



Sarawak Government

Study to Develop Key Indicators  
for the Economy

# POST COVID-19 DEVELOPMENT STRATEGY 2030 (ACTION AND IMPLEMENTATION PLAN)

Final Report Volume III  
*Enablers*  
*Poverty Alleviation*

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# 1. Enablers

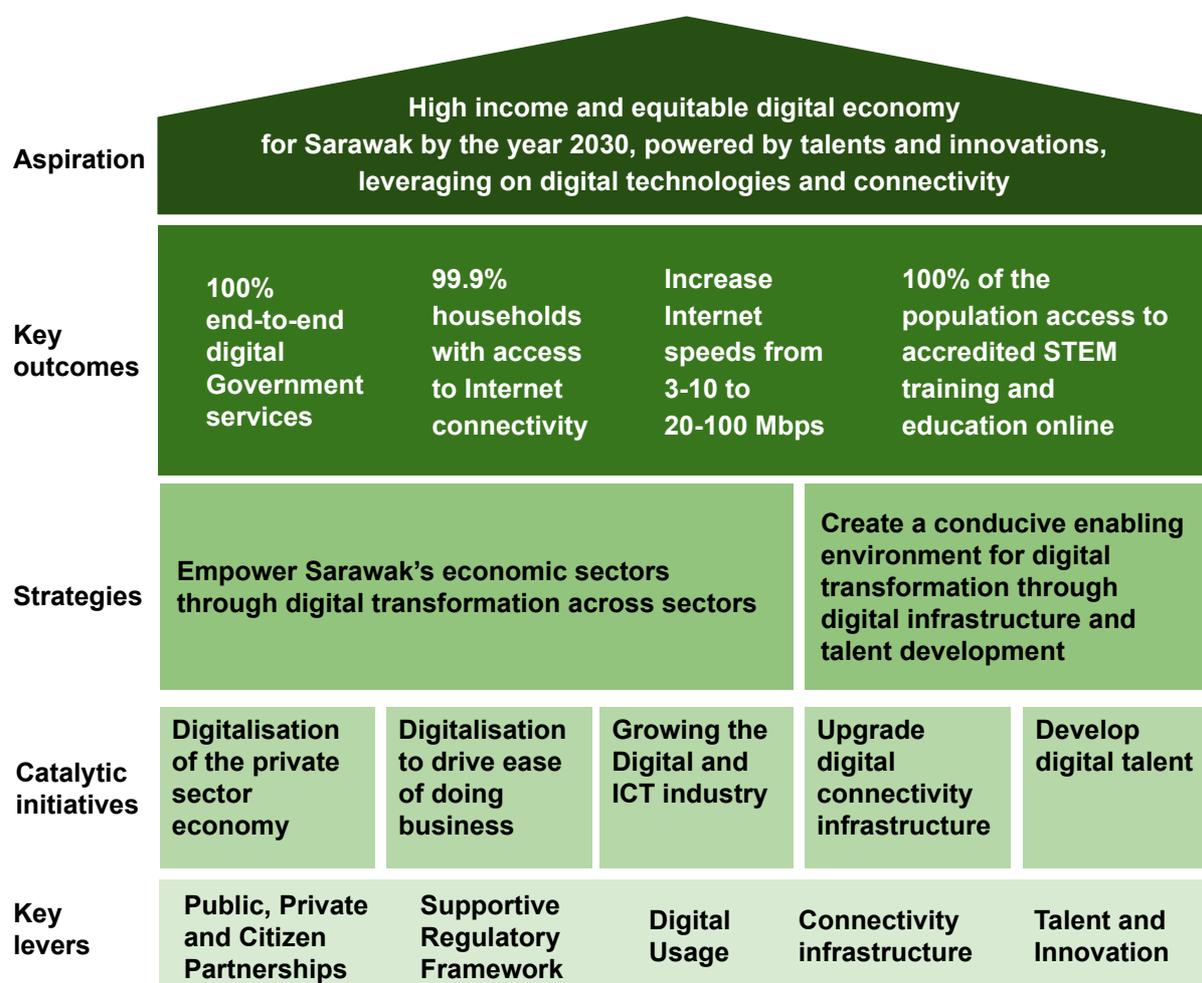
# 1.1 Digital Transformation

## Aspiration for Digital Transformation Sector

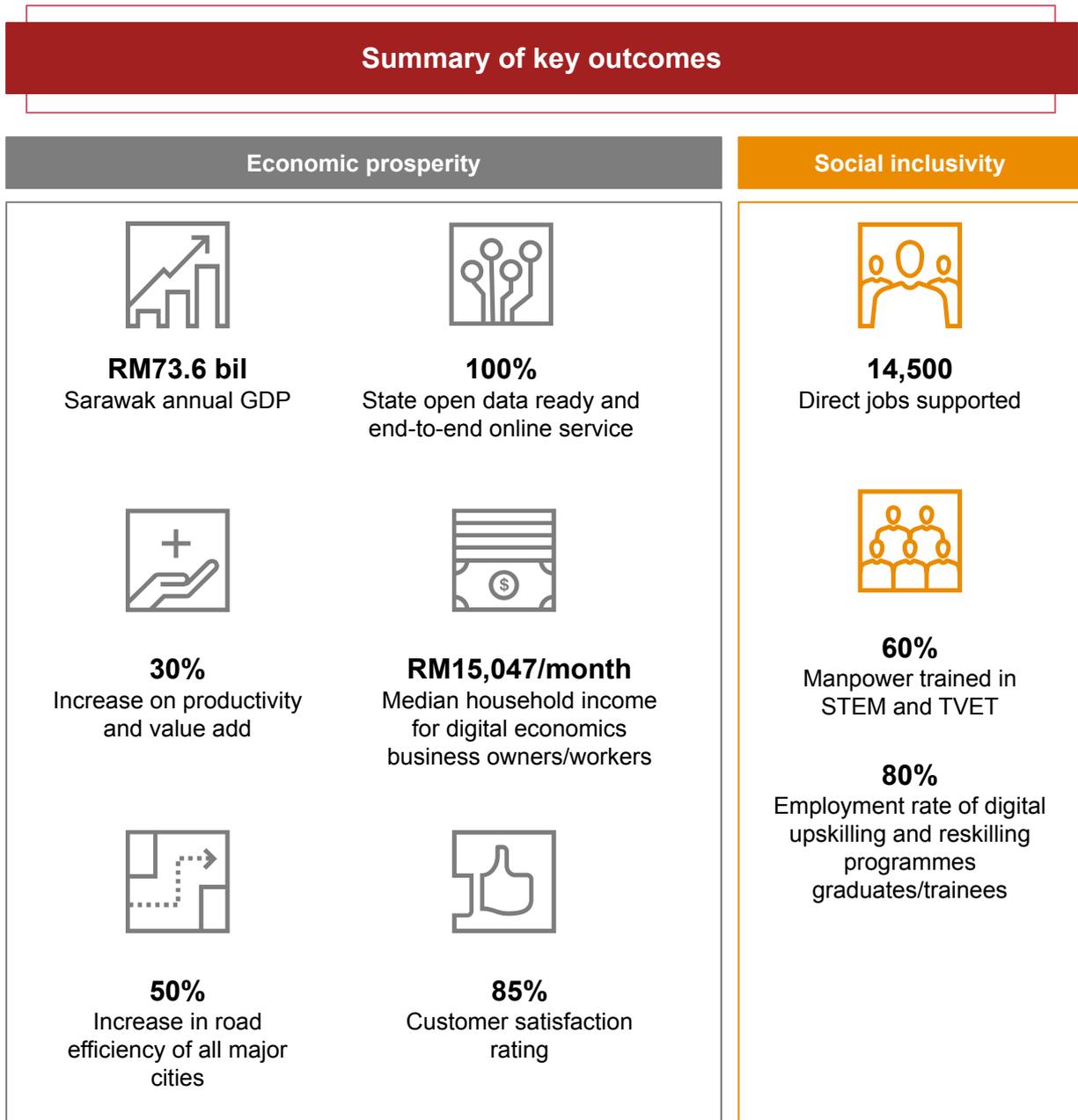
It is imperative to develop Sarawak’s Digital Economy to support overall growth of the State. Sarawak will promote digitalisation of economic sectors and accelerate ongoing efforts towards digitalising Government operations.

By 2030, the State aspires to be a high income and equitable digital economy, powered by innovations, leveraging on digital technologies and connectivity. This will be supported by key levers such as public private partnerships, regulatory framework that enable innovative digital ecosystem, digital usage, connectivity infrastructure, and a digitally literate population to power the digital transformation agenda.

**Figure 1.1.1: Aspiration framework for digital transformation sector**



**Figure 1.1.2: Summary of desired outcomes for digital transformation sector**



## AIP Level 1 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Strategy</b>	: Empower Sarawak's sectors through digital transformation across sectors		
<b>Initiative</b>	: 1. Digitalisation of the private sector economy		
<b>Initiative</b>	<b>Desired Outcome(s)</b>		
<b>1. Digitalisation of the private sector economy</b>  a) Data-analysing capabilities - big data, IoT & blockchain; b) Spatial, GIS platform, Building Information Modelling (BIM) for forestry, agriculture, mining, construction; manufacturing; tourism; and Digital Economy Projects Rollout (PPP).	<b>Economic Prosperity</b> 1. 100% of state open data ready for analysis in the context required by stakeholders 2. Sarawak is equivalent to/exceeds top 20 country in ICT adoption criteria of global competitiveness index (Malaysia is rank 33 for ICT adoption-MPC) 3. Productivity and value add to increase by 30%		
<b>Timeline</b>		<b>Resources Required</b>	
<b>Start Date</b>	<b>End Date</b>		
2022	2030	<ul style="list-style-type: none"> <li>• RM205 million</li> <li>• Big data infrastructure, ICT platform, IoT platform/ecosystem, digital data collection and expert talent</li> <li>• Open platform, Open API , Open data</li> <li>• Digital ID</li> <li>• Cybersecurity, data and privacy protection laws, incentives and condition synergy supporting all required resources and taxation policies</li> </ul>	
<b>Project Owner</b>	<b>Implementing Agency</b>	<b>Other Stakeholders</b>	
SMA, SSMU	SDEC, SAINS	Chief Minister Department, State Ministries and Department, LA, business associations	

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 1. Digitalisation of the private sector economy		
<b>Project</b>	: Setting up of Big Data Infrastructure		
<b>Action step</b>	: 1.1		
Action step (s)	Output (s)	Timeline	Resources required
<b>1.1 Setting up of Big Data Infrastructure</b>  a. Utilise SIOC Big Data Platforms and Infrastructure b. Receive Big Data proposals from state agencies, SMEs, Startups, etc. c. Study and analyse infrastructure requirements d. Design and develop infrastructure solutions e. Enhance SIOC Big Data Platform to meet solution requirement as needed f. Implement necessary governance	A centralised, shared big data processing infrastructure	Start date	RM50 million high speed telecommunication (100 Mbps)
		2022	
		End date	
		2025	
Project Owner	Implementing Agency	Other Stakeholders	
SMA	SDEC	Data Infra Service Providers, Data Experts	

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 1. Digitalisation of the private sector economy		
<b>Project</b>	: State Data Analytics Development - Technical Catalogue/ Database of Buildings		
<b>Action step</b>	: 1.2		
Action step (s)	Output (s)	Timeline	Resources required
<b>1.2 State Data Analytics Development - Technical Catalogue/ Database of Buildings</b>  a. Utilise SIOC / Digital Gov Analytics Platforms and Data Centre Services b. Study and analyse requirements c. Perform system development activities d. Enhance SIOC / DG Analytics Platform as needed e. Implement necessary governance	A database of comprehensive technical data of buildings to improve usability, centralised building data source and improve building planning, design, decision making and development works as well as enhance time in finding information on existing buildings by 50%.	Start date	RM20.6 million high speed telecommunication (100 Mbps), competent civil servants, open platform, open API , open data, digital ID
		2022	
		End date	
		2025	
Project Owner	Implementing Agency	Other Stakeholders	
JKR	SDEC	MUDENR	

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 1. Digitalisation of the private sector economy		
<b>Project</b>	: State Data Management System		
<b>Action step</b>	: 1.3		
Action step (s)	Output (s)	Timeline	Resources required
<b>1.3 State Data Management System</b>  a. Developing scope and specify requirements b. Carry out waiver of tender & project evaluation process c. Develop governance and guidelines to facilitate implementation of data management in State d. System development, system review, User Acceptance Test (UAT) & training e. System and governance implementation	a) A comprehensive data management system with: <ul style="list-style-type: none"> <li>• Data dictionary and catalogue</li> <li>• Consists of data modeler (user view)</li> <li>• Datasets in data catalogue will have metadata as per G.I by SMA</li> <li>• Have features for data updates and ability to identify redundant source of data</li> <li>• Datasets should be categorised by sectors</li> </ul> a) A mechanism to share data <ul style="list-style-type: none"> <li>• By data type/user access</li> <li>• Basic metadata functions supporting sharing of data between agencies and users (complying to the Circular and Governance for the State Public Service)</li> <li>• Provide security features to protect data, providers and users</li> </ul>	<b>Start date</b>  2022	RM3 million high speed telecommunication (100 Mbps), competent civil servants, open platform, open API , open data, digital ID
		<b>End date</b>  2025	
Project Owner	Implementing Agency	Other Stakeholders	
SSMU	SSMU	SMA	





## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 1. Digitalisation of the private sector economy		
<b>Project</b>	: Sarawak Unmanned Aerial System (UAS) Services and Management		
<b>Action step</b>	: 1.5		
Action step (s)	Output (s)	Timeline	Resources required
<b>1.5 Sarawak Unmanned Aerial System (UAS) Services and Management</b>  a. Request and catalogue UAS (Unmanned Aircraft Systems/ Drones) services from local UAS businesses/ service providers b. Develop policies, procedures and governance on use of UAS c. Develop UAS service catalogue and requisition system d. Implement system and governance	a) A UAS services and management system that enable the acceleration of talent development for local Sarawakians and Sarawakian enterprises in UAS industry b) A comprehensive set of policies, procedures and governance on use of UAS c) A comprehensive system to catalogue UAS services, and connect between service providers and users/ consumer and ensuring compliance with governance, policies and procedures as well as monitor applications of UAS and usage analytics	Start date	RM15 million smart city platform, open platform, open API, open data, digital ID
		2022	
		End date	
		2025	
Project Owner	Implementing Agency	Other Stakeholders	
SMA	SDEC	Government agencies	

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 1. Digitalisation of the private sector economy		
<b>Project</b>	: Development & implementation 3D web-based system		
<b>Action step</b>	: 1.6		
Action step (s)	Output (s)	Timeline	Resources required
<b>1.6 Development &amp; implementation 3D web-based system</b>  a. Developing scope and specify requirements b. Carry out waiver of tender & project evaluation process c. System development, system review, User Acceptance Test (UAT) & training d. System implementation	a) A web-based system to publish, visualise and share 3D city modelling dataset for major towns and cities in Sarawak  b) A 3D datasets central repository by year 2025, comprising 1,009 sq.km of town areas	Start date	RM3 million high speed telecommunication (100 Mbps), competent civil servants, smart city platform, open platform, open API, open data, digital ID
		2022	
		End date	
		2025	
Project Owner	Implementing Agency	Other Stakeholders	
SMA	SDEC	Land & Survey, MUDENR	

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation
<b>Initiative</b>	: 1. Digitalisation of the private sector economy
<b>Project</b>	: State BIM Monitoring and Analysis
<b>Action step</b>	: 1.7

Action step (s)	Output (s)	Timeline	Resources required
<b>1.7 State BIM Monitoring and Analysis</b>  Set up BIM platform for development project planning and management via the following steps: a) System requirement study b) Review Policies c) Design System d) Develop system Service e) Integration system f) Implement system and new process	a) A web-based system to publish and view 3D City profiles of major towns in Sarawak for effective city planning b) Report requirements on detailed problems statements, system functionalities, performance targets. Proposed business process reengineering of the BIM monitoring c) Revised and approved policies, which could be released once system is implemented d) System design specification taking into consideration data standards and interoperability for the BIM Monitoring e) Tested and functional BIM system with monitoring and analysis capabilities f) Digital data sharing integration with JKR g) A comprehensive BIM System implemented in JKR	Start date	RM8.7 million high speed telecommunication (100 Mbps), digitally competent engineering workforce, smart city platform, open platform, open API, open data, digital ID, project executive, system planner, system developer expertise
		2022	
		End date	
		2025	

Project Owner	Implementing Agency	Other Stakeholders
JKR	SDEC	Government agencies, business community, DGC, contractor/consultant

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 1. Digitalisation of the private sector economy		
<b>Project</b>	: IoT for smart farming		
<b>Action step</b>	: 1.8		
Action step (s)	Output (s)	Timeline	Resources required
<b>1.8 IoT for smart farming</b> a) Planning and scope of work b) Siting and SPA approval c) Site assessment on the readiness d) Appointment of consultant e) System requirement study & design (IoT platform and devices, top survey and drawings) f) Process procurement method g) Project execution h) Implementation of IoT technologies for smart farming	Real time cloud service for IoT Smart Farming	Start date	RM30 million high speed telecommunication (100 Mbps), digitally competent engineering workforce, smart city platform, open platform, open API, open data, digital ID, project executive, system planner, system developer expertise
		2022	
		End date	
		2025	

Project Owner	Implementing Agency	Other Stakeholders
MANRED	SDEC	Ministry/State agencies, farmers, investors & researchers

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 1. Digitalisation of the private sector economy		
<b>Project</b>	: IoT infrastructure for agriculture (e.g. LoRaWAN, NBIOT)		
<b>Action step</b>	: 1.9		
Action step (s)	Output (s)	Timeline	Resources required
<b>1.9 IoT infrastructure for agriculture (e.g. LoRaWAN, NBIOT)</b>  Implementing project as per the following steps: a) Identify sites for implementation b) Site assessment on readiness c) System requirement study (LoRaWan, NBIOT, Sigfox, wireless, etc.) d) Procurement process e) Project planning f) Project Implementation	Holistic IoT ecosystem for oil palm industry by utilizing LoraWAN and IoT sensors that covers SALCRA operation area of 100,000 HA	Start date	RM24.2 million project manager/coordinator/leader, big data infrastructure. stable connectivity (telecommunication), ICT platform, 3 agronomist, open platform, open API, open data, digital banking, cybersecurity, taxation policies
		2022	
		End date	
		2025	
Project Owner	Implementing Agency	Other Stakeholders	
MANRED/ SALCRA	SALCRA	Ministry/state agencies & investors	

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 1. Digitalisation of the private sector economy		
<b>Project</b>	: Agricultural technology for Sarawak		
<b>Action step</b>	: 1.10		
Action step (s)	Output (s)	Timeline	Resources required
<b>1.10 Agricultural technology for Sarawak</b>  Implementing project as per the following steps: a) Define project scope b) Conduct user requirement study c) Process procurement method d) Project execution	Centralise geospatial database for MANRED	Start date	RM5 million big data infrastructure, ICT platform and talent expert, open platform, open API, open data, digital ID, e-wallet, digital banking, cybersecurity and taxation policies
		2022	
		End date	
		2025	
Project Owner	Implementing Agency	Other Stakeholders	
MANRED/DoA	SEDC	DoA, MANRED	

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 1. Digitalisation of the private sector economy		
<b>Project</b>	: Geoinformation for agriculture		
<b>Action step</b>	: 1.11		
Action step (s)	Output (s)	Timeline	Resources required
<b>1.11 Systems and information for geotechnical engineering and agriculture</b>  Implementing project as per the following steps: a) Define project scope b) Conduct user requirement study c) Procure works, supply or data d) Execute project to develop/produce needed geo-information and related methodologies and processes e) Implement geo-information for agriculture	a) Satellite imageries, aerial photogrammetry and GIS data/maps for each specific agriculture use and areas throughout Sarawak  b) Map and database on geotechnical engineering data including boreholes, soil investigation and profile and related data for public/civil works  c) GIS platforms and software systems  State agencies and entities in the Sarawak agriculture and construction industry are able to capitalize on the use of GIS and spatial-based analytics to improve yield and quality of food/agriculture production and products, geotechnical engineering works and design.	Start date	RM1 million digital maps, updated aerial photos, geospatial related ICT hardware and software, GIS staff
		2022	
		End date	
		2025	
Project Owner	Implementing Agency	Other Stakeholders	
SSMU	MANRED, JKR	Other State Ministries & Agencies	

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 1. Digitalisation of the private sector economy		
<b>Project</b>	: Precision agriculture for oil palm plantation (SDEC)		
<b>Action step</b>	: 1.12		
Action step (s)	Output (s)	Timeline	Resources required
<b>1.12 Precision agriculture for oil palm plantation (SDEC)</b>  Implementing project as per the following steps: a) Site assessment on the readiness b) Conduct user requirement study c) Seek DGC approval d) Procurement Process e) Project planning f) Project implementation	Complete installation of internet gateway and LoraWan with IoT sensor (i.e. soil PH, soil moisture, water level)  Complete installation of platform for machine learning and recommendation report	Start date	RM5 million big data infrastructure, ICT platform and talent expert, open platform, open API, open data, digital ID, e-wallet, digital banking, cybersecurity and taxation policies
		2022	
		End date	
		2025	
Project Owner	Implementing Agency	Other Stakeholders	
MANRED/ SALCRA	SALCRA/ SDEC	Other State Ministries & Agencies	

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 1. Digitalisation of the private sector economy		
<b>Project</b>	: Integrated IoT - ERP System (SALCRA)		
<b>Action step</b>	: 1.13		
Action step (s)	Output (s)	Timeline	Resources required
<b>1.13 Integrated IoT - ERP System (SALCRA)</b>  Implementing project as per the following steps: a) Define project scope b) Conduct user requirement study c) Request for proposal (RFP) d) Seek DGC approval e) Procurement Process f) Project planning g) Project implementation	Comprehensive ERP System	Start date	RM4.9 million big data infrastructure, ICT platform and talent expert, open platform, open API, open data, digital ID, e-wallet, digital banking, cybersecurity and taxation policies
		2022	
		End date	
		2025	
Project Owner	Implementing Agency	Other Stakeholders	
MANRED/ SALCRA	SALCRA/ SDEC	Other State Ministries & Agencies	

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 1. Digitalisation of the private sector economy		
<b>Project</b>	: Geospatial Integrated Information System (SALIIS)		
<b>Action step</b>	: 1.14		
Action step (s)	Output (s)	Timeline	Resources required
<b>1.14 Geospatial Integrated Information System (SALIIS)</b>  Implementing project as per the following steps: a) Define project scope b) Conduct user requirement study c) Request for proposal (RFP) d) Seek DGC approval e) Procurement Process f) Project planning g) Project implementation	Integrated information system for Geospatial services	Start date	RM3.6 million big data infrastructure, ICT platform and talent expert, open platform, open API, open data, digital ID, e-wallet, digital banking, cybersecurity and taxation policies
		2022	
		End date	
		2025	
Project Owner	Implementing Agency	Other Stakeholders	
MANRED/ SALCRA	SALCRA/ SDEC	Other State Ministries & Agencies	

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 1. Digitalisation of the private sector economy		
<b>Project</b>	: Irrigation network SCADA System (automation system for irrigation water supply system)		
<b>Action step</b>	: 1.15		
Action step (s)	Output (s)	Timeline	Resources required
<b>1.15 Irrigation network Supervisory Control and Data Acquisition (SCADA) System (Automation system for irrigation water supply system)</b>  Control system to increase water supply efficiency to optimum level for paddy field irrigation to safeguard paddy production and livelihoods of paddy farmers. System can be replicated to other crops where controlled irrigation is required.	An Irrigation network SCADA control system for paddy field irrigation including: a) Improve system monitoring, coordination, management and maintenance of irrigation system; b) Direct response to emergency or critical event by SMS alert and remote dial in control; c) Prevent paddy from flash flood; d) Provide complete data for top management to analyse the irrigation supply and plan for the future; e) To increase productivity of paddy; f) To increase efficiency of transfer of water; g) To save water and human energy; and h) For better service to water user/farmers.	Start date	RM2 million connectivity/ IoT, competent civil servants, smart city platform, open platform, open API, open data, digital ID
		2022	
Implementing project as per the following steps: 1. Define project scope 2. Carry out procurement process 3. System development, system review, User Acceptance Test (UAT) & training 4. System implementation	1. User requirement documents 2. SFS Funding approval 3. SCADA system, upgraded relevant structures (including field offtake and pumping station and provide safety requirements), system design documentation and training materials 4. Systems and operation documentation	End date	
		2025	
Project Owner	Implementing Agency	Other Stakeholders	
SSMU	DID	State government/public	

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 1. Digitalisation of the private sector economy		
<b>Project</b>	: Aquaculture for freshwater and saltwater fish		
<b>Action step</b>	: 1.16		
Action step (s)	Output (s)	Timeline	Resources required
<b>1.16 Aquaculture for freshwater and saltwater fish</b>  Implementing project as per the following steps: a) Define project scope b) User requirement study c) Prepare project proposal d) Prepare procurement method e) Project execution f) Project implementation	Cloud based aquaculture system	Start date	RM20 million big data infrastructure, ICT platform and talent expert, open platform, open API, open data, digital ID, e-wallet, digital banking, cybersecurity and taxation policies
		2022	
		End date	
		2025	
Project Owner	Implementing Agency	Other Stakeholders	
MANRED/ DoA	SEDC	DoA/ local farmers	

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 1. Digitalisation of the private sector economy		
<b>Project</b>	: Veterinary Information System		
<b>Action step</b>	: 1.17		
Action step (s)	Output (s)	Timeline	Resources required
<b>1.17 Veterinary Information System</b>  Implementing project as per the following steps: a) Engagement with stakeholders b) Develop scope and user requirement c) Develop work processes d) Conduct user acceptance testing after the system is developed e) Project roll-out	Comprehensive system established to issue licences and keying records of all veterinary records.  Deliverables a) Laboratory Information Management Systems (LIMS) b) Application, inspection, reports and issuance of licence could be accomplished with ease and less hurdles c) Total number of applications, amount of assistance applied vs funding, applications processed, approved, livestock sectors applied (i.e. cattle, poultry, pigs, various sectors)  Modules: a) Laboratory Information Management System (LIMS) b) Livestock and statistic management software c) Licence application and renewal system: Electronic Veterinary Online Sarawak (e-VOS)"	Start date	RM5 million big data infrastructure, ICT platform and talent expert, open platform, open API, open data, digital ID, e-wallet, digital banking, cybersecurity and taxation policies
		2022	
		End date	
		2025	
Project Owner	Implementing Agency	Other Stakeholders	
DVS	SSMU	State agencies, livestock farmers, livestock associations, investors & communities	

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 1. Digitalisation of the private sector economy		
<b>Project</b>	: Enhancement of Sarawak travel application: e-commerce platform for tourism, arts and culture		
<b>Action step</b>	: 1.18		
Action step (s)	Output (s)	Timeline	Resources required
<b>1.18 Enhancement of Sarawak travel application: e-commerce platform for tourism, arts and culture</b>  a) Engagement with EPU, SSMU and SMA to come up with the proposal for e-commerce enhancement of Sarawak travel application b) Collaboration with existing e-commerce platform c) Collaboration with local entrepreneurs: tour agency , handicraft producers and entrepreneurs d) Support S Global Pay (S Pay Global) as a payment gateway e) Tourists Loyalty Programme - Introduction of programme/virtual card that can provide incentives and promotion for tourists and Sarawakians	a) E-Commerce platform in Sarawak travel application, which standardise data collection system to benefit different stakeholders b) Integration functions with existing ecommerce platform (Shopee, Lazada, Wechat , Entrepreneurs, etc.) to enhance tourism promotion c) Training courses for industry players via collaboration with Centex, Pustaka (Pandai), etc. d) Data collection and analytic functions, i.e. number of transactions done e) Functionalities to increase sales and promotion of tourism product and packages f) Functionalities to improve digital literacy among local entrepreneurs on e-commerce platform via capacity building programme g) Data collection and analytics functions, i.e. expected number of people trained hook on new e-commerce platform h) A Sarawak Tourism Ecosystem Online Fund application approval function	<b>Start date</b>  2022	RM5 million (total required for project), digital marketing, funding, manpower, existing e-commerce platform, Sarawak travel application
		<b>End date</b>  2030	
Project Owner	Implementing Agency	Other Stakeholders	
MTAC	SMA, MTAC, STB	SSMU, SMA, SAINS, STB, Sarawak Craft Council, Sarawak Tourism Federation, SCB, SCC, STF, SMA	

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 1. Digitalisation of the private sector economy		
<b>Project</b>	: Enhancement of Sarawak travel application: e-commerce platform for tourism, arts and culture		
<b>Action step</b>	: 1.18		
Action step (s)	Output (s)	Timeline	Resources required
<p><b>1.18 Enhancement of Sarawak travel application: e-commerce platform for tourism, arts and culture</b></p> <p>f) Tourists Loyalty Programme - Introduction of programme/virtual card that can provide incentives and promotion for tourists and Sarawakians</p> <p>Sarawak Travel App is effective tool for industry players to develop, managing, and distributing tourism product globally.</p> <p>The app plays critical role for tourism recovery by enabling contactless digital transactions and increase tourist's confidence to travel.</p> <p>Reducing operating costs, improving businesses processes and provide tourism players with additional opportunities to present and sell their products.</p>	<p>i) A payment function integrated with S Global Pay as a payment gateway for all tourism related e-commerce platform and targeting to increase S Global Pay usage among local and foreign visitors.</p> <p>j) A Tourist Loyalty Programme System that enable tourists to participate and benefit from loyalty programmes such as e-coupon, discounts and other value-added offerings in various packages.</p> <p>k) Loyalty programmes that will enable the following:</p> <ul style="list-style-type: none"> <li>● Increase e-commerce traffic</li> <li>● Increase visitors' arrival to Sarawak</li> <li>● Effective incentives for/from tourism industry players leading to repeat purchases</li> <li>● Improve brand loyalty with special benefits given to certain demographics of users</li> <li>● Improve services and products designed from the data collected from the use of each loyalty programme</li> <li>● Improve reach of loyalty programmes by leveraging on users of S Global Pay which is projected to grow 30% per year</li> </ul>	Start date	
		2022	
		End date	
		2030	
Project Owner	Implementing Agency	Other Stakeholders	
MTAC	MTAC, STB	SMA, SSMU, SAINS, STB, SCB, SCC, STF	

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 1. Digitalisation of the private sector economy		
<b>Project</b>	: Visitors Tracking System at Bako National Park		
<b>Action step</b>	: 1.19		
Action step (s)	Output (s)	Timeline	Resources required
<b>1.19 Visitors Tracking System at Bako National Park</b>  a) Engage with EPU, SSMU and SMA to come with the proposal of for visitor tracking application system b) Engagements with key stakeholder c) Improve network infrastructure in Bako NP d) Provide training and deployment of staff e) Maintenance of the system f) Collaborate with key stakeholders to facilitate R&D for visitor tracking application system	a) A Visitor Tracking System at Bako National Park and can be used by all national parks b) Requirement document to facilitate development of visitor tracking application system c) High capacity network at the Bako National Park area to enable smooth performance and stability of the application system d) Training courses and materials and class capacity document to enhanced deployment of the system <ul style="list-style-type: none"> <li>• Number of training (i.e. 2 times/year)</li> <li>• Number of staff per training (i.e. maximum of 15 person/session)</li> </ul> e) Annual maintenance service level document of the system f) R&D reports with reliable data and proposal for effective solution for visitor tracking including lost tourist.	<b>Start date</b>  2022	RM2.2 million manpower (operation staff at the site), RM1.8 million (IT consultant), RM4.5 million, competent consultant, Task Force Committee Meeting
		<b>End date</b>  2030	
Project Owner	Implementing Agency	Other Stakeholders	
MTAC	SMA, SFC, SAINS	SFC, STB, STF, SMU, SAINS, EPU Sarawak, forest department	

## AIP Level 1 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Strategy</b>	: Empower Sarawak's sectors through digital transformation across sectors		
<b>Initiative</b>	: 2. Digitalising to drive ease of doing business		
<b>Initiative</b>	<b>Desired Outcome(s)</b>		
<b>2. Digitalising to Drive Ease of Doing Business</b>  a) End-to-end digital services; b) Open Services: Open platform architecture; c) Smart city infrastructure: mobility, safety and security, convenience; d) Digital health; e) Environment and natural resources; f) Enhance cybersecurity capacity; g) Regulatory and procedures review and improvement; and h) Managing customer needs.	<b>Economic Prosperity</b> <ol style="list-style-type: none"> <li>1. Sarawak ranked top 20 (based on Doing Business score in 2020) in criteria relevant to digital transformation</li> <li>2. 100% end-to-end online services</li> <li>3. Increase customer satisfaction rating to 85%</li> <li>4. 99.9% secured online transactions through the digital economy platforms</li> <li>5. Increased road efficiency by 50% for all major cities</li> </ol>		
<b>Timeline</b>		<b>Resources Required</b>	
<b>Start Date</b>	<b>End Date</b>		
2022	2030	<ul style="list-style-type: none"> <li>• RM915 million</li> <li>• High speed telecommunication (100 Mbps)</li> <li>• Competent civil servants, digital government</li> <li>• Smart City Platform</li> <li>• Open platform, Open API , Open data, secure and trusted data exchange(S-Sarawak)</li> <li>• Digital ID, S Global Pay, digital banking, fintech, cybersecurity</li> </ul>	
<b>Project Owner</b>	<b>Implementing Agency</b>	<b>Other Stakeholders</b>	
MINTRED, SSMU, SMA	SDEC, SAINS	Chief Minister Department, State Ministries and Department, LA, NGOs, business associations, public	

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 2. Digitalising to drive ease of doing business		
<b>Project</b>	: Sarawak's visitor landing application integrated with EnterSarawak		
<b>Action step</b>	: 2.1		
Action step (s)	Output (s)	Timeline	Resources required
<b>2.1 Sarawak's visitor landing application integrated with EnterSarawak</b>  a) Engagement with EPU, Immigration Department (JIMS) and SSMU/SMA to come with the digital application  b) Digitalise the workflow <ul style="list-style-type: none"> <li>To create QR code and template form for visitors to fill in the required information</li> <li>Visitors create an account and fill in an individual or a group submission card</li> <li>Visitors need to fill the important information</li> <li>Upon successful submission, a confirmation barcode with reference details will be displayed. When transiting, visitors must present the confirmation barcode on mobile phone at immigration counter, and stamp or scan the passport before entering the state</li> </ul>	a) A Visitor Landing System that keeps records of the visitors for health and diseases related analysis  b) Functions for visitors to submit travel information including: <ul style="list-style-type: none"> <li>Generation of confirmation code for every completed submission form</li> <li>Verification by immigration officers via scanning of code</li> <li>Generate information of visitors stored in app and reports for internal used</li> </ul>	Start date	RM1.5 million manpower, competent consultant, QR Code, digital template form, RM0.5 million, 3 project officers
		2022	
		End date	
		2030	
Project Owner	Implementing Agency	Other Stakeholders	
SSMU	MTAC	EPU Sarawak, SSMU, SMA, UKPN, STB, STF	

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 2. Digitalising to drive ease of doing business		
<b>Project</b>	: Sarawak's visitor landing application integrated with EnterSarawak		
<b>Action step</b>	: 2.1		
Action step (s)	Output (s)	Timeline	Resources required
<b>2.1 Sarawak's visitor landing application integrated with EnterSarawak</b>  c) Troubleshooting and maintenance of the application every 6 months d) Planning e) Integration with My Travel Pass and health declaration application	c) Maintenance service level document and/or agreement ensuring system and data security at all times d) Comprehensive project plan to study, develop and implement a real time intelligent system capable of analysing visitors' data for insights, patterns and trends and perform visitors' exit survey e) Integration functions with My Travel Pass and health declaration applications to generate: <ul style="list-style-type: none"> <li>● Vaccination certificate showed in application</li> <li>● PCR Test</li> <li>● Health declaration</li> <li>● Visitor details information</li> <li>● Visitors trip information</li> <li>● Visitors trip history</li> <li>● Visitors pattern and trend captured in data storage</li> </ul>	Start date	Funding, IT executive, server, visitors exit survey data
		2022	
		End date	
		2030	
Project Owner	Implementing Agency	Other Stakeholders	
SSMU	MTAC	EPU Sarawak, SSMU, SMA, UKPN, STB, STF	

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 2. Digitalising to drive ease of doing business		
<b>Project</b>	: Open data, open source and open interface initiative		
<b>Action step</b>	: 2.2		
Action step (s)	Output (s)	Timeline	Resources required
<b>2.2 Open data, open source and open interface initiative</b>  Implementing project as per the following steps: a) System requirement study b) Review Policies c) Design System d) Implement system and new process	A platform for open data, source code sharing and API	Start date	RM0.7 million project executive, procurement process executed, competent network of project offices and CDO/ADO, funding for promotion
		2022	
		End date	
		2027	
Project Owner	Implementing Agency	Other Stakeholders	
SMA	SSMU	Government agencies, business community, DGC, contractor/ consultant, SAGC	

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 2. Digitalising to drive ease of doing business		
<b>Project</b>	: Sarawak Integrated Operation Centre Phase 2		
<b>Action step</b>	: 2.3		
Action step (s)	Output (s)	Timeline	Resources required
<b>2.3 Sarawak Integrated Operation Centre Phase 2</b>  Implementing project as per the following steps: a) Requirement study and analysis, management services b) Carry out sitting, soil investigation and land acquisition. Obtain wayleave approval c) Design, procure and install CCTV systems (i.e. cameras, network, storage, etc.) d) Installation of client IOC e) Integration of CCTV system and client IOC with existing platform f) Training and preparation to provide IOC services statewide	SIOC platforms and application systems to deliver services and wider support for all Smart City initiatives/ implementations	Start date	RM306 million (overall funding required for project) high speed telecommunication (100 Mbps), competent civil servants, smart city platform, open platform, open API, open data, digital ID, project officers, SIOC platform APIs, client services (VM), web services, trainers, SIOC in-sourced personnel
		2022	
		End date	
		2030	
Project Owner	Implementing Agency	Other Stakeholders	
SMA	SMA, Local Authorities	MCMC, PDRM, developers, public, business community, network facility providers, public, ISP	

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 2. Digitalising to drive ease of doing business		
<b>Project</b>	: Security and enforcement decision support system		
<b>Action step</b>	: 2.4		
Action step (s)	Output (s)	Timeline	Resources required
<b>2.4 Security and enforcement decision support system</b>  Implementing project as per the following steps: a) System requirement study b) Review policies c) Design system d) Develop system e) Implement system and new process	A Security and Enforcement Decision Support System	Start date	RM0.5 million high speed telecommunication (100 Mbps), competent civil servants, smart city platform, open platform, open API, open data, digital ID, project officer, trainers, SIOC in-sourced personnel, PVR
		2022	
		End date	
		2025	
Project Owner	Implementing Agency	Other Stakeholders	
SSMU/ SMA	UPKN	State and federal enforcement agencies	

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 2. Digitalising to drive ease of doing business		
<b>Project</b>	: Development of Unified Security and Access Control System		
<b>Action step</b>	: 2.5		
Action step (s)	Output (s)	Timeline	Resources required
<b>2.5 Development of Unified Security and Access Control System</b>  Implementing project as per the following steps: a) Appointment of service provider, mobilisation of project team b) Requirement study and analysis c) Develop, procure and install security systems (i.e. cameras, scanners, etc.) d) Integration of security system with existing platform e) Training and Implementation	A Unified Security and Access Control System (USACS) that includes: a) Integration of existing security capabilities with those capabilities of SIOC b) Improvements in the capability and accuracy of information recorded and analysed in the USACS c) Increase in process speed controlled through USACS operation. d) Full-time and real-time monitoring through accurate information analysis will result in accuracy of actions in security control.	Start date	RM2 million high speed telecommunication (100 Mbps), stable SarawakNet and internet connectivity, competent civil servants, open platform, open API, open data, digital ID, API for CCTV, image recognition of SIOC, USACs open platform
		2021	
		End date	
		2025	
Project Owner	Implementing Agency	Other Stakeholders	
SSMU	UKPN	All state agencies, SAINS, SMA	



## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 2. Digitalising to drive ease of doing business		
<b>Project</b>	: Smart Flood Management and Response System		
<b>Action step</b>	: 2.6		
Action step (s)	Output (s)	Timeline	Resources required
<b>2.6 Smart Flood Management and Response System</b>  A) Upgrading of hydrological networks and Central Information Telemetry Network - Hydrological Telemetry System (CITN-HTS) and related application systems <ul style="list-style-type: none"> <li>Establishment of new hydrological stations complete with telemetry system and upgrading and enhancement of the existing hydrological stations to telemetry systems and installation of CITN infrastructure including flood sensors and CCTVs</li> <li>Enhancement of CITN - HTS Application System</li> <li>Land acquisition</li> <li>Development of flood detection system in urban areas</li> <li>Development of flood modelling, forecasting and warning system</li> </ul>	a) More than 300 telemetry systems (rainfall, water level, discharge, evaporation, climate and groundwater) b) An enhanced CITN-HTS application system c) Acquired land for new telemetry system sites with related documentation d) A flood detection system e) A flood modelling, forecasting and warning system	Start date	RM36 million
		2022	
		End date	
		2026	
Project Owner	Implementing Agency	Other Stakeholders	
SMA	DID	SDMC, UKPN, MLGH, resident & district offices, local authorities	

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 2. Digitalising to drive ease of doing business		
<b>Project</b>	: Smart Flood Management and Response System		
<b>Action step</b>	: 2.6		
Action step (s)	Output (s)	Timeline	Resources required
<b>2.6 Smart Flood Management and Response System</b>  B) Smart SUSToM Pilot Project  C) Integrated Smart Development Planning <ul style="list-style-type: none"> <li>• Integrated Stormwater Master Plan</li> <li>• Establish river reserve on Geographic Information System (GIS)</li> <li>• Computer hardware &amp; softwares, digital data</li> </ul>	a) A Supervisory Control and Data Acquisition (SCADA) b) Flood sensors and water level sensors in flood prone areas of Serian c) New rainfall and water level telemetry system in Serian  An integrated Smart Development Planning Masterplan with supporting GIS system and data	<b>Start date</b>  2022	RM1.5 million
		<b>End date</b>  2024	
Project Owner	Implementing Agency	Other Stakeholders	
SMA	DID	SDMC, UKPN, MLGH, resident & district offices, local authorities	

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 2. Digitalising to drive ease of doing business		
<b>Project</b>	: Animal Identification and Traceability System		
<b>Action step</b>	: 2.7		
Action step (s)	Output (s)	Timeline	Resources required
<b>2.7 Animal Identification and Traceability System</b>  Implementing project as per the following steps: a) Define project scope b) Conduct user requirement study c) Request for proposal (RFP) d) Seek DGC approval e) Procurement process method f) Project planning & execution g) System implementation	An integrated animal identification and tracing system	Start date	RM2 million, big data infrastructure, ICT platform and talent expert, open platform, open API, open data, digital ID, e-wallet, digital banking, cybersecurity and taxation policies
		2022	
		End date	
		2025	
Project Owner	Implementing Agency	Other Stakeholders	
SSMU	DVS	State agencies/ministries	

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 2. Digitalising to drive ease of doing business		
<b>Project</b>	: Smart traffic light		
<b>Action step</b>	: 2.8		
Action step (s)	Output (s)	Timeline	Resources required
<b>2.8 Smart traffic light</b> a) Develop scope and specify requirements b) Procurement of works, hardware and software licences c) Contract and execution of works and systems integration d) Implement system, governance and training	Smart Traffic Light system connecting traffic lights at essential traffic junctions in towns/ cities throughout Sarawak to their respective traffic control centre, the master traffic control centre in Kuching integrating with SIOC. Project components include but not limited to: a) Upgrade traffic light junctions in Kuching (>140), Miri (>57), Bintulu (>43) and Sibu (>39) and any other essential junctions in Sarawak (>293). This include detector loops for every lane at every junction b) Setup wireless telecommunications pole/ tower and transmission system in each city/town c) Add/upgrade associated systems (countdown timers (>175), variable message signs (>30) CCTVs (>1,000 cameras), power supply and backup including batteries, Automatic Incident Detection (AID) & other special purpose applications) d) Integrate or share data with public navigation application or transport services, i.e. Waze, priority transport management for ambulance, emergency vehicles or public transport	Start date	RM125 million high speed telecommunication (100 Mbps), competent civil servants, smart city platform, open API, open data, digital ID
		2022	
		End date	
		2025	
Project Owner	Implementing Agency	Other Stakeholders	
SMA/ JKR	SMA/ JKR	SSMU, Local authorities, , SIOC, Resident Offices, business and public	

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 2. Digitalising to drive ease of doing business		
<b>Project</b>	: Smart traffic light		
<b>Action step</b>	: 2.8		
Action step (s)	Output (s)	Timeline	Resources required
<b>2.8 Smart traffic light</b> a) Develop scope and specify requirements b) Procurement of works, hardware and software licences c) Contract and execution of works and systems integration d) Implement system, governance and training	e) Live traffic condition monitoring and recovery, etc. at central traffic control centre in each city/town and SIOC (Sarawak Integrated Operation Centre) f) Setup and operations of main traffic control centre in Kuching and local monitoring centre in each city/town including smart traffic light system (i.e. SCATS SOPs, Road Traffic Management Protocol)	<b>Start date</b>	RM125 million high speed telecommunication (100 Mbps), competent civil servants, smart city platform, open platform, open API, open data, digital ID
		2022	
		<b>End date</b>	
		2025	
Project Owner	Implementing Agency	Other Stakeholders	
SMA/ JKR	SMA/ JKR	SSMU, Local authorities, MOTS, SIOC, resident offices, business and public	



## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 2. Digitalising to drive ease of doing business		
<b>Project</b>	: Smart mobility		
<b>Action step</b>	: 2.9		
Action step (s)	Output (s)	Timeline	Resources required
<b>2.9 Smart mobility</b>  b) Procurement of consultancy, development works, and supply hardware and software c) Contract, execution and systems integration d) Implement systems, governances and trainings	A comprehensive digital ecosystem comprising of digital infrastructure, application systems (i.e. online and mobile) including hardware and software, data analytics, visualisation and dissemination, network connectivity, and cybersecurity that fully integrates and supports the planning, management, operations and end-user services of: a) Integrated Public Transport (PT) System b) Stage bus services c) Traffic management d) Free school bus services e) River transportation services f) Any arising transport services where relevant i.e. domestic air travel, ride hailing, etc.	<b>Start date</b>	RM10 million high speed telecommunication (100 Mbps), competent civil servants, smart city platform, open platform, open API, open data, digital ID
		2022	
		<b>End date</b>	
		2025	
Project Owner	Implementing Agency	Other Stakeholders	
SMA/ MOTS	SMA/ MOTS	JKR, SRB, SEDC, Sarawak Metro, private sector	

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 2. Digitalising to drive ease of doing business		
<b>Project</b>	: Crime Monitoring Solution		
<b>Action step</b>	: 2.10		
Action step (s)	Output (s)	Timeline	Resources required
<b>2.10 Crime Monitoring Solution</b>  Implementing project as per the following steps: a) System requirement study b) Review Policies c) Design System d) Develop system e) Implement system and new process	Crime monitoring solutions and related documentation	Start date	RM1.25 million high speed telecommunication (100 Mbps), competent civil servants, smart city platform, open platform, open API, open data, digital ID, trainers, SIOC in-sourced personnel, PVR
		2022	
		End date	
		2025	
Project Owner	Implementing Agency	Other Stakeholders	
SMA	SMA	State agencies, local authorities, state and federal enforcement agencies, public, private sectors	

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 2. Digitalising to drive ease of doing business		
<b>Project</b>	: Use case for government digital platform		
<b>Action step</b>	: 2.11		
Action step (s)	Output (s)	Timeline	Resources required
<b>2.11 Use case for government digital platform</b>  Implementing project as per the following steps: a) System requirement study b) Review policies c) Design of the use case d) Develop use case e) Implement use case in the existing SIOC system and identify new process	Use case for digital economy activities	Start date	RM0.5 million high speed SarawakNet, competent civil servants, smart city platform, open platform, open API, open data, digital ID, Trainers, SIOC in-sourced personnel
		2022	
		End date	
		2025	
Project Owner	Implementing Agency	Other Stakeholders	
SSMU	SSMU	State agencies	

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 2. Digitalising to drive ease of doing business		
<b>Project</b>	: Old Kuching Smart Heritage (OKSHE) (Smart Heritage)		
<b>Action step</b>	: 2.12		
Action step (s)	Output (s)	Timeline	Resources required
<b>2.12 Old Kuching Smart Heritage (OKSHE) (Smart Heritage)</b>  Carry out a feasibility study, design and development of blueprint for smart heritage: a) Study and requirement planning b) System development for data repository (dashboard) and urban farming monitoring c) Equipments/tools procurement and installation d) System testing e) Community development and training	Completion of: a) Digital Infrastructure and Platform b) Green and sustainable environment platform c) Smart Community programme d) Socio-Economic Platform	Start date	RM21 million big data infrastructure, ICT platform and talent expert, open platform, open API , open data, digital ID, e-wallet, digital banking, cybersecurity and taxation policies
		2022	
		End date	
		2025	
Project Owner	Implementing Agency	Other Stakeholders	
OKSHE/ SMA	SDEC/ CENTEXS	Consultants	

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 2. Digitalising to drive ease of doing business		
<b>Project</b>	: Smart stadium		
<b>Action step</b>	: 2.13		
Action step (s)	Output (s)	Timeline	Resources required
<b>2.13 Smart stadium</b> Implementing project as per the following steps: a) Study and requirement planning b) Requirement study and analysis, management services c) Develop business model and process d) Procurement process e) Develop and implement smart stadium features f) Testing, commissioning, training and handing over g) Promotion, maintenance and operation services	World class smart stadium to host global sports which involves infrastructure and system	Start date	RM30 million (overall funding required) high speed telecommunication (5G), smart city platform, open platform, open API, open data, digital ID, project officers (SDEC, SSC), Smart Stadium Master Plan
		2022	
		End date	
		2025	
Project Owner	Implementing Agency	Other Stakeholders	
SSC	SDEC	SMA, SSMU, MTACS, SAINS, SFSO, SAGC, community	

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 2. Digitalising to drive ease of doing business		
<b>Project</b>	: Integrated Social Management System		
<b>Action step</b>	: 2.14		
Action step (s)	Output (s)	Timeline	Resources required
<b>2.14 Integrated Social Management System</b>  a) Develop scope and specify business requirements b) Execute procurement for: <ul style="list-style-type: none"> <li>• Consultancy to scope and specify detailed business requirements and design to-be solution and specifications</li> <li>• Systems development and integration services</li> <li>• Supply of hardware and software</li> </ul> c) Contract and execution of consultancy, systems development and integration as well as implementation d) Implement systems, governance and training	An Integrated Social Management System for the consolidation of social development and welfare management in Sarawak covering but not limited to: <ol style="list-style-type: none"> <li>Social data collection and integration at every source agency, existing application systems, in the field of operations, as well as social media, public reporting, sentiment analysis, and other relevant sources, perform analytics, alerts, visualisation, dynamic reporting, sensors and communications that provides social information and indicators that are accurate, timely and reliable</li> <li>Integration and data sharing with all social related application systems (&gt;20), databases and stakeholders in the State and Federal Government;</li> <li>Holistic system based on the State and Divisional Social Transformation Framework (Sarawak Sejahtera), pillars and domain</li> <li>Undertake Social services (Centre for Social/ Drug Intervention) in every division in Sarawak</li> </ol>	<b>Start date</b>  2022	RM5 million high speed telecommunication (100 Mbps), competent social workers smart city platform, open platform, open API, open data, digital ID S Pay Global
		<b>End date</b>  2025	
Project Owner	Implementing Agency	Other Stakeholders	
SSMU/ SMA	KWKPK	All government agencies involved in social/ welfare, NGOs, political parties, private entities	

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 2. Digitalising to drive ease of doing business		
<b>Project</b>	: Integrated Social Management System		
<b>Action step</b>	: 2.14		
Action step (s)	Output (s)	Timeline	Resources required
<b>2.14 Integrated Social Management System</b>  a) Develop scope and specify business requirements b) Execute procurement for: <ul style="list-style-type: none"> <li>• Consultancy to scope and specify detailed business requirements and design to-be solution and specifications</li> <li>• Systems development and integration services</li> <li>• Supply of hardware and software</li> </ul> c) Contract and execution of consultancy, systems development and integration as well as implementation d) Implement systems, governance and training	e) Manage 10 priority social issue/ problem areas (i.e. abuse of drugs and substances, sexual crimes against women and children, domestic and family violence, etc.) from awareness to resolution to prevention to intervention f) Support inter-agency operations and collaboration in welfare activities, economic assistance (i.e. funding, entrepreneurship programme, business training, skill development, etc.) g) Assist all agencies performing social development/ services to improve their capabilities and functions/operations h) Maintaining a Social Wellbeing Index for monitoring all pillars of Sarawak Sejahtera model (i.e. family, education, health) in Sarawak i) Provide information to various stakeholders to craft policies, legislation and governance, develop programmes, implementation plans and assessments and conduct research for social development	<b>Start date</b>  2022	RM5 million high speed telecommunication (100 Mbps), competent social workers smart city platform, open platform, open API, open data, digital ID S Pay Global
		<b>End date</b>  2025	
Project Owner	Implementing Agency	Other Stakeholders	
SSMU/ SMA	KWKPK	All government agencies involved in social/ welfare, NGOs, political parties, private entities	

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 2. Digitalising to drive ease of doing business		
<b>Project</b>	: Integrated Social Management System		
<b>Action step</b>	: 2.14		
Action step (s)	Output (s)	Timeline	Resources required
<b>2.14 Integrated Social Management System</b>  a) Develop scope and specify business requirements b) Execute procurement for: <ul style="list-style-type: none"> <li>• Consultancy to scope and specify detailed business requirements and design to-be solution and specifications</li> <li>• Systems development and integration services</li> <li>• Supply of hardware and software</li> </ul> c) Contract an execution of consultancy, systems development and integration as well as implementation d) Implement systems, governance and training	j) Fully automated execution & tracking of policies, programmes, activities, coordination mechanism and standard operating procedures;  k) Multi-party collaboration, operations planning and execution, case management; and target person/ group, vehicle and activity tracking and monitoring	Start date	RM5 million high speed telecommunication (100 Mbps), competent social workers smart city platform, open platform, open API, open data, digital ID S Pay Global
		2022	
		End date	
		2025	
Project Owner	Implementing Agency	Other Stakeholders	
SSMU/ SMA	KWKPK	All government agencies involved in social/ welfare, NGOs, political parties, private entities	

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 2. Digitalising to drive ease of doing business		
<b>Project</b>	: Physical infrastructure and utility mapping		
<b>Action step</b>	: 2.15		
Action step (s)	Output (s)	Timeline	Resources required
<b>2.15 Physical infrastructure and utility mapping</b>  Implementing project as per the following steps: a) Developing scope and specify requirements b) Review policies, laws and regulations related to physical infrastructure and utility mapping c) Execute procurement for consultancy, system development and integration d) System Development, System Review, User Acceptance Test (UAT) & training e) Implement system, governance and training	One stop physical infrastructure and utility mapping data system and process	Start date	RM10 million high speed telecommunication (100 Mbps), competent civil servants, smart city platform, open platform, open API, open data, digital ID
		2022	
		End date	
		2025	
Project Owner	Implementing Agency	Other Stakeholders	
SSMU/ SMA	SMA, L&S, MOU	-	



## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 2. Digitalising to drive ease of doing business		
<b>Project</b>	: JKR Integrated Study, Planning & Development System		
<b>Action step</b>	: 2.16		
Action step (s)	Output (s)	Timeline	Resources required
<b>2.16 JKR Integrated Study, Planning &amp; Development System (part of eSPA)</b>  Implementing project as per the following steps: a) Developing scope and specify requirements b) Carry out procurement & project evaluation process c) System Development, System Review, User Acceptance Test (UAT) & training d) Implement system	f) Development of GEOINFOS <ul style="list-style-type: none"> <li>Standardised electronic format for authority submission of subsurface investigation data</li> <li>Single centralised database of all Sarawak SI records</li> <li>Web based access to database with various levels of access for different kind of users</li> </ul>	Start date	RM10 million high speed telecommunication (100 Mbps), competent civil servants, smart city platform, open platform, open API, open data, digital ID
		2022	
		End date	
		2025	
Project Owner	Implementing Agency	Other Stakeholders	
SSMU	JKR	SMA, DoA, MUDENR	

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 2. Digitalising to drive ease of doing business		
<b>Project</b>	: State Development Planning & Management System		
<b>Action step</b>	: 2.17		
Action step (s)	Output (s)	Timeline	Resources required
<b>2.17 State Development Planning &amp; Management System (integrated with eSPA)</b>  Implementing project as per the following steps: a) Developing scope and specify requirements b) Carry out waiver of tender & project evaluation process c) System Development, System Review, User Acceptance Test (UAT) & training d) System implementation	2021-2022: eQP 2.0 a) Merging/Integrate eQP into eSPA b) Improve digital submission UX c) Data Analytics d) Other enhancements  2021-2023 eSPA 2.0 a) More comprehensive list of application categories/types for digital submission (i.e. application under delegation of power DLS/GM BDA) b) GIS Portal c) Develop submission criteria and database for 3D model files of proposed development d) Migration of spatial data from SUPERMAP to ARGIS.	Start date	RM10 million high speed telecommunication (100 Mbps), competent civil servants, smart city platform, open platform, open API, open data, digital ID
		2021	
		End date	
		2025	
Project Owner	Implementing Agency	Other Stakeholders	
SSMU	MUDENR	-	

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 2. Digitalising to drive ease of doing business		
<b>Project</b>	: State Development Planning & Management System		
<b>Action step</b>	: 2.17		
Action step (s)	Output (s)	Timeline	Resources required
<b>2.17 State Development Planning &amp; Management System (integrated with eSPA)</b>  Implementing project as per the following steps: a) Developing scope and specify requirements b) Carry out waiver of tender & project evaluation process c) System Development, System Review, User Acceptance Test (UAT) & training d) System implementation	2021-2025 eSPA 3.0 a) To provide end-2-end / seamless experience for public, QP, QSP to deal with land development projects in Sarawak b) Management Dashboard:- <ul style="list-style-type: none"> <li>Visualise and track the entire land development life cycle by project</li> <li>From Proposal &gt; SPA Approved Plan &gt; Building Plan &gt; WOS&gt; OP Title</li> <li>Project Status</li> <li>Figures (development components)</li> <li>Standardised KPI</li> <li>Access to digital plans</li> <li>Application references are linked up from the same project - flowing across agencies &amp; ministries</li> <li>No resubmission required for information that had been submitted earlier by submitting person</li> <li>No resubmission of approved plan documents by previous processing agencies, e.g. LSD, BDA &amp; Council</li> </ul>	Start date	RM10 million high speed telecommunication (100 Mbps), competent civil servants, smart city platform, open platform, open API, open data, digital ID
		2022	
		End date	
		2025	
Project Owner	Implementing Agency	Other Stakeholders	
SSMU	MUDENR	-	



## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 2. Digitalising to drive ease of doing business		
<b>Project</b>	: ICT Development and Enhancement Projects for L&S		
<b>Action step</b>	: 2.18		
Action step (s)	Output (s)	Timeline	Resources required
<b>2.18 ICT Development and Enhancement Projects for L&amp;S</b>  Implementing project as per the following steps: a) Developing scope and specify requirements b) Carry out waiver of tender & project evaluation process c) System Development, System Review, User Acceptance Test (UAT) & training d) System implementation	a) LASIS Next Generation System (LASIS with new design and technologies) b) Temporary Occupation Licence (TOL) Management System c) Smart Enforcement System d) Online Extraction of Survey Data Service (together with the online submission of survey jobs, the survey service is E2E) e) Improvement to the current LASIS database for data analytics.	Start date	RM10 million high speed telecommunication (100 Mbps), competent civil servants, smart city platform, open platform, open API, open data, digital ID
		2022	
		End date	
		2025	
Project Owner	Implementing Agency	Other Stakeholders	
SSMU, L&S department	L&S department	-	

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 2. Digitalising to drive ease of doing business		
<b>Project</b>	: Digitalisation of Water Supply Phase 2		
<b>Action step</b>	: 2.19		
Action step (s)	Output (s)	Timeline	Resources required
<b>2.19 Digitalisation of Water Supply Phase 2</b>  Implementing project as per the following steps: a) Developing scope and specify requirements b) Carry out waiver of tender & project evaluation process c) System Development, System Review, User Acceptance Test (UAT) & training d) System implementation	a) WBS 2.0 - including enhanced UI/UX, system migration, system integration with Agrobank, POS Malaysia and other banking institutions, MMAS/IAMS, Sifbas, existing command centre platform, Service Sarawak, Sarawak ID and Advanced Meter Infrastructure (AMI) b) Water Supply Operation Reporting Management System (WORMS) - PWD106 daily report (i.e. plant operation, fuel, chemical stock, water quality, chemical dosing, jab, kimia sample, electricity, water usage & pump status particulars to integrate with MMAS/IAMS, SIFBAS and existing command centre platform for data), PWD112 (i.e. monthly report - summary of daily report for every month, for every Water Supply Authorities (WSA)), annual report (i.e. integrate data from water billing - tariff, consumption, NRW, integrate data with Talikhidmat for complaints statistics, integrate with SCS-GEMS for salary and staff info statistics, energy consumption, integrate with SIFBAS for capex and opex cost, dam operation, integrate with existing command centre platform for pipeline data)	Start date	RM10 million high speed telecommunication (100 Mbps), competent civil servants, smart city platform, open platform, open API, open data, digital ID
		2022	
		End date	
		2025	
Project Owner	Implementing Agency	Other Stakeholders	
SSMU	JBALB	-	

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 2. Digitalising to drive ease of doing business		
<b>Project</b>	: Digitalisation of Water Supply Phase 2		
<b>Action step</b>	: 2.19		
Action step (s)	Output (s)	Timeline	Resources required
<b>2.19 Digitalisation of Water Supply Phase 2</b>  Implementing project as per the following steps: a) Developing scope and specify requirements b) Carry out waiver of tender & project evaluation process c) System Development, System Review, User Acceptance Test (UAT) & training d) System implementation	c) Integrated Water Resource Demand Management System (iWARDEMs) - POC for the installation of catchment areas monitoring station and telemetry system for data collection, Integration with existing NAWAB application (federal DID monitoring system) and existing iHydro (Sarawak DID monitoring system), installation of catchment areas monitoring station and telemetry system for data collection.  d) Functional requirement documents (FRD), UAT and training for personnel.	Start date	RM10 million high speed telecommunication (100 Mbps), competent civil servants, smart city platform, open platform, open API, open data, digital ID
		2022	
		End date	
		2025	
Project Owner	Implementing Agency	Other Stakeholders	
SSMU	JBALB	-	





## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 2. Digitalising to drive ease of doing business		
<b>Project</b>	: Information System for Utilities - Phase 2		
<b>Action step</b>	: 2.20		
Action step (s)	Output (s)	Timeline	Resources required
<b>2.20 Information System for Utilities - Phase 2</b>  Implementing project as per the following steps: i) Conduct workshops to study the requirement for project monitoring j) Conduct System Requirements Study for project scope under 12MP 2nd Rolling Plan (2023-2025) k) Carry out procurement process l) Setup new online services m) Enhance existing system <ul style="list-style-type: none"> <li>• Data sharing for water catchment and infrastructure spatial data from JBALB via SHARES centralised platform</li> <li>• Plot layer function under Map Viewer</li> <li>• Online payment, e.g. credit card, bank transfer, e-Wallet, TT and integrate with treasury system</li> </ul>	o) 3 new online services.: <ul style="list-style-type: none"> <li>• Online registration &amp; renewal of accredited institution module (for e-Water, e-Gas, eMINDS) – all in one system</li> <li>• Online examination endorsement enhancement – all in one system</li> <li>• Online electricity generating licence application</li> </ul> p) Functions covering: <ul style="list-style-type: none"> <li>• Water catchment data include in e-Utilities</li> <li>• Staff able to add layers in Map Viewer</li> <li>• Online services enhance with new payment channels</li> </ul>	Start date	RM7 million (total funding required for the project), competent consultants, government officers in data analytics
		2022	
		2025	
Project Owner	Implementing Agency	Other Stakeholders	
MOU, SSMU	MOU	SMA, SIMU, UPKJ, SIRIM, RNDO, Treasury department, L&S, Accredited Institutions, UPKJ, SIRIM	

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 2. Digitalising to drive ease of doing business		
<b>Project</b>	: Information System for Utilities - Phase 2		
<b>Action step</b>	: 2.20		
Action step (s)	Output (s)	Timeline	Resources required
<b>2.20 Information System for Utilities - Phase 2</b>  Implementing project as per the following steps: n) Setup One Utilities Project Monitoring System under IPMS – for MOU, JBALB, KWB, SWB, LAKU <ul style="list-style-type: none"> <li>• Complete information on project life cycle</li> <li>• Reporting and data analytics - project log/history tracking, upload project file from agencies, advance search in project list, etc.</li> <li>• Online Rural Project application - integration with IPMS</li> </ul> o) Integrate with other systems <ul style="list-style-type: none"> <li>• Integrate eMINDS with UPKJ</li> <li>• Integrate e-KISS system with Water Supply Authorities</li> <li>• Integration with SEB system for electricity supply performance information to eUtilities and power outages notification info to MOU website</li> <li>• Integration with SIRIM for certificate of approval</li> </ul>	q) Project monitoring system for MOU and all water supply agencies  r) E-Utilities system integrates with other systems for information sharing	Start date	RM7 million (total funding required for the project), competent consultants, government officers in data analytics
		2022	
		End date	
		2025	
Project Owner	Implementing Agency	Other Stakeholders	
MOU, SSMU	MOU	SMA, SIMU, UPKJ, SIRIM, RNDO, Treasury department, L&S, Accredited Institutions, SIRIM	

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 2. Digitalising to drive ease of doing business		
<b>Project</b>	: Information System for Utilities - Phase 2		
<b>Action step</b>	: 2.20		
Action step (s)	Output (s)	Timeline	Resources required
<b>2.20 Information System for Utilities - Phase 2</b>  Implementing project as per the following steps: p) Establish Utility Information Center <ul style="list-style-type: none"> <li>Utilities data and information on website and at MOU information center.</li> </ul>	s) Data and information on utilities are accessed by public through website.	Start date	RM7 million (total funding required for the project), competent consultants, government officers in data analytics
		2022	
		End date	
		2025	
Project Owner	Implementing Agency	Other Stakeholders	
MOU, SSMU	MOU	SMA, SIMU, UPKJ, SIRIM, RNDO, Treasury department, L&S, Accredited Institutions, UPKJ, SIRIM	

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 2. Digitalising to drive ease of doing business		
<b>Project</b>	: One Utility Bill (OUB)		
<b>Action step</b>	: 2.21		
Action step (s)	Output (s)	Timeline	Resources required
<b>2.21 One Utility Bill</b> Implementing project as per the following steps: a) Create system design and mock-up b) Administer tendering process c) Contract and execution of OUB system development and integration with government systems (ISM, Sarawak ID, S Global Pay, etc.) d) Implement system, operations and training	One Utility Bill system comprising of water electricity and gas distribution	Start date	RM3.5 million (total funding required for the project)
		2022	
		End date	
		2025	
Project Owner	Implementing Agency	Other Stakeholders	
MOU, SSMU	SDEC	SMA, SEB, water supply authorities and other agencies	

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 2. Digitalising to drive ease of doing business		
<b>Project</b>	: Development of Water Supply Command Centers		
<b>Action step</b>	: 2.22		
Action step (s)	Output (s)	Timeline	Resources required
<b>2.22 Development of Water Supply Command Centers</b>  Implementing project as per the following steps: a) Project initialisation and planning b) Carry out procurement process c) Construct / upgrade Command Centers in Central and Northern Regions and MOU d) Purchase equipment for the command centers e) Establish data and predictive analytics capability for decision making, solutions and engagement with public f) Integrate Command Centers in Southern, Central and Northern Regions with SIOC and MOU g) Testing and commissioning	Integrated water supply command centers state-wide with intelligent system for decision making and issue handling	<b>Start date</b>	RM15 million (total funding required for the project), expert and knowledgeable staff in data and predictive analytics
		2022	
		<b>End date</b>	
		2025	
Project Owner	Implementing Agency	Other Stakeholders	
MOU, JBALB, KWB, SWB, LAKU, SSMU	MOU, JBALB, KWB, SWB, LAKU	SMA	

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 2. Digitalising to drive ease of doing business		
<b>Project</b>	: Sarawak Minerals Information System		
<b>Action step</b>	: 2.23		
Action step (s)	Output (s)	Timeline	Resources required
<b>2.23 Sarawak Minerals Information System</b>  Develop Sarawak Mining Policy to support implementation of Sarawak mining masterplan.	"One Stop System" for all activities involving the mining industries	Start date	RM1.3 million
		2023	
		End date	
		2024	
Project Owner	Implementing Agency	Other Stakeholders	
MUDENR, SSMU	MUDENR	SMA	

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 2. Digitalising to drive ease of doing business		
<b>Project</b>	: Integrated Entrepreneur System (BNR, EDMS, etc.)		
<b>Action step</b>	: 2.24		
Action step (s)	Output (s)	Timeline	Resources required
<b>2.24 Integrated Entrepreneur System (BNR, EDMS, etc.)</b>  Implementing project as per the following steps: a) System requirement study <ul style="list-style-type: none"> <li>Identify issues of existing database</li> <li>Proposed enhancement framework</li> </ul> b) Design system c) Develop system <ul style="list-style-type: none"> <li>Update database</li> <li>Beta testing/testing rollout</li> <li>Evaluation</li> </ul> d) Implement system and new process <ul style="list-style-type: none"> <li>Monitoring and maintenance</li> </ul>	a) Database on entrepreneurs in Sarawak and Sarawakian entrepreneurs b) Online facility for application for financial assistance c) Training sessions for entrepreneurs	Start date	RM5 million
		2022	
		End date	
		2025	
Project Owner	Implementing Agency	Other Stakeholders	
SSMU	MINTRED	SFS, Unit Pentadbiran JKM, SME CORP, DOSM, SSM, HASIL, PERKESO, KWPKK, Jabatan Wanita, Jabatan Kebajikan, SEDC, DOA, STIDC, MLGH, MTACS	

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 2. Digitalising to drive ease of doing business		
<b>Project</b>	: Autonomous AI Tractor for Palm Oil Harvesting Solution (Precision Agriculture Testbed)		
<b>Action step</b>	: 2.25		
Action step (s)	Output (s)	Timeline	Resources required
<b>2.25 Autonomous AI Tractor for Palm Oil Harvesting Solution (Precision Agriculture Testbed)</b>  a) Identify fresh food bunch (FFB) challenges in palm oil harvesting process and find solution b) Develop Smart AI + IoT solution for palm oil harvesting process c) Provide current and relevant programme in agriculture industry: palm oil	a) Smart AI + IoT solution for palm oil harvesting process b) Trainings to onboard for farmers	Start date	Funding
		2022	
		End date	
		2026	
Project Owner	Implementing Agency	Other Stakeholders	
Centexs	Centexs	-	

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 2. Digitalising to drive ease of doing business		
<b>Project</b>	: CENTEXS Nipa Research Lab (Precision Agriculture Testbed)		
<b>Action step</b>	: 2.26		
Action step (s)	Output (s)	Timeline	Resources required
<b>2.26 CENTEXS Nipa Research Lab (Precision Agriculture Testbed)</b>  a) Conduct research on Nipa Palm in Sarawak to support Nipa upstream and downstream b) Develop Automated Reticulation of nira sap collection solution c) Provide current and relevant programme in Agriculture industry: Nipa	a) Research findings on techniques to increase commercial value of the Nipa Palm b) Automated reticulation of nira sap collection solution c) Training programmes to industry players to apply the new technique and solution	Start date	Funding
		2022	
		End date	
		2026	
Project Owner	Implementing Agency	Other Stakeholders	
Centexs	Centexs	-	

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 2. Digitalising to drive ease of doing business		
<b>Project</b>	: E-Learning: Immersive Simulation Based Learning		
<b>Action step</b>	: 2.27		
Action step (s)	Output (s)	Timeline	Resources required
<b>2.27 E-Learning: Immersive Simulation Based Learning</b>  a) Develop immersive simulation based learning/ e-learning module leveraging high-tech equipment including AR/VR/XR  b) Provide training and programmes	E-learning module	Start date	Funding
		2022	
		End date	
		2026	
Project Owner	Implementing Agency	Other Stakeholders	
Centexs	Centexs	-	

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 2. Digitalising to drive ease of doing business		
<b>Project</b>	: Digital Welding Training: An Augmented Reality Welding Simulator		
<b>Action step</b>	: 2.28		
Action step (s)	Output (s)	Timeline	Resources required
<b>2.28 Digital Welding Training: An Augmented Reality Welding Simulator</b>  Provide welding skills through digital welding simulation prior to real machine to ensure welding remains vigilant in the industry sectors	Online/ digital trainings on welding	Start date	Funding
		2022	
		End date	
		2026	
Project Owner	Implementing Agency	Other Stakeholders	
Centexs	Centexs	-	

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 2. Digitalising to drive ease of doing business		
<b>Project</b>	: Building automation		
<b>Action step</b>	: 2.29		
Action step (s)	Output (s)	Timeline	Resources required
<b>2.29 Building automation</b> a) Provide programming and automation skills in home & building control for Building Automation System (BAS) b) Provide trainings and programmes	Trainings in building automation	Start date	Funding
		2022	
		End date	
		2024	
Project Owner	Implementing Agency	Other Stakeholders	
Centexs	Centexs	-	

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 2. Digitalising to drive ease of doing business		
<b>Project</b>	: Accelerated Capability Development		
<b>Action step</b>	: 2.30		
Action step (s)	Output (s)	Timeline	Resources required
<b>2.30 Accelerated Capability Development</b>  Provide training programmes using analytic software and digital simulation in the key disciplines of Exploration & Production, Geology, Geophysics, Reservoir Engineering and Drilling Engineering.	More than 20 training programmes provided using analytic software and digital simulation in the key disciplines of exploration & production, geology, geophysics, reservoir engineering and drilling engineering.	Start date	Funding
		2022	
		End date	
		2024	
Project Owner	Implementing Agency	Other Stakeholders	
Centexs	Centexs	-	

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 2. Digitalising to drive ease of doing business		
<b>Project</b>	: Smart Hydroponics		
<b>Action step</b>	: 2.31		
Action step (s)	Output (s)	Timeline	Resources required
<b>2.31 Smart Hydroponics</b>  Provide theoretical and practical in the field of agricultural operation in generating innovative solution through the application of IoT and smart monitoring apps	Theoretical courses and practical training in the field of agricultural operation in generating innovative solution through the application of IOT and smart monitoring apps	Start date	Funding
		2022	
		End date	
		2024	
Project Owner	Implementing Agency	Other Stakeholders	
Centexs	Centexs	-	

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 2. Digitalising to drive ease of doing business		
<b>Project</b>	: Smart Indoor Aquaponics Operation		
<b>Action step</b>	: 2.32		
Action step (s)	Output (s)	Timeline	Resources required
<b>2.32 Smart Indoor Aquaponics Operation</b>  Provide both theoretical and practical in the field of aquaculture through the application of IoT and smart system monitoring and control	Theoretical trainings and practical courses in the field of aquaculture through the application of IOT and smart system monitoring and control	Start date	Funding
		2022	
		End date	
		2024	
Project Owner	Implementing Agency	Other Stakeholders	
Centexs	Centexs	-	

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 2. Digitalising to drive ease of doing business		
<b>Project</b>	: Platform for digital health services		
<b>Action step</b>	: 2.33		
Action step (s)	Output (s)	Timeline	Resources required
<b>2.33 Platform for digital health services</b>  Implementing project as per the following steps: a) Define project scope b) Prepare proposal paper to brief higher authority c) Engagement with JKNS, PKB, private clinics, etc. d) Conduct comprehensive study e) Seek DGC approval f) Process procurement method g) Project execution h) Post project implementation	Integrated health system connected to all medical facilities in the State	Start date	RM5 million high speed telecommunication (100 Mbps), competent civil servants, smart city platform, open platform, open API, open data, digital ID
		2024	
		End date	
		2027	
Project Owner	Implementing Agency	Other Stakeholders	
SSMU	JKNS	KKM/ private medical/ State Government	

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 2. Digitalising to drive ease of doing business		
<b>Project</b>	: Sarawak Foreign Workers Health Management System (SaFHIS) (integrated with EnterSarawak/eHDF/SWIS)		
<b>Action step</b>	: 2.34		
Action step (s)	Output (s)	Timeline	Resources required
<b>2.34 Sarawak Foreign Workers Health Management System (SaFHIS) (integrated with EnterSarawak/ eHDF/ SWIS)</b>  Implementing project as per the following steps: a) Define project scope b) Engagement with UP/JTK c) Prepare project proposal d) Seek DGC approval e) Process procurement method f) Project execution g) Post project implementation	An integrated foreign workers health management system	Start date	RM2 million high speed telecommunication (100 Mbps), competent civil servants, smart city platform, open platform, open API, open data, digital ID
		2021	
		End date	
		2025	
Project Owner	Implementing Agency	Other Stakeholders	
SSMU	UP/ ILMU	SMA, KKM, JTK, JIMS, private clinics, etc.	

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 2. Digitalising to drive ease of doing business		
<b>Project</b>	: Disease Control and Eradication Programme (SDMC iAlert / SDMC social media platform)		
<b>Action step</b>	: 2.35		
Action step (s)	Output (s)	Timeline	Resources required
<b>2.35 Disease Control and Eradication Programme (SDMC iAlert / SDMC social media platform)</b>  Implementing project as per the following steps: a) Define project scope b) Engagement with relevant agencies (i.e. MKN, SDMC, JKNS) c) Prepare project proposal d) Seek DGC approval e) Process procurement method f) Project execution g) Post project implementation	An online Disease Control and Eradication System	Start date	RM1.5 million high speed telecommunication (100 Mbps), competent civil servants, smart city platform, open platform, open API, open data, digital ID
		2021	
		End date	
		2025	
Project Owner	Implementing Agency	Other Stakeholders	
SMA/ SSMU	SMA	SDMC, MKN, JKNS, APM, DVSS	

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 2. Digitalising to drive ease of doing business		
<b>Project</b>	: Online application for permission to enter and exit Sarawak		
<b>Action step</b>	: 2.36		
Action step (s)	Output (s)	Timeline	Resources required
<b>2.36 Online application for permission to enter and exit Sarawak</b>  Implementing project as per the following steps: a) Define system enhancement based on latest SOP issued by SDMC b) Prepare project proposal document c) Seek DGC approval d) Process procurement method e) Develop enhancement module f) System rollout	Comprehensive online application system for enter Sarawak	Start date	RM7.5 million
		2020	
		End date	
		2025	
Project Owner	Implementing Agency	Other Stakeholders	
SSMU/ SMA	SDMC/ UPKN	KKM, MKN, JIMS, APM, MTAC, UP, JTK other state agencies/ ministries	

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 2. Digitalising to drive ease of doing business		
<b>Project</b>	: Online application e-Health Declaration and Digital Tracking		
<b>Action step</b>	: 2.37		
Action step (s)	Output (s)	Timeline	Resources required
<b>2.37 Online Application e-Health Declaration and Digital Tracking</b>  Implementing project as per the following steps: a) Define system enhancement based on latest SOP issued by SDMC b) Prepare project proposal document c) Process procurement method d) Develop enhancement module e) System rollout	An updated application to monitor traveler's health declaration upon enter into Sarawak for disease control	Start date	RM7.5 million
		2020	
		End date	
		2025	
Project Owner	Implementing Agency	Other Stakeholders	
SSMU/ SMA	SDMC/ UPKN	KKM, MKN, JIMS, APM other state agencies/ministries	



## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 2. Digitalising to drive ease of doing business		
<b>Project</b>	: Artificial Intelligence (AI) and Forensic Timber Identification for forest protection and revenue generation		
<b>Action step</b>	: 2.39		
Action step (s)	Output (s)	Timeline	Resources required
<b>2.39 Artificial Intelligence (AI) and Forensic Timber Identification for forest protection and revenue generation</b>  Implementing project as per the following steps: a) Develop scope and specify requirements b) Execute procurement for: <ul style="list-style-type: none"> <li>• Consultancy services</li> <li>• Systems development and integration services</li> <li>• Supply of hardware and software</li> </ul> c) Contract and execution of consultancy, systems development and integration as well as implementation d) Implement systems, governance and training e) Implementation of enhancement of the system	A comprehensive AI and forensic timber identification.system	Start date	RM3 million high speed telecommunication (100 Mbps), competent civil servants, smart city platform, open platform, open API, open data, digital ID
		2022	
		End date	
		2027	
Project Owner	Implementing Agency	Other Stakeholders	
SSMU	FD	MUDENR, SMA	

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 2. Digitalising to drive ease of doing business		
<b>Project</b>	: 3D Cave Modelling For Gazetted Totally Protected Areas in Sarawak		
<b>Action step</b>	: 2.40		
Action step (s)	Output (s)	Timeline	Resources required
<b>2.40 3D Cave Modelling For Gazetted Totally Protected Areas in Sarawak</b>  Implementing project as per the following steps: a) Develop 3D Cave Modelling for totally protected areas in Sarawak b) Study and planning c) Procurement of equipment and installation d) Data analysis, modelling and platform setup e) User Training Manual for system	Data repository system for 3D cave modelling	Start date	RM3.9 million competent civil servants, big data open platform, open platform
		2022	
		End date	
		2025	
Project Owner	Implementing Agency	Other Stakeholders	
SFC, SSMU	SDEC	Experienced Geospatial analyst, safety expert, competent civil servant	

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 2. Digitalising to drive ease of doing business		
<b>Project</b>	: Timber Enforcement Administration and Management Systems		
<b>Action step</b>	: 2.41		
Action step (s)	Output (s)	Timeline	Resources required
<b>2.41 Timber Enforcement Administration and Management Systems</b>  Implementing project as per the following steps: a) Developing scope and specify requirements b) Carry out waiver of tender & project evaluation process c) System Development, System Review, User Acceptance Test (UAT) & training d) System implementation	2021-2023 (agreed modules): <ul style="list-style-type: none"> <li>• Comp 1: Enterprise Forest Information Management System (EFIMS) (enhancement - Satellite image/Catalogue of LPF + Enterprise database (improve updating &amp; publishing process efficiency)</li> <li>• Comp 7: IPTS (complete the investigation paperwork process. disposal module + temporary release application, integration with licensee portal)</li> <li>• Comp 9: Research, Development and Innovation Division (RDID) (centralised database and catalogue for specimen + digitalisation of specimens)</li> <li>• Comp 6: Revlog (e-Transit Pass - Digital )</li> <li>• Comp 3: Licensee Portal (timber licence renewal application - access for Sarawak ID user)</li> <li>• Agency Data-driven Transformation (Dashboard)</li> <li>• BPI - Overall FD function and processes</li> </ul>	Start date	RM10 million high speed telecommunication (100 Mbps), competent civil servants, smart city platform, open platform, open API, open data, digital ID
		2022	
		End date	
		2025	
Project Owner	Implementing Agency	Other Stakeholders	
SSMU	FD	UKPN, SFC, Harwood, STIDC, timber industry entities	

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation
<b>Initiative</b>	: 2. Digitalising to drive ease of doing business
<b>Project</b>	: Timber Enforcement Administration and Management Systems
<b>Action step</b>	: 2.41

Action step (s)	Output (s)	Timeline	Resources required
<b>2.41 Timber Enforcement Administration and Management Systems</b>  Implementing project as per the following steps: a) Developing scope and specify requirements b) Carry out waiver of tender & project evaluation process c) System Development, System Review, User Acceptance Test (UAT) & training d) System implementation	2022-2025 <ul style="list-style-type: none"> <li>• Comp 2: Reduced Impact Logging (RIL), Sustainable Forest Management (SFM) (chain of command - enabling verification supporting SFM)</li> <li>• Comp 4: Boundary Management (Sarawak ID User access to PFE - eliminate boundary discrepancy between FD &amp; LS)</li> <li>• Comp 5: FRAMES (Support Industrial Forest development + reforestation in Sarawak + access for Sarawak ID User)</li> </ul>	Start date	RM10 million high speed telecommunication (100 Mbps), competent civil servants, smart city platform, open API, open data, digital ID
		2022	
		End date	
		2025	

Project Owner	Implementing Agency	Other Stakeholders
SSMU	FD	UKPN, SFC, Harwood, STIDC, timber industry entities

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 2. Digitalising to drive ease of doing business		
<b>Project</b>	: Online Wildlife Licensing System (SMA to merge under TEAMS)		
<b>Action step</b>	: 2.42		
Action step (s)	Output (s)	Timeline	Resources required
<b>2.42 Online Wildlife Licensing System (SMA to merge under TEAMS)</b>  Implementing project as per the following steps: a) Developing scope and specify requirements b) Carry out waiver of tender & project evaluation process c) System Development, System Review, User Acceptance Test (UAT) & training d) System implementation	Online Wildlife Licensing Module for TEAMS	Start date	High speed telecommunication (100 Mbps), competent civil servants, smart city platform, open platform, open API, open data, digital ID
		2022	
		End date	
		2025	
Project Owner	Implementing Agency	Other Stakeholders	
SSMU	MUDENR	FD, SFC	

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 2. Digitalising to drive ease of doing business		
<b>Project</b>	: Smart solar power street light		
<b>Action step</b>	: 2.43		
Action step (s)	Output (s)	Timeline	Resources required
<b>2.43 Smart solar power street light</b>  Implementing project as per the following steps: a) System requirement study b) Review Policies c) Design System d) Develop system e) Implement system and new process	Smart Solar Power Street Light System	Start date	RM8 million high speed telecommunication (100 Mbps), competent civil servants, smart city platform, open platform, open API, open data, digital ID
		2021	
		End date	
		2025	
Project Owner	Implementing Agency	Other Stakeholders	
DBKU/ SDEC	SMA/ DBKU	-	



## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 2. Digitalising to drive ease of doing business		
<b>Project</b>	: Development and implementation of an application to monitor water level based on Hydrological Telemetry Data (previously DID Telemetry System Upgrades)		
<b>Action step</b>	: 2.45		
Action step (s)	Output (s)	Timeline	Resources required
<b>2.45 Development and implementation of an application to monitor water level based on Hydrological Telemetry Data (previously DID Telemetry System Upgrades)</b>  Implementing project as per the following steps: a) Developing scope and specify requirements b) Carry out waiver of tender & project evaluation process c) System Development, System Review, User Acceptance Test (UAT) & training d) System implementation	Integrated Smart Development Plan	Start date	RM1 million high speed telecommunication (100 Mbps), competent civil servants, smart city platform, open platform, open API, open data, digital ID
		2021	
		End date	
		2025	
Project Owner	Implementing Agency	Other Stakeholders	
SSMU	DID	SMA	

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 2. Digitalising to drive ease of doing business		
<b>Project</b>	: Online Monitoring System for Kuching Centralised Sewerage System Sewer Network		
<b>Action step</b>	: 2.46		
Action step (s)	Output (s)	Timeline	Resources required
<b>2.46 Online Monitoring System for Kuching Centralised Sewerage System Sewer Network</b>  Implementing project as per the following steps: a) Developing scope and specify requirements b) Carry out waiver of tender & project evaluation process c) System Development, System Review, User Acceptance Test (UAT) & training d) System implementation	A web-based monitoring system with the following capabilities: a) Monitoring sewage flow from 9 branches sewer (secondary to Main Trunk) to quantify the actual volume of sewage flow from connected properties based on area b) Monitoring 10 selected sewer manhole (potential) to prevent from sewage overflow to public and unauthorised removal of manhole cover	Start date	RM0.5 million high speed telecommunication (100 Mbps), competent civil servants, smart city platform, open platform, open API, open data, digital ID
		2021	
		End date	
		2025	
Project Owner	Implementing Agency	Other Stakeholders	
SSMU	Sewerage Department	SMA	

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 2. Digitalising to drive ease of doing business		
<b>Project</b>	: Environment, air and water quality monitoring and analysis		
<b>Action step</b>	: 2.47		
Action step (s)	Output (s)	Timeline	Resources required
<b>2.47 Environment, air and water quality monitoring and analysis</b>  Implementing project as per the following steps: a) Developing scope and specify requirements b) Execute procurement for System development c) Contract and execution of consultancy, systems development and integration as well as implementation d) System implementation	A comprehensive system that apply sensors, analytics, artificial intelligence and smart applications to monitor the quality of air, water particularly in our rivers and environment including outcomes from the following activities: a) Comprehensive study on air and water quality solutions b) Install air quality and water quality monitoring sensors and stations statewide c) Establish >100 IoT sensor stations and mobile communication network to enable remote monitoring of environment quality d) Data collection and analysis capability for decision support in regards to water and air quality management	Start date	RM10 million high speed telecommunication (100 Mbps), competent civil servants, smart city platform, open platform, open API, open data, digital ID
		2021	
		End date	
		2025	
Project Owner	Implementing Agency	Other Stakeholders	
SSMU	NREB, MUDENR, MOU	-	

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 2. Digitalising to drive ease of doing business		
<b>Project</b>	: Cyber security code of practice and awareness programmes		
<b>Action step</b>	: 2.48		
Action step (s)	Output (s)	Timeline	Resources required
<b>2.48 Cyber security code of practice and awareness programmes</b>  Implementing project as per the following steps: a) Develop cyber security programmes b) Programme evaluation	Cyber security code of practice and awareness programmes	Start date	RM0.45 million high speed telecommunication (100 Mbps), competent civil servants, smart city platform, open platform, open API, open data, digital ID
		2022	
		End date	
		2025	
Project Owner	Implementing Agency	Other Stakeholders	
SMA, SSMU	State agencies	-	

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 2. Digitalising to drive ease of doing business		
<b>Project</b>	: Data security and protection framework		
<b>Action step</b>	: 2.49		
Action step (s)	Output (s)	Timeline	Resources required
<b>2.49 Data security and protection framework</b>  Implementing project as per the following steps: a) Requirement study and analysis b) Review policy c) Implementation of data security and protection framework	Data Security and Protection framework	<b>Start date</b>	RM5 million high speed telecommunication (100 Mbps), competent civil servants, smart city platform, open platform, open API, open data, digital ID
		2022	
		<b>End date</b>	
		2025	
Project Owner	Implementing Agency	Other Stakeholders	
SMA	SMA	-	

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 2. Digitalising to drive ease of doing business		
<b>Project</b>	: S Global Pay (S Pay Global)		
<b>Action step</b>	: 2.50		
Action step (s)	Output (s)	Timeline	Resources required
<b>2.50 S Global Pay (S Pay Global)</b>  Implementing project as per the following steps: a) Define new features/functions b) Prepare project proposal c) Process procurement method d) Enhance system	SPay Global System with enhanced e-commerce and cross border transaction features	<b>Start date</b>	RM125 million high speed telecommunication (100 Mbps), competent civil servants, smart city platform, open platform, open API, open data, digital ID
		2021	
		<b>End date</b>	
		2025	
Project Owner	Implementing Agency	Other Stakeholders	
EPU Sarawak, SSMU	EPU Sarawak	-	

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 2. Digitalising to drive ease of doing business		
<b>Project</b>	: Implementation of Sarawak ID		
<b>Action step</b>	: 2.51		
Action step (s)	Output (s)	Timeline	Resources required
<b>2.51 Implementation of Sarawak ID</b>  Implementing project as per the following steps: a) Developing scope and specify requirements b) Carry out procurement process c) System Development, System Review, User Acceptance Test (UAT) & training d) System implementation	A full-feature digital ID solution for citizen and organisations, with support for identification of foreigners and those without IC/birth certificate, eKYC	Start date	RM1 million high speed telecommunication (100 Mbps), competent civil servants, smart city platform, open platform, open API, open data, digital ID
		2021	
		End date	
		2025	
Project Owner	Implementing Agency	Other Stakeholders	
SMA/ SSMU	SMA	-	

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 2. Digitalising to drive ease of doing business		
<b>Project</b>	: Service Sarawak Centre		
<b>Action step</b>	: 2.52		
Action step (s)	Output (s)	Timeline	Resources required
<b>2.52 Service Sarawak Centre (Service Sarawak for One Stop Frontline Services)</b>  Implementing project as per the following steps: a) Developing scope and specify requirements b) Carry out waiver of tender & project evaluation process c) System Development, System Review, User Acceptance Test (UAT) & training d) System implementation	a) The Service Sarawak Kiosks extended throughout Sarawak with new services b) Service Sarawak Operation system enhanced for service efficiency and support outreach to rakyat especially for rural community c) New/improved frontline service for Service Sarawak through integration. The services include the councils related services, District Office related services, utilities related services, agriculture related services, land related services, forestry related services and others high impact/demand frontlines services d) New/improved frontline services available at various Service Sarawak One Stop Service Channels through integration with service owner application system. Covered services from State Agencies, Statutory Bodies, Local councils, GLCs, Federal Government Agencies	Start date	RM5 million high speed telecommunication (100 Mbps), ISM platform, competent civil servants, smart city platform, open platform, open API, open data, digital ID
		2022	
		End date	
		2025	
Project Owner	Implementing Agency	Other Stakeholders	
SSMU	SSMU	-	

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 2. Digitalising to drive ease of doing business		
<b>Project</b>	: Feasibility study, development and implementation of blockchain capability		
<b>Action step</b>	: 2.53		
Action step (s)	Output (s)	Timeline	Resources required
<b>2.53 Feasibility study, development and implementation of blockchain capability</b>  Implementing project as per the following steps: a) Developing scope and specify requirements b) Procurement of consultancy services c) Contract and execution of identified applications for blockchain d) Execute pilot implementation and governance for each identified blockchain application e) Scale each application as required with enhancements, integration and training	A trusted digital blockchain-based ecosystem that support various application areas, i.e. e-Commerce, land records and transactions, etc.	Start date	RM2 million high speed telecommunication (100 Mbps), competent civil servants, smart city platform, open platform, open API, open data, digital ID
		2022	
		End date	
		2025	
Project Owner	Implementing Agency	Other Stakeholders	
SMA	SMA	-	

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 2. Digitalising to drive ease of doing business		
<b>Project</b>	: Integrated Service Management System		
<b>Action step</b>	: 2.54		
Action step (s)	Output (s)	Timeline	Resources required
<b>2.54 Integrated Service Management System</b>  Implementing project as per the following steps: a) Developing scope and specify requirements b) Carry out waiver of tender & project evaluation process c) System Development, System Review, User Acceptance Test (UAT) & training d) System implementation	a) 77 online services available under ISM b) Rating system for service and customer satisfaction and public feedback c) Central accessing of PKI documents in public workspace, signing of PKI document and validation of PKI documents using QR code d) Comprehensive service performance by service owner e) One central access to Sarawak Government services through SEG Portal & SEG application	Start date	RM12 million high speed telecommunication (100 Mbps), competent civil servants, smart city platform, open platform, open API, open data, digital ID
		2021	
		End date	
		2030	
Project Owner	Implementing Agency	Other Stakeholders	
SSMU	SSMU	-	

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 2. Digitalising to drive ease of doing business		
<b>Project</b>	: Digital platform for benefits, incentives, and welfare		
<b>Action step</b>	: 2.55		
Action step (s)	Output (s)	Timeline	Resources required
<b>2.55 Digital platform for benefits, incentives, and welfare</b>  Implementing project as per the following steps: a) Feasibility study b) User requirement gathering c) Prepare project proposal d) Process procurement method e) Prepare business process document f) Prepare system design document g) System development h) System testing i) System deployment j) Post implementation	One stop centre/digital platform that supports: a) Social welfare and social support b) Economic development for the underprivileged group c) Counselling and psychology d) Disaster management and volunteer community	Start date	RM17.7 million high speed telecommunication (100 Mbps), competent civil servants, smart city platform, open platform, open API, open data, digital ID
		2021	
		End date	
		2025	
Project Owner	Implementing Agency	Other Stakeholders	
SSMU/ SMA	KWKPK	State agencies/ministries	

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 2. Digitalising to drive ease of doing business		
<b>Project</b>	: Biodiversity Contents Creation Programme for Digital Economy Sectors in social, tourism and agriculture		
<b>Action step</b>	: 2.56		
Action step (s)	Output (s)	Timeline	Resources required
<b>2.56 Biodiversity Contents Creation Programme for Digital Economy Sectors in social, tourism and agriculture</b>  Implementing project as per the following steps: a) Organising natural STEM education b) Digital repository of Biodiversity Heritage c) Conducting professional programmes: Biodiversity Tourism Program d) Conducting lifelong learning/ short courses e) Industry internship at tertiary education	a) Training and courses on Biodiversity Contents Creation for Digital Economy Sectors, particularly Social, Tourism and Agriculture  b) 7,500 Sarawakian enrolment in school and University (1,000 pax per batch)	Start date	RM28 million funding, manpower, training materials, software, database, digital image consultant, industry partners (i.e. SFC, SFD, HDU Drone Academy/ smart agriculture related company)
		2021	
		End date	
		2026	
Project Owner	Implementing Agency	Other Stakeholders	
SMA	SMA	UNIMAS, Jabatan Pendidikan Negeri Sarawak, consultants, other related training/ education	

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 2. Digitalising to drive ease of doing business		
<b>Project</b>	: Electronic IC and Data Encryption (Certificate Authority/ Private Key Infrastructure)		
<b>Action step</b>	: 2.57		
Action step (s)	Output (s)	Timeline	Resources required
<b>2.57 Electronic IC and Data Encryption (Certificate Authority/ Private Key Infrastructure)</b>  Implementing project as per the following steps: a) Developing scope and specify requirements b) Carry out procurement process c) Implementation of High Availability and Disaster Recovery onto PKI Infra	2021: <ul style="list-style-type: none"> <li>Enhanced PKI platform, additional systems to adopt PKI - GEMS, eLA2, e-Minds, Syariah Court Case Management System - case registration and other modules, Khidmat Islam Sarawak (e-KISWA) – e-Munakahat, Nikah and other modules. Ministry of Utilities (MoU) Information System – Online New and Renewal Application or Registration, e-Procurement, eR&amp;DO (BNR, Probate)</li> </ul> 2022: <ul style="list-style-type: none"> <li>Enhanced PKI platform, additional systems to adopt PKI - CACTUS, Native Marriage Electronic System (NAMES) – marriage registration and other modules, migration - Land &amp; Survey eLASIS System, eSPA, eQP, ePASS</li> <li>State Integrated Financial and Accounting System (SIFBAS) modules</li> </ul> 2023: <ul style="list-style-type: none"> <li>Enhanced PKI platform, additional systems to adopt PKI - GEMS, Ministry of Utilities (MoU) Information System – licence application and other modules</li> </ul>	<b>Start date</b>  2021	RM1.5 million high speed telecommunication (100 Mbps), competent civil servants, smart city platform, open platform, open API, open data, digital ID
		<b>End date</b>  2030	
Project Owner	Implementing Agency	Other Stakeholders	
SSMU	SSMU	SMA, other State agencies	

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 2. Digitalising to drive ease of doing business		
<b>Project</b>	: Simplification of business names, trade licence and operating permit		
<b>Action step</b>	: 2.58		
Action step (s)	Output (s)	Timeline	Resources required
<b>2.58 Simplification of business names, trade licence and operating permit</b>  Implementing project as per the following steps: a) Carry out service and business process reengineering b) System requirement study c) Review policies/ Ordinance: The Business Names Ordinance 1958 (Chapter 64, Laws of Sarawak) & The Business, Professions & Trade Licensing Ordinances, 1955 (Cap.33, Laws of Sarawak). d) Design System e) Develop system f) Implement system and new process	a) Application to link processes to start business, including facilitating FDI (i.e. manufacturing licences, etc.)  b) Registration of business names, for Trade and Business Licences and Operating permits at the one-stop portal of Service Sarawak, which could also be made accessible via portals of other relevant agencies	Start date	RM1.5 million high speed telecommunication (100 Mbps), competent civil servants, smart city platform, open platform, open API, open data, digital ID
		2022	
		End date	
		2025	
Project Owner	Implementing Agency	Other Stakeholders	
UP, MLGH, SSMU, SMA	UP, MLGH, SSMU, SMA	State: SAG, SFS, State Treasury, SMA, MINTRED  Federal: Federal AG, MOF, LHDN, MITI, MIDA	

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 2. Digitalising to drive ease of doing business		
<b>Project</b>	: e-TANI: Integrated Agriculture Database for Sarawak		
<b>Action step</b>	: 2.59		
Action step (s)	Output (s)	Timeline	Resources required
<b>2.59 e-TANI: Integrated Agriculture Database for Sarawak</b>  Implementing project as per the following steps: a) Developing scope and specify requirements b) Carry out waiver of tender & evaluation process c) System development, system review, UAT, Training d) System implementation	2021 Four (4) services <ul style="list-style-type: none"> <li>• Application of schemes, subsidies and assistance</li> <li>• Application of e-permit and phytosanitary certs</li> <li>• Application of soil maps (SHARES)</li> <li>• Application for MyGAP certification</li> </ul> 2022 Six (6) services <ul style="list-style-type: none"> <li>• Registration in Area Farmers' Organisation</li> <li>• Application of fisheries licences</li> <li>• Request for agriculture information and statistics</li> <li>• Application for lab services</li> <li>• Application for Planting Material Verification</li> <li>• Application for farmers' training and courses</li> </ul> (Take into account requirement from agriculture client, e.g. farmers, fishermen to market agriculture products. The number of services may increase due to dynamic industry)	Start date	RM5 million Big data infrastructure, ICT platform and talent expert, open platform, open API, open data, digital ID, e-wallet, digital banking, cybersecurity and taxation policies
		2022	
		2025	
Project Owner	Implementing Agency	Other Stakeholders	
SSMU	DOA	State agencies/ ministries	

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 2. Digitalising to drive ease of doing business		
<b>Project</b>	: e-TANI: Integrated Agriculture Database for Sarawak		
<b>Action step</b>	: 2.59		
Action step (s)	Output (s)	Timeline	Resources required
<b>2.59 e-TANI: Integrated Agriculture Database for Sarawak</b>  Implementing project as per the following steps: a) Developing scope and specify requirements b) Carry out waiver of tender & evaluation process c) System development, system review, UAT, Training d) System implementation	2022: Statistics <ul style="list-style-type: none"> <li>• Village and farmer profiles</li> <li>• Hectarage, production and yield</li> <li>• Land status</li> <li>• Specific locations</li> <li>• Number of permits issued</li> <li>• Commodities price</li> <li>• Agriculture external and international trade</li> <li>• Agriculture in Sarawak and Malaysia economy</li> <li>• Price trend for agriculture products, commodities and inputs</li> </ul> 2023: Project Management <ul style="list-style-type: none"> <li>• Funding info</li> <li>• Current year project monitoring</li> <li>• Past projects records</li> <li>• Project participant monitoring</li> <li>• Actual project sites</li> <li>• Records for successful projects</li> <li>• Geospatial database and GIS capabilities</li> <li>• Boundaries for DUN, Parlimen, Districts and Divisions</li> <li>• Pest and diseases control</li> <li>• Outbreak management</li> <li>• Project photos</li> </ul>	Start date	RM5 million Big data infrastructure, ICT platform and talent expert, open platform, open API, open data, digital ID, e-wallet, digital banking, cybersecurity and taxation policies
		2022	
		2025	
Project Owner	Implementing Agency	Other Stakeholders	
SSMU	DOA	State agencies/ ministries	

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 2. Digitalising to drive ease of doing business		
<b>Project</b>	: Go Digital Consultancy Program		
<b>Action step</b>	: 2.60		
Action step (s)	Output (s)	Timeline	Resources required
<b>2.60 Go Digital Consultancy Program</b>  Implementing project as per the following steps: a) Develop consultancy programmes b) Programme monitoring	a) Industry standard platform b) 1,000 businesses on boarded onto digitalisation annually c) Tracking: SERAPI (ecosystem platform) and digital business listing platform operational by Q3 2022	Start date	RM50 million digital infrastructure trainers and skill providers, policy support for gig workers in digital economy
		2021	
		End date	
		2030	
Project Owner	Implementing Agency	Other Stakeholders	
SDEC	SDEC	SMA, SMG, TEGAS, private sector innovation partners, federal partners (i.e. MDEC, MAGIC, etc.), MINTRED, MESTR	

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 2. Digitalising to drive ease of doing business		
<b>Project</b>	: Talikhidmat		
<b>Action step</b>	: 2.61		
Action step (s)	Output (s)	Timeline	Resources required
<b>2.61 Talikhidmat</b> Implementing project as per the following steps: a) Developing scope and specify requirements b) Carry out procurement process c) System Development, System Review, User Acceptance Test (UAT) & training d) System implementation	Upgraded Talikhidmat system and process: a) 1. To enhance current application on customer management operation (i.e. comprehensive case management operation, allow public to track the cases by process, etc.) b) To enhance current application on agency end (i.e. seamless & speedy collaboration with outsource contractors and service providers, improve instantaneous decision makings at a glance, easy reporting) c) To include features such as announcement/ alert, GIS, statistical/analytics, etc. d) To improve the customer servicing, engagement process, operational efficiency and customer satisfaction	Start date	RM2 million high speed telecommunication (100 Mbps), competent civil servants, smart city platform, open platform, open API, open data, digital ID
		2021	
		End date	
		2025	
Project Owner	Implementing Agency	Other Stakeholders	
SSMU	UKAS	-	

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 2. Digitalising to drive ease of doing business		
<b>Project</b>	: Integrated Project Management System		
<b>Action step</b>	: 2.62		
Action step (s)	Output (s)	Timeline	Resources required
<b>2.62 Integrated Project Management System</b>  Implementing project as per the following steps: a) Developing scope and specify requirements b) Carry out waiver of tender & project evaluation process c) System Development, System Review, User Acceptance Test (UAT) & training d) System implementation	Additional features of Integrated Project Management System and enhancement of other related systems  2021: <ul style="list-style-type: none"> <li>IPMS Dashboard</li> <li>Existing Systems Improvement (i.e. SPPMS, RTPMS, PACES)</li> <li>Smart Monitor application Enhancement</li> </ul> 2022 - 2025: <ul style="list-style-type: none"> <li>Existing systems improvement (i.e. SPPMS, RTPMS, PACES)</li> <li>Integration with other Line of Business (LOB) applications like SIFBAS, Contractors Registration Information System (CoRIS), GEMS, eSPA, etc. for data</li> <li>Sharing purposes</li> </ul>	Start date	RM6 million high speed telecommunication (100 Mbps), competent civil servants, smart city platform, open platform, open API, open data, digital ID
		2021	
		End date	
		2025	
Project Owner	Implementing Agency	Other Stakeholders	
SSMU	EPU Sarawak/ SIMU	Government agencies	

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 2. Digitalising to drive ease of doing business		
<b>Project</b>	: State e-Procurement		
<b>Action step</b>	: 2.63		
Action step (s)	Output (s)	Timeline	Resources required
<b>2.63 State e-Procurement</b>  Implementing project as per the following steps: a) Developing scope and specify requirements b) Carry out procurement process c) System Development, System Review, User Acceptance Test (UAT) & training d) System implementation	State e-Procurement System	Start date	RM4 million high speed telecommunication (100 Mbps), competent civil servants, smart city platform, open platform, open API, open data, digital ID
		2021	
		End date	
		2023	
Project Owner	Implementing Agency	Other Stakeholders	
SSMU	SFSO	Government agencies	

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 2. Digitalising to drive ease of doing business		
<b>Project</b>	: PRODAMS (Property Development and Asset Management System)		
<b>Action step</b>	: 2.64		
Action step (s)	Output (s)	Timeline	Resources required
<b>2.64 PRODAMS (Property Development and Asset Management System)</b>  Implementing project as per the following steps: a) Developing scope and specify requirements b) Carry out waiver of tender & project evaluation process c) System Development, System Review, User Acceptance Test (UAT) & training d) Appointment of service provider, mobilisation of project team e) User requirement study f) Business process improvement g) System design h) System development i) System implementation j) Operation and Maintenance	Integrated PRODAMS:  2023: <ul style="list-style-type: none"> <li>Integration data - HomeApps, Home2Grab and HIS(Housing Information System)</li> <li>Licence and Permit Management</li> <li>e-Tribunal</li> <li>SarawakID Corporate</li> </ul> 2024: <ul style="list-style-type: none"> <li>Digital signature</li> <li>Landed and Strata Properties Management</li> <li>eAduan</li> </ul> 2025: <ul style="list-style-type: none"> <li>Developer Profile Management</li> <li>Housing Project Planning</li> </ul>	Start date	RM3 million high speed telecommunication (100 Mbps), competent civil servants, smart city platform, open platform, open API, open data, digital ID, document on existing process, policies, User Agency
		2022	
		End date	
		2025	
Project Owner	Implementing Agency	Other Stakeholders	
SSMU	MLGH, SFSO	Other State agencies including JKR and L&S	





## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 2. Digitalising to drive ease of doing business		
<b>Project</b>	: Contractor and Consultant Management System (CMS)		
<b>Action step</b>	: 2.65		
Action step (s)	Output (s)	Timeline	Resources required
<b>2.65 Contractor and Consultant Management System (CMS)</b>  Implementing project as per the following steps: a) Developing scope and specify requirements b) Carry out waiver of tender & project evaluation process c) System implementation	An online Contractor and Consultant Management System (CMS)  2022: <ul style="list-style-type: none"> <li>• Search/ view/ generate listings for contractors/ suppliers/ consultants – generate according to DUN</li> <li>• View reports - company biodata, company profile, project entry, performance, users in own agency, star rating (improved format)</li> <li>• Update information (project awarded, project completed, adverse report) – able to upload document, fill in JPTT Form</li> <li>• Contractors Performance Evaluation Report (CoPER) – change criteria</li> <li>• Maintenance, administration and reporting (company biodata, company profile, project entry, performance, users reports, star rating), adverse report</li> <li>• Database filter and reporting tools for CoRRIS</li> <li>• Imposed disciplinary actions</li> <li>• Reports – adverse report</li> <li>• JPTT process – create case, request Info, submit to SAG, enter secretariat recommendation, enter JPTT decision (able to uploads relevant documents)</li> <li>• Online filing and case number allocation</li> <li>• Correspondent</li> <li>• SAG Department to Enter comments and recommendations</li> </ul>	<b>Start date</b>	RM1.5 million Internet connectivity, competent civil servants, digital ID
		2022	
2023			
Project Owner	Implementing Agency	Other Stakeholders	
SSMU	SFSO	Project implementing agencies, UPKJ, contractors	

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 2. Digitalising to drive ease of doing business		
<b>Project</b>	: Contractor and Consultant Management System (CMS)		
<b>Action step</b>	: 2.65		
Action step (s)	Output (s)	Timeline	Resources required
<b>2.65 Contractor and Consultant Management System (CMS)</b>  Implementing project as per the following steps: a) Developing scope and specify requirements b) Carry out waiver of tender & project evaluation process c) System implementation	An online Contractor and Consultant Management System (CMS)  2023: <ul style="list-style-type: none"> <li>Integration with IPMS, E-Procurement and other potential system</li> <li>Monitor contractor awarded and the reporting</li> <li>Enter information on contractors that have been awarded projects (i.e. manpower, machineries, etc.)</li> </ul>	Start date	RM1.5 million Internet connectivity, competent civil servants, digital ID
		2022	
		End date	
		2023	
Project Owner	Implementing Agency	Other Stakeholders	
SSMU	SFSO	Project implementing agencies, UPKJ, contractors	

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 2. Digitalising to drive ease of doing business		
<b>Project</b>	: State Portal and Websites Integrated Framework		
<b>Action step</b>	: 2.66		
Action step (s)	Output (s)	Timeline	Resources required
<b>2.66 State Portal and Websites Integrated Framework</b>  Implementing project as per the following steps: a) Appointment of service provider, mobilisation of project team b) User requirement study c) Business process improvement d) System design e) System development f) System implementation g) Operation and maintenance	Comprehensive State Portal and Websites Integrated Framework  a) Intranet platform for state agency sharing on document/ announcement within division/ section/ branch <ul style="list-style-type: none"> <li>• Central accessing on EG application service listing</li> <li>• To enhance UI features in SEG Portal</li> <li>• Chatbot HR matter</li> <li>• Mobile responsive</li> <li>• Central data for ICT personnel include HRC/ HRO and asset officer</li> <li>• To enhance staff directory</li> </ul>	Start date	RM2 million (total fund required for the project) high speed network, competent civil servants, open platform, open API , open data
		2022	
		End date	
		2025	
Project Owner	Implementing Agency	Other Stakeholders	
SSMU	SSMU, SFSO	SFSO, SAGC, service Sarawak, CDOs/ ADOs/ Webmasters	

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 2. Digitalising to drive ease of doing business		
<b>Project</b>	: Industrial Coordination Committee System (previously Industrial Application Monitoring System)		
<b>Action step</b>	: 2.67		
Action step (s)	Output (s)	Timeline	Resources required
<b>2.67 Industrial Coordination Committee System (previously Industrial Application Monitoring System)</b>  Implementing project as per the following steps: a) Appointment of service provider b) User requirement study c) Business process improvement d) System design e) System development f) System implementation g) Operation and maintenance	Enhanced Industrial Coordination Committee System which comprises:  a) Readily accessible digital records of previous cases b) Industrial Coordination Committee System (ICCS) new features, Putrajaya International Convention Centre (PICC) API/ User Interface, ICC2 API/ User Interface, reports, integration with eSPA (2022) c) GIS Features, map viewer, web services and data publishing, attribute updates & query, presentation view (Query Filter), map switcher (satellite imagery)	Start date	RM1 million high speed telecommunication (100 Mbps), competent civil servants, open platform, open API , open data, digital ID
		2022	
		End date	
		2024	
Project Owner	Implementing Agency	Other Stakeholders	
SSMU/ SDEC	MINTRED	SFSO, SAGC, EPU Sarawak, MIDA	

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 2. Digitalising to drive ease of doing business		
<b>Project</b>	: State Integrated Financial and Accounting System (SIFBAS)		
<b>Action step</b>	: 2.68		
Action step (s)	Output (s)	Timeline	Resources required
<b>2.68 State Integrated Financial and Accounting System (SIFBAS)</b>  Implementing project as per the following steps: a) Developing scope and specify requirements b) Carry out procurement process c) System Development, System Review, User Acceptance Test (UAT) & training d) System implementation	Enhanced version of SIFBAS:  a) E-collection initiative in collaboration with SSMU for all government bill payment. This will cover all 156 existing RS counters and ISM portal b) Digital signature initiative for all SIFBAS process. Initial implementation to cover PV & JV c) Bank lodgement for Maybank and CIMB will be rolled out by August 2021 pending UAT scheduled in last week of July 2021. E-SST is in fine tuning stage d) Bank payment is at the compilation of data and discussion with relevant parties. Target roll out in 2022. e) State financial performance dashboard - detail had been finalised & will be implemented in 2021	Start date	RM3.5 million SarawakNet, State Data Centre, competent civil servants, open platform, open API , open data, digital ID
		2021	
		End date	
		2025	
Project Owner	Implementing Agency	Other Stakeholders	
SSMU	SFSO	-	

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 2. Digitalising to drive ease of doing business		
<b>Project</b>	: Accrual Accounting System		
<b>Action step</b>	: 2.69		
Action step (s)	Output (s)	Timeline	Resources required
<b>2.69 Accrual Accounting System</b>  Implementing project as per the following steps: a) Developing scope and specify requirements b) Carry out procurement process c) System Development, System Review, User Acceptance Test (UAT) & training d) System implementation	Holistic Accrual Accounting System:  a) Accrual Accounting system with 7 value chains namely planning & budget, procure to pay, hire to retire, acquire to retire, Cash Management, Treasury Management, record to report with 20 subsystems b) Access to Sarawak Government services through SEG Portal & SEG App	Start date	RM15 million SarawakNet, State Data Centre, competent civil servants, open platform, open API, open data, digital ID
		2021	
		End date	
		2025	
Project Owner	Implementing Agency	Other Stakeholders	
SSMU	SFSO	-	

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 2. Digitalising to drive ease of doing business		
<b>Project</b>	: Integrated Assets Management System		
<b>Action step</b>	: 2.70		
Action step (s)	Output (s)	Timeline	Resources required
<b>2.70 Integrated Assets Management System</b>  Implementing project as per the following steps: a) Developing scope and specify requirements b) Carry out procurement process c) System Development, System Review, User Acceptance Test (UAT) & training d) System implementation	<b>Comprehensive IAMS:</b>  <b>Impact:</b> a) Embedded Accounting Policies: IAMS will adopt relevant MPSAS (Malaysian Public Sector Accounting Standard) requirements for Asset Data (i.e. moveable asset, non-moveable asset, biological asset, heritage asset) in preparing for transitioning from cash accounting procedures into accrual accounting procedures b) Data source consistency: IAMS to become a single source of data that will provide a complete and accurate State Government asset data for better asset planning and decision making c) Enhanced features and functionalities: IAMS to be able to generate relevant asset reports, utilisation and monitoring with enhanced data analytics and dashboard functions for automated real-time asset usage tracking d) Efficient asset disposal and write-off process: efficient procedure through consolidated digitised forms and system workflow as well as a review on existing state asset policies to balance controls and efficiency	<b>Start date</b>  2021	RM5 million high speed telecommunication (100 Mbps), competent civil servants, open platform, open API , open data, digital ID
		<b>End date</b>  2025	
Project Owner	Implementing Agency	Other Stakeholders	
SSMU	SFSO	Government agencies	

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 2. Digitalising to drive ease of doing business		
<b>Project</b>	: Study & Implementation of Integrated Port Monitoring System (IPOMS)		
<b>Action step</b>	: 2.71		
Action step (s)	Output (s)	Timeline	Resources required
<b>2.71 Study &amp; Implementation of Integrated Port Monitoring System (IPOMS)</b>  Implementing project as per the following steps: a) Developing scope and specify requirements b) Carry out procurement process c) System Development, System Review, User Acceptance Test (UAT) & training d) System implementation	<b>IPOMS:</b>  a) To improve efficiency in providing real time information on port operation b) To monitor the port development and operation c) To monitor port dues and channel maintenance fee collection/remittance d) To improve decision making and policy formulation e) To monitor the impact and outcome of decision making or policy formulated related to port and maritime f) To enable data sharing with relevant government agencies.	<b>Start date</b>	RM0.9 million high speed telecommunication (100 Mbps), competent civil servants, open platform, open API , open data, digital ID
		2021	
		<b>End date</b>	
		2025	
Project Owner	Implementing Agency	Other Stakeholders	
MIPD, SSMU	Port authorities	MIPD	

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 2. Digitalising to drive ease of doing business		
<b>Project</b>	: Khidmat Islam Sarawak (e-KISWA) Phase 2		
<b>Action step</b>	: 2.72		
Action step (s)	Output (s)	Timeline	Resources required
<b>2.72 Khidmat Islam Sarawak (e-KISWA) Phase 2</b>  Implementing project as per the following steps: a) Developing scope and specify requirements b) Carry out waiver of tender & project evaluation process c) System Development, System Review, User Acceptance Test (UAT) & training d) System implementation	Enhancement of e-KISWA system:  2021: <ul style="list-style-type: none"> <li>Development of Kursus pra perkahwinan online, rundingcara, pendaftaran kes utk penguatkuasaan dan pendakwaan &amp; penyemakkan status laporan pendakwaan</li> <li>Integration with i-Syariah</li> <li>Integration with Native Marriage Management Electronic System (NAMES)</li> </ul> 2022: <ul style="list-style-type: none"> <li>Enhancement on existing modules</li> <li>Development on new modules</li> <li>Integration with PKI</li> <li>Integration with ISM</li> </ul> 2023: <ul style="list-style-type: none"> <li>Development of mobile apps</li> <li>Enhancement on existing modules</li> <li>Development on new modules</li> <li>Integration with Native Marriage Management Electronic System (NAMES)</li> </ul> eTibyan for Mufti:  2021 <ul style="list-style-type: none"> <li>Data conversion (M2D)</li> <li>Integration with SarawakID</li> <li>Admin Module</li> <li>Check Status</li> <li>Dashboard</li> </ul> 2022 <ul style="list-style-type: none"> <li>Task Escalating</li> <li>Task Monitoring</li> </ul>	Start date	RM5 million SarawakNet, competent civil servants, open platform, open API , open data, digital ID
		2022	
		End date	
		2025	
Project Owner	Implementing Agency	Other Stakeholders	
SSMU	JAIS	-	

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 2. Digitalising to drive ease of doing business		
<b>Project</b>	: Native Court System		
<b>Action step</b>	: 2.73		
Action step (s)	Output (s)	Timeline	Resources required
<b>2.73 Native Court System</b> Implementing project as per the following steps: a) Developing scope and specify requirements b) Carry out waiver of tender & project evaluation process c) System Development, System Review, User Acceptance Test (UAT) & training d) System implementation	Upgraded version of Native Court System  a) To upgrade Native Court System development technologies to later and baselined versions b) To design the system user interface (UI) as well as the system process flow to meet the user-friendliness and user experience c) To design and development of functionalities and features based on the user requirement which consists of the following modules and components.	Start date	RM2 million connectivity, competent civil servants, open platform, open API , open data, digital ID
		2021	
		End date	
		2025	
Project Owner	Implementing Agency	Other Stakeholders	
SSMU	MAIS	-	



## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 2. Digitalising to drive ease of doing business		
<b>Project</b>	: Other Religion Services Management (ORSEM) System		
<b>Action step</b>	: 2.75		
Action step (s)	Output (s)	Timeline	Resources required
<b>2.75 Other Religion Services Management (ORSEM) System</b>  Implementing project as per the following steps: a) Developing scope and specify requirements b) Carry out waiver of tender & project evaluation process c) System Development, System Review, User Acceptance Test (UAT) & training d) System implementation	An online ORSEM system:  2022: <ul style="list-style-type: none"> <li>• New Online Record Management System for houses of worship/ religious societies (requirement for online fund applications)</li> <li>• New online fund application for houses of worship.</li> </ul> 2023: <ul style="list-style-type: none"> <li>• Enhancement to SHARES (mapping for houses of worship/ religious societies &amp; cemeteries)</li> <li>• Enhancement to Online Record Management System for houses of worship/ religious societies (cater for burial sites)</li> </ul>	Start date	RM3 million high speed telecommunication (100 Mbps), competent civil servants, open platform, open API , open data, digital ID
		2021	
		End date	
		2025	
Project Owner	Implementing Agency	Other Stakeholders	
SSMU	UNIFOR	-	



## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 2. Digitalising to drive ease of doing business		
<b>Project</b>	: Native Marriage Electronic System (NAMES)		
<b>Action step</b>	: 2.77		
Action step (s)	Output (s)	Timeline	Resources required
<b>2.77 Native Marriage Electronic System (NAMES)</b>  Implementing project as per the following steps: a) Developing scope and specify requirements b) Carry out waiver of tender & project evaluation process c) System Development, System Review, User Acceptance Test (UAT) & training d) System implementation	<b>Comprehensive NAMES:</b>  a) Public access to their registration application process (status/ process bar) from first application to end process of receiving certificate b) Setup database on Adat Marriages which is not registered (record, sorting, statistical purposes) c) Setup database for MAIS Verification letter (record, sorting, statistical, predictive purposes) d) Minimise public visiting MAIS office for Verification Letter - using NAMES as platform to complete the process from A-Z (Headmen Verification Module) e) Harmonised Adat marriages registration procedure into the system f) Complete documentation on NAMES for MAIS to produce training materials for NAMES operators g) Accurate data output to be supplemented to all related agencies such as MPS and EPU h) Preparing for future possibility of adopting digital signatures and electronic certificates into Adat Marriage and divorce registrations with accordance to state Initiatives	<b>Start date</b>	RM2 million connectivity, competent civil servants, open platform, open API , open data, digital ID
		2022	
		<b>End date</b>	
		2025	
Project Owner	Implementing Agency	Other Stakeholders	
SSMU	Jabatan Kehakiman Syariah Sarawak	-	

## AIP Level 2 - Digital Transformation sector

<b>Sector</b> : Digital Transformation			
<b>Initiative</b> : 2. Digitalising to drive ease of doing business			
<b>Project</b> : E-Resident and District Office (eR&DO)			
<b>Action step</b> : 2.78			
Action step (s)	Output (s)	Timeline	Resources required
<b>2.78 E-Resident and District Office (eR&amp;DO)</b>  Implementing project as per the following steps: a) Developing scope and specify requirements b) Carry out waiver of tender & project evaluation process c) System Development, System Review, User Acceptance Test (UAT) & training d) System implementation	a) Upgraded eR&DO system b) An enhance module to e-SKM and e-JKKK c) A redevelopment of e-Firearm system d) All module integrated into the new eRNDO e) To study the online divisional profile and regis and develop evillage profile system based on study f) To automate RNDO process by having these to be digitised <ul style="list-style-type: none"> <li>• Sistem Pendaftaran Programme Perumahan Rakyat Termiskin - to have a system to keep record of the applicant and recipient</li> <li>• Sistem Permohonan Pungutan Derma Awam - to enhance the current system and consolidate into eRnDO</li> <li>• Express marriage Application System - to have a system to keep record of applicant</li> <li>• Laws Frequently Asked Questions System – a repository of information and discussion between district office and the SAG (Law Officer) on the Act and ordinance for easy reference</li> </ul> a) ERNDO to Integrations <ul style="list-style-type: none"> <li>• Integration with SIFBAS on payment processes</li> <li>• Integration with Land &amp; Survey system for retrieve land related information</li> </ul>	Start date	RM3 million SawarakNet, competent civil servants, open platform, open API , open data, digital ID
		2021	
		2025	
Project Owner	Implementing Agency	Other Stakeholders	
SSMU	UP	RANDOs	

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 2. Digitalising to drive ease of doing business		
<b>Project</b>	: eLA2: Development and implementation for all local authorities		
<b>Action step</b>	: 2.79		
Action step (s)	Output (s)	Timeline	Resources required
<b>2.79 eLA2: Development and implementation for all local authorities</b>  Implementing project as per the following steps: a) Developing scope and specify requirements b) Carry out waiver of tender & project evaluation process c) System Development, System Review, User Acceptance Test (UAT) & training d) System implementation	Enhancement of eLA 2 system:  2022: eLA2: development and implementation for all local authorities - Phase 1 <ul style="list-style-type: none"> <li>• BKSS 5.0 Rating (25% reduction of rates for 1st half assessment rates of residential/ commercial/ industry properties)</li> <li>• BKSS 5.0 Licensing (licence fee 100% off, market/ hawker rental 50% off)</li> <li>• BKSS 6.0 Rating (25% reduction of rates for 2nd half assessment rates of residential/ commercial/ industry properties)</li> <li>• BKSS 6.0 Licensing (unlicensed hawker &amp; small traders)</li> </ul>	Start date	RM5 million high speed telecommunication (100 Mbps), competent civil servants, open platform, open API , open data, digital ID
		2021	
		End date	
		2025	
Project Owner	Implementing Agency	Other Stakeholders	
SSMU/ MLGH	Local authorities	SMA	





## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 2. Digitalising to drive ease of doing business		
<b>Project</b>	: eLA2: development and implementation for all local authorities		
<b>Action step</b>	: 2.79		
Action step (s)	Output (s)	Timeline	Resources required
<b>2.79 eLA2: development and implementation for all local authorities</b>  Implementing project as per the following steps: a) Developing scope and specify requirements b) Carry out waiver of tender & project evaluation process c) System Development, System Review, User Acceptance Test (UAT) & training d) System implementation	Enhancement of eLA 2 system:  2025: eLA2: development and implementation for all local authorities - Phase 4 <ul style="list-style-type: none"> <li>• ESS - travel request &amp; claim, integration to FAS (study, development and piloting)</li> <li>• Legal retainer (study, development and piloting)</li> <li>• GIS data collection and conversion for major councils</li> <li>• Accrual accounting</li> <li>• Enforcement and compound</li> <li>• Council dashboard</li> <li>• Tender management</li> <li>• ESS - training management</li> <li>• Project and Work Monitoring System</li> </ul>	<b>Start date</b>  2021	RM5 million high speed telecommunication (100 Mbps), competent civil servants, open platform, open API , open data, digital ID
		<b>End date</b>  2025	
Project Owner	Implementing Agency	Other Stakeholders	
SSMU/ MLGH	Local authorities	SMA	

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 2. Digitalising to drive ease of doing business		
<b>Project</b>	: Electronic Administrative System and Dashboard		
<b>Action step</b>	: 2.80		
Action step (s)	Output (s)	Timeline	Resources required
<b>2.80 Electronic Administrative System and Dashboard</b>  Implementing project as per the following steps: a) Developing scope and specify requirements b) Carry out procurement process c) System Development, System Review, User Acceptance Test (UAT) & training d) System implementation	A comprehensive EASE system:  Consolidation of all administration core businesses  Enhancement on a) Building Management System (BQMS) b) Electronic Foreign worker Permit (MSEN) c) Sarawak Foreign Workers Health Management System (SaFHIS) d) Electronic gazette e) Electronic permits and licence issuance f) A dashboard to provide snapshot information of BQMS, MSEN, eGazette and permit. Dashboard also for UP to monitor financial aspect that is: <ul style="list-style-type: none"> <li>● financial performance</li> <li>● procurement planning</li> <li>● AP58</li> <li>● account amanah</li> </ul>	Start date	RM2 million high speed telecommunication (100 Mbps), competent civil servants, open platform, open API , open data, digital ID
		2021	
		End date	
		2025	
Project Owner	Implementing Agency	Other Stakeholders	
SSMU	SSMU	-	

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 2. Digitalising to drive ease of doing business		
<b>Project</b>	: Mobile Government Services		
<b>Action step</b>	: 2.81		
Action step (s)	Output (s)	Timeline	Resources required
<b>2.81 Mobile Government Services</b>  Implementing project as per the following steps: a) Appointment of service provider, mobilisation of resources b) User requirement study c) Business process improvement d) System design e) System development f) System implementation g) Operation and maintenance	Integrated SCS Mobile App: a) Mobile platform of integrated SCS applications for SCS to access and doing task b) QR scanner for PKI documents & meeting attendance  SEG App a) mobile platform for public to access all government services b) Public workspace c) Service notifications d) QR scanner for PKI documents e) Online payment f) Info on Sarawak g) IDEA Kamek	Start date	RM3 million high speed telecommunication (100 Mbps), competent civil servants, open platform, open API, open data, digital ID
		2021	
		End date	
		2025	
Project Owner	Implementing Agency	Other Stakeholders	
SSMU	SSMU	-	

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 2. Digitalising to drive ease of doing business		
<b>Project</b>	: Workforce Online Data System		
<b>Action step</b>	: 2.82		
Action step (s)	Output (s)	Timeline	Resources required
<b>2.82 Workforce Online Data System</b>  Implementing project as per the following steps: a) Developing scope and specify requirements b) Carry out waiver of tender & project evaluation process c) System Development, System Review, User Acceptance Test (UAT) & training d) System implementation	A workforce online data system:  2021 - 2022: • Project Management  2023 - 2025: • SWIS System enhancement  a) Develop analysis tool in SWIS to allow MESTR perform projection planning and comparison analysis base on SWIS data trend b) Setup data warehouse & data modeling c) Dashboard development	Start date	RM2 million (total fund required) high speed telecommunication (100 Mbps), competent civil servants, open platform, open API , open data, digital ID
		2021	
		End date	
		2025	
Project Owner	Implementing Agency	Other Stakeholders	
SSMU	MESTR	-	

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 2. Digitalising to drive ease of doing business		
<b>Project</b>	: Feasibility study and implementation of digital certificates		
<b>Action step</b>	: 2.83		
Action step (s)	Output (s)	Timeline	Resources required
<b>2.83 Feasibility study and implementation of digital certificates</b>  Implementing project as per the following steps: a) Obtain need statements from stakeholders, including industry players b) Carry out requirement study c) Study into use of other emerging technology for digital signature and authentication d) Business process reengineering e) Study on legal framework, review policies and update if necessary f) Setting up of governance and operation structures for CA g) Setting up CA h) Implement digital certificates/ equivalent	State's own certificate authority or equivalent to promote trusted online digital economic and digital government activities	<b>Start date</b>  2023	RM10 million digital certificate provider, competent civil servants, smart city platform, open platform, open API , open data, digital ID, emerging technologies, findings of 'Feasibility Study, Development and Implementation of Blockchain Capability' action plan
		<b>End date</b>  2028	
Project Owner	Implementing Agency	Other Stakeholders	
SMA	SMA	SAGC, SSMU, ICT, industry players	

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 2. Digitalising to drive ease of doing business		
<b>Project</b>	: Integrated Tourism Management System		
<b>Action step</b>	: 2.84		
Action step (s)	Output (s)	Timeline	Resources required
<b>2.84 Integrated Tourism Management System</b>  Implementing project as per the following steps: a) Developing scope and specify requirements b) Carry out waiver of tender & project evaluation process c) System Development, System Review, User Acceptance Test (UAT) & Training d) System implementation	An integrated Tourism management system:  a) MOAS <ul style="list-style-type: none"> <li>Intelligent interactive monitoring system for MTAC and JIMS who are the main stake-holders for S-MM2H programme</li> <li>Real-time statistical data provider to MTAC</li> <li>User-friendly system to accommodate, especially to foreign applicant who want to apply from abroad</li> <li>Environmental friendly system with paperless and less space of storage</li> <li>Rating system for service and customer satisfaction and public feedback</li> <li>Central accessing of uploaded submitted documents in SarawakNet, validation of submitted documents</li> <li>Comprehensive service performance by service owner</li> <li>One central access to Sarawak Government services in line with Federal Online application system and state direction on digital economy</li> </ul>	Start date	RM3 million
		2021	
		End date	
		2025	
Project Owner	Implementing Agency	Other Stakeholders	
SSMU	MTAC	-	

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 2. Digitalising to drive ease of doing business		
<b>Project</b>	: Integrated Tourism Management System		
<b>Action step</b>	: 2.84		
Action step (s)	Output (s)	Timeline	Resources required
<b>2.84 Integrated Tourism Management System</b>  Implementing project as per the following steps: a) Developing scope and specify requirements b) Carry out waiver of tender & project evaluation process c) System Development, System Review, User Acceptance Test (UAT) & Training d) System implementation	An integrated Tourism management system:  b) STODAS <ul style="list-style-type: none"> <li>The system allows users to key in (record) or generate the data monthly or yearly. With the enhancement of STODAS, the data can be generate easily, and analyzing report or chart. STODAS also can be generated by registered public user without changing or remove the data</li> <li>The system provides a comprehensive finding information to assist public users and industries players to have better understanding and information sharing for future strategic planning, tourism practices and development in the tourism sector</li> <li>The system can ensure a safe and reliable data repository statistical data, effective monitoring system, forecasting the trends and patterns</li> </ul>	Start date	RM3 million
		2021	
		End date	
		2025	
Project Owner	Implementing Agency	Other Stakeholders	
SSMU	MTAC	-	

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 2. Digitalising to drive ease of doing business		
<b>Project</b>	: Development of enterprise architecture		
<b>Action step</b>	: 2.85		
Action step (s)	Output (s)	Timeline	Resources required
<b>2.85 Development of enterprise architecture</b>  Implementing project as per the following steps: a) Training for CDOs b) Development of EA for State Government c) Testing and implementing EA	A comprehensive material of enterprise architecture	Start date	RM6 million (total fund required for the project), trained and certified EA officers
		Mar 2022	
		End date	
		Dec 2025	
Project Owner	Implementing Agency	Other Stakeholders	
SMA	SMA	SSMU, other state agencies	

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 2. Digitalising to drive ease of doing business		
<b>Project</b>	: Electronic Know Your Customer (eKYC) Solution		
<b>Action step</b>	: 2.86		
Action step (s)	Output (s)	Timeline	Resources required
<b>2.86 Development of enterprise architecture</b>  Implementing project as per the following steps: a) Developing scope and specify requirements b) Carry out waiver of tender & project evaluation process c) Customisation requirement study & design d) System Development, System Review, User Acceptance Test (UAT) & training e) System implementation	eKYC solution for Sarawak ID online verification process:  a) Verification API b) Audit module customisation c) MyKad data collection d) Passport compatibility	Start date	RM1 million
		2022	
		End date	
		2023	
Project Owner	Implementing Agency	Other Stakeholders	
SSMU/ SNT	SSMU (Sarawak ID), EPU Sarawak (S Global Pay)	BNM	

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 2. Digitalising to drive ease of doing business		
<b>Project</b>	: Cooperation in the area of Digital Economy: Rainforest Guardian System		
<b>Action step</b>	: 2.87		
Action step (s)	Output (s)	Timeline	Resources required
<b>2.87 Cooperation in the area of Digital Economy: Rainforest Guardian System</b>  a) Perform Proof of Concept (PoC), review PoC data and effectiveness of system for each use case and PoC exit criteria b) Scale up implementation upon successful PoC exit criteria and acceptance by FD and SFC c) Migrate core systems from Huawei Cloud to SIOC d) Implement standard operating procedures for each use case i.e. illegal logging, wildlife tracking and conservation, wildlife spotting for tourism, acoustics recordings for education, lost tourist, etc. e) Research and technology enhancement for specific use cases i.e. narrow down direction and location of sound source, network using IoT and low power low bandwidth devices for communications in forest environment, etc.	<b>Rainforest Guardian System:</b>  a) Proof of concept (POC) study and result of implementation of acoustics monitoring system (named Rainforest Guardian System) incorporating cloud and artificial intelligence technologies to facilitate and support the following tasks/ subject matter: <ul style="list-style-type: none"> <li>• Wildlife conservation and enforcement, i.e. poaching, study of endangered animal behaviours and movement patterns</li> <li>• Forest conservation and enforcement, i.e. detection and prevention of illegal logging</li> <li>• Eco-tourism and tourist safety, i.e. data to monitor tourist &amp; aid in locating lost tourist(s) in National Parks, creation of trails or attractions</li> <li>• Alert authorities to perform real-time intervention</li> <li>• Any other relevant tasks/ subject matter</li> </ul> If POC for an area is successful, the solution will be scaled-up/ expanded to all other relevant sites (National Park and Forest Reserve) throughout Sarawak	<b>Start date</b>  2020	Enforcement personnel, researchers in wildlife, funding
		<b>End date</b>  2023	
Project Owner	Implementing Agency	Other Stakeholders	
SMA	FD, SFC	MUDENR, enforcement agencies in Forestry (i.e. UKPN, Harwood, STIDC)	

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 2. Digitalising to drive ease of doing business		
<b>Project</b>	: Enhance the ecosystem for Sama Jaya High Tech Park		
<b>Action step</b>	: 2.88		
Action step (s)	Output (s)	Timeline	Resources required
<b>2.88 Enhance the ecosystem for Sama Jaya High Tech Park</b>  Implementing project as per the following steps: a) Management services b) Data processing and computer services c) Project implementation, including infra works, hardware installation, testing, configuration & briefing, Unifi subscription & contractor/ visitor pass design & printing d) Computer hardware/ equipment	Integrated Security System for entry and exit of authorised personnel and vehicles	Start date	RM0.5 million manpower, supply
		2021	
		End date	
		2022	
Project Owner	Implementing Agency	Other Stakeholders	
SMA	MINTRED	MINTRED	

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 2. Digitalising to drive ease of doing business		
<b>Project</b>	: Online Security Services		
<b>Action step</b>	: 2.89		
Action step (s)	Output (s)	Timeline	Resources required
<b>2.89 Online Security Services</b>  Implementing project as per the following steps: a) System requirement study b) Review policies c) Design system d) Develop system e) Implement system and new process	An online security services:  a) Sharing of safety information across the agencies (information at your fingertips) b) Sharing and communicating on safety information to general public c) Enhance the safety of the cities	<b>Start date</b>	RM1.25 million (total fund required for the project) high speed telecommunication (100 Mbps), competent civil servants, smart city platform, open platform, open API, open data, digital ID
		2021	
		<b>End date</b>	
		2025	
Project Owner	Implementing Agency	Other Stakeholders	
SMA	SMA	SSMU, SAINS, local authorities, State and Federal enforcement agencies	

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 2. Digitalising to drive ease of doing business		
<b>Project</b>	: Enhancement of smart farming at DoA stations		
<b>Action step</b>	: 2.90		
Action step (s)	Output (s)	Timeline	Resources required
<b>2.90 Enhancement of smart farming at DoA stations</b>  Implementing project as per the following steps: a) Define user requirement for enhancement/improvement b) Conduct site assessment c) Prepare project proposal d) Prepare procurement method e) Contract agreement f) Project execution g) Post implementation	Comprehensive IoT Solution for smart farming:  a) Enhancement of IoT platform b) Purchase of equipment and devices such as soil sensors, fertigation machines, weather station, cctv, pest control, uav c) Upgrade the electric power supply and IoT data and control room	Start date	RM4 million research officer, IT personnel at ministry and agency
		2022	
		End date	
		2023	
Project Owner	Implementing Agency	Other Stakeholders	
SMA	MANRED DoA	MOA/ State agencies/ ministries	

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 2. Digitalising to drive ease of doing business		
<b>Project</b>	: DBKU smart city - eDBKU		
<b>Action step</b>	: 2.91		
Action step (s)	Output (s)	Timeline	Resources required
<b>2.91 DBKU smart city - eDBKU</b>  Implementing project as per the following steps: a) Develop scope and specify requirements b) Execute procurement for: <ul style="list-style-type: none"> <li>• Consultancy services</li> <li>• System development and integration including hardware and software</li> </ul> c) Contract and execution of systems development and integration as well as implementation d) Implement systems, governance and training e) Solutions develop in one city can be replicated/ enhanced and white labelled for use by other cities/ towns thus speeding up development and lowering total cost of ownership/ investment for the Sarawak Government	Comprehensive eDBKU digital ecosystem consist of follows:  a) Smart city systems such as smart surveillance, smart lighting, smart environment, smart parks and greens, smart urban maintenance, smart mobility, smart community b) Online and mobile service delivery including one-stop integrated service point, service request management c) Innovative Digital Solutions such as financial, budgeting and accounting system, human resource management system, valuation system, asset management system, licensing system, procurement management system, building control system, fleet management system, legal management system, and operations monitoring system	<b>Start date</b>	Funding, expert consultant/ developer/ implementer of smart city solutions
		2021	
		<b>End date</b>	
		2030	
Project Owner	Implementing Agency	Other Stakeholders	
SMA	DBKU	MLGH, all relevant government agencies	

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 2. Digitalising to drive ease of doing business		
<b>Project</b>	: Miri Smart City		
<b>Action step</b>	: 2.92		
Action step (s)	Output (s)	Timeline	Resources required
<b>2.92 Miri Smart City</b>  Implementing project as per the following steps: a) Develop scope and specify requirements b) Execute procurement (waiver of tender) c) Contract and execution of systems development and integration as well as implementation d) Implement systems, governance and training e) Solutions develop in one city can be replicated/ enhanced and white labelled for use by other cities/ towns thus speeding up development and lowering total cost of ownership/ investment for the Sarawak Government	Establishment of Miri Smart City.  The outputs as as listed below and expected to increase/ scaled up, new solutions added until 2030 with integrations to SIOC.	Start date	Funding, expert consultant/ developer/ implementer of smart city solutions
		2021	
		End date	
		2030	
Project Owner	Implementing Agency	Other Stakeholders	
SMA	MCC	MLGH, all relevant government agencies	

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 2. Digitalising to drive ease of doing business		
<b>Project</b>	: Miri Smart City		
<b>Action step</b>	: 2.92		
Action step (s)	Output (s)	Timeline	Resources required
<b>2.92 Miri Smart City</b>  Implementing project as per the following steps: <ul style="list-style-type: none"> <li>• Digital signage – to deliver effective information via online digital multimedia channels to improve public information delivery</li> <li>• Safe city &amp; safe park – to improve the safety and security of the city centre and community parks</li> <li>• Command Centre – To centralises the monitoring, control and command of selected critical operations om Miri City Councils (MCC)</li> <li>• Smart drain – to determine the rectification works required at the affected area or main Water channel by collecting data</li> </ul>	a) 30 digital signage installed with cpu, storage system and supporting structure b) 1 digital signage content management system c) Installation at 3 parks and 3 city areas by 2022 comprising more than 27 SOS pole structure, 93 cameras, 26 facial cameras, 16 PTZ cameras, 2 thermal cameras, 6 traffic cameras, panic button, video intercom, communications, storage. More installations to be made until 2030 d) 1 Video analytics system with facial recognition at command centre. To be integrated with SIOC going forward. e) 1 Command Centre installed with display screens, servers, computers, printers, telecommunications, network and software to manage, control and interoperate with all Miri Smart City solution systems f) 5 smart drain sites installed with CCTV, water level sensor, solar power and battery system communications, storage g) 1 Video analytics system with facial recognition	<b>Start date</b>  2021	Funding, expert consultant/ developer/ implementer of smart city solutions
		<b>End date</b>  2030	
Project Owner	Implementing Agency	Other Stakeholders	
SMA	MCC	MLGH, all relevant government agencies	

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 2. Digitalising to drive ease of doing business		
<b>Project</b>	: Miri Smart City		
<b>Action step</b>	: 2.92		
Action step (s)	Output (s)	Timeline	Resources required
<b>2.92 Miri Smart City</b>  Implementing project as per the following steps: <ul style="list-style-type: none"> <li>● Smart bus – to allow the public to plan their journey more efficiently</li> <li>● Smart truck – to improve Miri’s waste management service</li> <li>● Smart MCC – to enhance eLA2 (HR and Payroll System) (HRPay), Building Control System</li> <li>● Smart tourism - to disseminate tourism-related information to the public</li> <li>● Miri Cares – to help public channel complaints to contact centre</li> <li>● Smart Miri - a mobile app for public to easily discover and use Miri Smart City services</li> </ul>	a) 22 smart buses installed with CCTV, panic button, storage, communications and vehicle tracking b) 1 Smart Bus System (mobile & web) integration with Smart Miri App System c) 25 smart trucks installed with CCTVs, storage, communications, vehicle tracking d) 1 Smart Truck System (mobile & web) integrated with Smart Miri Mobile App System e) 1 Smart MCC System (mobile & web) integrated with Smart Miri Mobile App System f) 1 map production system g) 1 Smart Tourism System (mobile & web) integrated with Smart Miri Mobile App System h) 1 Miri Cares System (mobile & web) integrated with Smart Miri Mobile App System i) 1 Smart Miri System (mobile & web)	<b>Start date</b>	Funding, expert consultant/ developer/ implementer of smart city solutions
		2021	
2030			
Project Owner	Implementing Agency	Other Stakeholders	
MCC	SMA	MLGH, all relevant government agencies	

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 2. Digitalising to drive ease of doing business		
<b>Project</b>	: Sarawak Digital Bank		
<b>Action step</b>	: 2.93		
Action step (s)	Output (s)	Timeline	Resources required
<b>2.93 Sarawak Digital Bank</b>  Implementing project as per the following steps: a) Engagement with BNM b) Seek MMKN approval c) Develop frameworks and policies d) Establishment of Digital Bank	Sarawak Digital Bank	Start date	RM3.7 million economists
		2022	
		End date	
		2025	
Project Owner	Implementing Agency	Other Stakeholders	
EPU Sarawak, SSMU	JKM/ EPU Sarawak	BNM/ STATOS	

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 2. Digitalising to drive ease of doing business		
<b>Project</b>	: Sarawak Digital Bank		
<b>Action step</b>	: 2.94		
Action step (s)	Output (s)	Timeline	Resources required
<b>2.94 Integrated Project Monitoring System (IPMS)</b>  a) Establishment of the project monitoring policy b) Identify the implementing agencies of the digital transformation projects	Sarawak Digital Bank	Start date	Staff experienced in project management
		2021	
		End date	
		2025	
Project Owner	Implementing Agency	Other Stakeholders	
SMA	SDEC	SSMU, government agencies	

## AIP Level 1 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Strategy</b>	: Empower Sarawak's sectors through digital transformation across sectors		
<b>Initiative</b>	: 3. Growing the digital and ICT industry		
<b>Initiative</b>	<b>Desired Outcome(s)</b>		
<b>3. Growing the digital and ICT industry</b>  a) Data Centres/Data Farm; b) Digital Village Ecosystem; and c) Digital content creation	<b>Economic Prosperity</b> 1. Digital and ICT contribute RM73.6 billion to Sarawak's annual GDP 2. 500 competent digital companies and 1 unicorn produced		
<b>Timeline</b>		<b>Resources Required</b>	
<b>Start Date</b>	<b>End Date</b>		
2022	2030	<ul style="list-style-type: none"> <li>• RM139.5 million</li> <li>• Digital infrastructure</li> <li>• Smart city</li> <li>• Expert/accredited trainers and skill providers</li> </ul>	
<b>Project Owner</b>	<b>Implementing Agency</b>	<b>Other Stakeholders</b>	
MINTRED, SSMU, SMA, CENTEXS	SDEC, SAINS, CENTEXS	Chief Minister Department, State Ministries and Department, LA, business associations, institute of higher learning	

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 3. Growing the digital and ICT industry		
<b>Project</b>	: Attract investment to setup data centre		
<b>Action step</b>	: 3.1		
Action step (s)	Output (s)	Timeline	Resources required
<b>3.1 Attract investment to setup data centre</b>  Implementing project as per the following steps: a) Fine tune processes/ policies to attract investors b) Engage key agencies c) Execute promotion activities	1 data centre is established by global player	Start date	RM1 million (total fund required for project), economists, officers knowledgeable in data center business
		2022	
		End date	
		2025	
Project Owner	Implementing Agency	Other Stakeholders	
SMA	SDEC	MIDA, MINTRED, MITI, EPU Sarawak	

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 3. Growing the digital and ICT industry		
<b>Project</b>	: Digital Village and Digital Innovation Hubs Operations		
<b>Action step</b>	: 3.2		
Action step (s)	Output (s)	Timeline	Resources required
<b>3.2 Digital Village and Digital Innovation Hubs Operations</b>  Implementing project as per the following steps: a) Establishment of new innovation hubs and microhubs b) Operationalise innovation hubs	a) International engagement by scale up startups from Digital Village: 10/year b) Successful investments for startups totalling - RM2 million/year c) Launch Sarawak - 3/year new landing pads outside Sarawak	Start date	RM107 million policy that supports attracting local and international high-potential startups to set up operations in Sarawak
		2021	
		End date	
		2030	
Project Owner	Implementing Agency	Other Stakeholders	
SDEC	SDEC	SMA, SMG, TEGAS, private sector innovation partners, Federal partners (i.e. MDEC, MAGIC, etc.), MINTRED, MESTR	

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 3. Growing the digital and ICT industry		
<b>Project</b>	: Startup growth development support		
<b>Action step</b>	: 3.3		
Action step (s)	Output (s)	Timeline	Resources required
<b>3.3 Startup growth development support</b>  Implementing project as per the following steps: a) Implement startup growth development program b) Startup growth development monitoring	4,900 startup/entrepreneurs are produced. 30,000 jobs are created by 2030 via expansion of the startups and entrepreneurs.	Start date	RM50 million digital infrastructure trainers and skill providers
		2021	
		End date	
		2030	
Project Owner	Implementing Agency	Other Stakeholders	
SDEC	SDEC	SMA, SMG, TEGAS, private sector innovation partners, Federal partners (i.e. MDEC, MAGIC, etc.), MINTRED, MESTR	

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 3. Growing the digital and ICT industry		
<b>Project</b>	: Startup ecosystem development support		
<b>Action step</b>	: 3.4		
Action step (s)	Output (s)	Timeline	Resources required
<b>3.4 Startup ecosystem development support</b>  Implementing project as per the following steps: a) Develop program and criteria b) Startup development monitoring	a) 1,000 tech skilled developers trained by 2030 b) 1,000 high impact startups by 2030 c) 500 certified mentors and trainers are produced in Sarawak by 2030	Start date	RM32.5 million (12MP), policy to attract offshoring jobs to Sarawak, focusing on remote workers and digital nomads, streamlining policy on digital talent
		2021	
		End date	
		2030	
Project Owner	Implementing Agency	Other Stakeholders	
SDEC	SDEC	SMA, SMG, TEGAS, private sector innovation partners, Federal partners (i.e. MDEC, MAGIC, etc.), MINTRED, MESTR	

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 3. Growing the digital and ICT industry		
<b>Project</b>	: Creative digital content development		
<b>Action step</b>	: 3.5		
Action step (s)	Output (s)	Timeline	Resources required
<b>3.5 Creative digital content development</b>  Implementing project as per the following steps: a) Develop program and criteria b) Programme monitoring	5 Content IP a year	Start date	RM25 million
		2021	
		End date	
		2025	
Project Owner	Implementing Agency	Other Stakeholders	
SDEC	SDEC	SMA, SMG, TEGAS, private sector innovation partners, Federal partners (i.e. MDEC, MAGIC, etc.), MINTRED, MESTR	

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 3. Growing the digital and ICT industry		
<b>Project</b>	: Sarawak media network initiatives		
<b>Action step</b>	: 3.6		
Action step (s)	Output (s)	Timeline	Resources required
<b>3.6 Sarawak media network initiatives</b>  Implementing project as per the following steps: a) Develop specific content and program b) Control and monitor the content and program	Number of programmes and contents created	Start date	RM70 million
		2021	
		End date	
		2024	
Project Owner	Implementing Agency	Other Stakeholders	
SSMU	SSMU	Sarawak Media Group	

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 3. Growing the digital and ICT industry		
<b>Project</b>	: State intellectual property initiatives		
<b>Action step</b>	: 3.7		
Action step (s)	Output (s)	Timeline	Resources required
<b>3.7 State intellectual property initiatives</b>  a) Identify high value IPs b) Appoint IP consultant c) Facilitate registration of IPs	IP documentation and commercialisation of IP products	Start date	RM2.5 million
		2022	
		End date	
		2030	
Project Owner	Implementing Agency	Other Stakeholders	
SMA	SMA	-	

## AIP Level 1 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Strategy</b>	: Empower Sarawak's sectors through digital transformation across sectors		
<b>Initiative</b>	: 4. Upgrade digital connectivity infrastructure		
<b>Initiative</b>	<b>Desired Outcome(s)</b>		
<b>4. Upgrade digital connectivity infrastructure</b>  a) Rolling out affordable digital connectivity to rural areas; and b) Upgrade digital infrastructure in key economic centres and research centres.	<b>Economic Prosperity</b> <ol style="list-style-type: none"> <li>99.9% of the population covered by telecommunication services</li> <li>Upgrade SarawakNet statewide up to 50 Mbps and upgrade Internet gateway to 1 Gbps</li> <li>Minimum UX speeds to increase from 3 - 10 to 20 - 100 Mbps(2). Reduce latency from 200 ms to below 50 ms</li> </ol>		
<b>Timeline</b>		<b>Resources Required</b>	
<b>Start Date</b>	<b>End Date</b>		
2021	2030	<ul style="list-style-type: none"> <li>RM6.2 billion</li> <li>Commercial 4G/5G structure</li> <li>Policy on telecommunications</li> </ul>	
<b>Project Owner</b>	<b>Implementing Agency</b>	<b>Other Stakeholders</b>	
SMA, SSMU, SDEC	SDEC, SAINS	EPU Sarawak, SSMU, MCMC, Land & Survey, MRPE	

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 4. Upgrade digital connectivity infrastructure		
<b>Project</b>	: SMA Rural Telecommunication (SMART)		
<b>Action step</b>	: 4.1		
Action step (s)	Output (s)	Timeline	Resources required
<b>4.1 SMA Rural Telecommunication (SMART)</b>  a) Survey & planning tower structure b) Site acquisition c) Tower construction d) Network planning & design e) Project implementation f) Operation & maintenance g) Training	a) 1,500 telecommunication towers in rural areas in Sarawak b) Carrier-neutral high-speed broadband transmission backbone interconnecting Kalimantan, Kuching, Sibul, Bintulu and Miri c) High-speed broadband backhaul data connection to rural towns and villages and associated wireless broadband coverage	Start date	RM5.5 bil (Total fund required for the project)  Commercial 4G/5G Structure Policy on telecommunications
		2021	
		End date	
		2025	
Project Owner	Implementing Agency	Other Stakeholders	
SMA	SDEC	-	

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 4. Upgrade digital connectivity infrastructure		
<b>Project</b>	: Increase capacity and speed of SarawakNet		
<b>Action step</b>	: 4.2		
Action step (s)	Output (s)	Timeline	Resources required
<b>4.2 Increase capacity and speed of SarawakNet</b>  a) Appointment of contractor b) Carry out the necessary cabling, access point installations and network services to improve the connectivity at government offices	a) Upgrade of 329 sites up to 155 Mbps and upgrade Internet gateway to 500 Mbps b) Upgrade of 287 sites up to 50 Mbps and upgrade Internet gateway to 1 Gbps c) Upgrade of 102 sites up to 1 Gbps and upgrade Internet gateway to 2 Gbps	Start date	RM57.6 mil (Total fund required for the project)  SFSO latest procurement management plan on the appointment of contractors.  Wifi Access Point + Fiber Infrastructure Telecommunication
		2021	
		End date	
		2025	
Project Owner	Implementing Agency	Other Stakeholders	
SSMU	SDEC	Government agencies, business community, DGC	

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 4. Upgrade digital connectivity infrastructure		
<b>Project</b>	: Upgrading of digital infrastructure and services at industrial parks		
<b>Action step</b>	: 4.3		
Action step (s)	Output (s)	Timeline	Resources required
<b>4.3 Upgrading of digital infrastructure and services at industrial parks</b>  a) Upgrading system to improve the safety and security at industrial parks b) System requirement study c) Review policies d) Design and planning e) Development of 5G f) Implement system and new process	Installed fiber optic lines to all sub-checkpoints at Samalaju Industrial Park	Start date	RM5.5 million (total fund required for the project), commercial 4G/5G structure policy on telecommunications, project executive, planning engineer, implementation engineer
		2021	
		End date	
		2025	
Project Owner	Implementing Agency	Other Stakeholders	
MINTRED	SDEC and SAINS	MINTRED, business communities	

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 4. Upgrade digital connectivity infrastructure		
<b>Project</b>	: ICT infrastructure for district offices and others		
<b>Action step</b>	: 4.4		
Action step (s)	Output (s)	Timeline	Resources required
<b>4.4 ICT infrastructure for district offices and others</b>  a) Developing scope and specify requirements b) Carry out waiver of tender & project evaluation process c) Network infrastructure upgrading & installation	2021: New network equipment at WBM and upgraded network service	Start date	RM10 million (total fund required for the project), commercial 4G/5G structure policy on telecommunications
	2022: New network equipment at STROPI and upgraded network service	2021	
	2023: New network equipment at Old DUN and upgraded network service	End date	
		2025	
Project Owner	Implementing Agency	Other Stakeholders	
SSMU	SSMU	District offices, resident office	

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 4. Upgrade digital connectivity infrastructure		
<b>Project</b>	: Sebauh connectivity		
<b>Action step</b>	: 4.5		
Action step (s)	Output (s)	Timeline	Resources required
<b>4.5 Sebauh connectivity</b> a) Equipment identification b) Appointment of contractor c) Install fixed high speed broadband service at Sebauh	Completion of installation of fixed high speed broadband service at Sebauh	Start date	RM13.5 million
		2021	
		End date	
		2025	
Project Owner	Implementing Agency	Other Stakeholders	
SMA	SDEC	Land and Survey department	

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 4. Upgrade digital connectivity infrastructure		
<b>Project</b>	: Long San connectivity		
<b>Action step</b>	: 4.6		
Action step (s)	Output (s)	Timeline	Resources required
<b>4.6 Long San connectivity</b> a) Equipment identification b) Appointment of contractor c) Installation and commissioning of telecommunication infrastructure at Long San.	Completion of tower construction and telecommunication infrastructure connectivity	Start date	RM5.4 mil
		2021	
		End date	
		2025	
Project Owner	Implementing Agency	Other Stakeholders	
SMA	SDEC	Land and Survey department	

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 4. Upgrade digital connectivity infrastructure		
<b>Project</b>	: Interim connectivity solution for rural and underserved area		
<b>Action step</b>	: 4.7		
Action step (s)	Output (s)	Timeline	Resources required
<b>4.7 Interim connectivity solution for rural and underserved area</b>  a) Equipment identification b) Appointment of contractor c) Construction of fixed wireless access (FWA) and Very Small Aperture Terminal (VSAT)	Completion of installation of fixed high speed broadband service at Sebauh.	Start date	RM25.6 million
		2021	
		End date	
		2025	
Project Owner	Implementing Agency	Other Stakeholders	
SMA	SDEC	Land and Survey department	

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 4. Upgrade digital connectivity infrastructure		
<b>Project</b>	: Development of point of interconnect for Sarawak national park		
<b>Action step</b>	: 4.8		
Action step (s)	Output (s)	Timeline	Resources required
<b>4.8 Development of point of interconnect for Sarawak national park</b>  a) Construction of towers b) Supply and Install fiber optic lines to all sub-checkpoints with manholes, ductings and all necessary accessories for Sarawak National Park	Completion of network connectivity infrastructure at national park  Completion of fiber optic lines at designated areas	Start date	RM2.7 million
		2021	
		End date	
		2025	
Project Owner	Implementing Agency	Other Stakeholders	
SMA	SDEC	MTAC	

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 4. Upgrade digital connectivity infrastructure		
<b>Project</b>	: Sarawak Agricultural Technology Park (SARTECH)		
<b>Action step</b>	: 4.9		
Action step (s)	Output (s)	Timeline	Resources required
<b>4.9 Sarawak Agricultural Technology Park (SARTECH)</b>  Implementing project as per the following steps: a) Seek MMKN approval (MANRED) b) Establishment of PSC/PTWC c) Define user requirement d) Conduct site assessment and feasibility study e) Appointment of consultant f) Prepare CTK document g) Process procurement method h) Project execution	5G connectivity in SARTECH areas  High tech equipment and digital solutions at agencies premisses	Start date	RM20 million, big data infrastructure, ICT platform and talent expert, open platform, open API, open data, digital ID, e-wallet, digital banking, cybersecurity and taxation policies
		2021	
		End date	
		2025	
Project Owner	Implementing Agency	Other Stakeholders	
MANRED/ DoA	SDEC	-	

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 4. Upgrade digital connectivity infrastructure		
<b>Project</b>	: Coastal Road Fiber Connectivity		
<b>Action step</b>	: 4.10		
Action step (s)	Output (s)	Timeline	Resources required
<b>4.10 Coastal Road Fiber Connectivity</b>  Implementing project as per the following steps: a) Survey & Planning for Fiber Infrastructure Network b) Telecommunication Network Planning & Design c) Construction of Fiber Infrastructure d) Installation and commissioning of telecommunication infrastructure	Operation of Fiber Infrastructure including fiber nodes along the Coastal Road	Start date	RM500 mil Construction of Fibre Infrastructure connecting all the fibre nodes along the Coastal Road
		2021	
		End date	
		2025	
Project Owner	Implementing Agency	Other Stakeholders	
SMA	SDEC		

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 4. Upgrade digital connectivity infrastructure		
<b>Project</b>	: Border Patrol Communication and Support Equipment		
<b>Action step</b>	: 4.11		
Action step (s)	Output (s)	Timeline	Resources required
<b>4.11 Border Patrol Communication and Support Equipment</b>  Implementing project as per the following steps: a) Survey & Planning for Telecommunication and Supporting Equipment b) Construction of Telecommunication Infrastructure c) Installation and commissioning of telecommunication network and supporting equipment	Operation of Telecommunication and UAV Aerial Surveillance Supporting Equipment along the border patrol surveillance of the 3rd and 9th brigades of Malaysian Infantry for seventeen (17) POS area	Start date	RM61 mil Construction of Telecommunication Infrastructure and providing the UAV Aerial Surveillance Supporting Equipment
		2021	
		End date	
		2025	
Project Owner	Implementing Agency	Other Stakeholders	
SMA	SDEC	Malaysian Infantry	

## AIP Level 1 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Strategy</b>	: Empower Sarawak's sectors through digital transformation across sectors		
<b>Initiative</b>	: 5. Develop Digital Talent		
<b>Initiative</b>	<b>Desired Outcome(s)</b>		
<b>5. Develop Digital Talent</b> a) Large scale upskilling via Digital Academy; b) Digital ICT centres; and c) Establish a talent repository database to match talent supply to industry demand.	<b>Economic Prosperity</b> 1. Median household income of digital economic business owners/workers reaches RM15,047/month  <b>Social Inclusivity</b> 1. 60% manpower trained in STEM and TVET 2. Fulfil Industry skill needs within 6 months 3. 80% rate of employment of digital upskilling and reskilling programmes graduates/trainees		
<b>Timeline</b>		<b>Resources Required</b>	
<b>Start Date</b>	<b>End Date</b>		
2021	2030	<ul style="list-style-type: none"> <li>• RM475 million</li> <li>• Training centre/ innovation hub</li> <li>• Subject matter expert</li> <li>• 99% access to telecommunication service</li> </ul>	
<b>Project Owner</b>	<b>Implementing Agency</b>	<b>Other Stakeholders</b>	
CENTEXS	SSMU, SHRU, Sarawak Science Centre, SDEC, SAINS, SCOPE	EPU Sarawak, Institutions of Higher Learning, MINTRED, MESTR, Federal Ministry of Education	

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 5. Develop Digital Talent		
<b>Project</b>	: R&D conferences and workshops		
<b>Action step</b>	: 5.1		
Action step (s)	Output (s)	Timeline	Resources required
<b>5.1 R&amp;D conferences and workshops</b>  a) Engagement with industry, government and universities b) Identify best practices, lesson learned and implementation experience from other countries c) Organisation of conferences and workshops on R&D	50 conferences, seminar and workshops	Start date	RM1 million, training centre/ innovation hub, subject matter expert, 99% access to telecommunication service
		2021	
		End date	
		2025	
Project Owner	Implementing Agency	Other Stakeholders	
SDEC	SDEC	-	

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 5. Develop Digital Talent		
<b>Project</b>	: Economic sector focused testbeds (Living Labs)		
<b>Action step</b>	: 5.2		
Action step (s)	Output (s)	Timeline	Resources required
<b>5.2 Economic sector focused testbeds (Living Labs)</b> a) Set up testbeds facilities and technology showcase/ use cases b) Developed a complete prototype with support from the technology in the facilities c) Collaboration with potential universities/ technologies/ technology provider/ industries on the research and development in the facility d) Support and assist start-up, researcher, and industrialist to fully utilise the facility for their project innovation, research and development	a) Six testbeds facility and 30 technology showcase/ use cases b) 12 Proof-of-concept (POC) and prototype technology c) 20 strategic partnership with universities and technology industries on research and development d) 15 programmes on industry adoption on the latest technology	Start date	RM97.6 million, training centre/ innovation hub, subject matter expert, 99% access to telecommunication service
		2021	
		End date	
		2025	
Project Owner	Implementing Agency	Other Stakeholders	
SDEC	SDEC	-	

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 5. Develop Digital Talent		
<b>Project</b>	: 5G Demonstrator Project		
<b>Action step</b>	: 5.3		
Action step (s)	Output (s)	Timeline	Resources required
<b>5.3 5G Demonstrator Project</b>  Implementing project as per the following steps: a) System requirement study b) Review policies c) Design and planning d) Design and development of 5G network infrastructure e) Arrange and provide user training f) Arrange and provide UAT g) Guide, facilitate, and support live implementation of 5G network h) Implement system and new process	5G demonstrator with use cases	Start date	RM30 million, training centre/ innovation hub, subject matter expert, 99% access to telecommunication service
		2021	
		End date	
		2025	
Project Owner	Implementing Agency	Other Stakeholders	
SDEC	SDEC	Government agencies, business community, DGC, contractor/ consultant	

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 5. Develop Digital Talent		
<b>Project</b>	: High Tech Entrepreneurship Development Program		
<b>Action step</b>	: 5.4		
Action step (s)	Output (s)	Timeline	Resources required
<b>5.4 5G High Tech Entrepreneurship Development Program</b>  Implementing project as per the following steps: a) Develop the program b) Identify the potential high scale ups startups	Commercialised local technologies, services or products  10 scale up startup hosted at DV, Samajaya	Start date	RM50 million, digital infrastructure, trainers and skill providers
		2021	
		End date	
		2030	
Project Owner	Implementing Agency	Other Stakeholders	
SDEC, MINTRED	SDEC	SMA, SMG, TEGAS, private sector innovation partners, Federal partners (i.e. MDEC, MAGIC, etc.), MINTRED, MESTR	

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 5. Develop Digital Talent		
<b>Project</b>	: Business Digitalisation Programme NB: Project consolidated with Go Digital Consultancy		
<b>Action step</b>	: 5.5		
Action step (s)	Output (s)	Timeline	Resources required
<b>5.5 Business Digitalisation Programme</b> <b>NB: Project consolidated with Go Digital Consultancy</b>  Implementing project as per the following steps: a) Develop consultancy programmes b) Programme monitoring	a) Industry standard platform b) 1,000 businesses on boarded onto digitalisation annually c) Tracking: SERAPI (ecosystem platform) and digital business listing platform operational by Q3 2022	Start date	RM50 million, digital infrastructure, trainers and skill providers, policy support for gig workers in digital economy
		2021	
		End date	
		2030	
Project Owner	Implementing Agency	Other Stakeholders	
SDEC	SDEC	SMA, SMG, TEGAS, private sector innovation partners, Federal partners (i.e. MDEC, MAGIC, etc.), MINTRED, MESTR	

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 5. Develop Digital Talent		
<b>Project</b>	: Launch Sarawak Program		
<b>Action step</b>	: 5.6		
Action step (s)	Output (s)	Timeline	Resources required
<b>5.6 Launch Sarawak Program</b>  Implementing project as per the following steps: a) Identify the landing pads b) Engagement with the key players c) Establishment of new landing pads outside Sarawak	Launch Sarawak Program	Start date	RM20 million, digital infrastructure, trainers and skill providers
		2021	
		End date	
		2030	
Project Owner	Implementing Agency	Other Stakeholders	
SDEC	SDEC	-	

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 5. Develop Digital Talent		
<b>Project</b>	: Conduct Industry Linkage Programs to spur collaborations and industries' participation in digital R&D		
<b>Action step</b>	: 5.7		
Action step (s)	Output (s)	Timeline	Resources required
<b>5.7 Conduct Industry Linkage Programs to spur collaborations and industries' participation in digital R&amp;D</b>  Implementing project as per the following steps: a) Develop the program b) Collaboration with the industries c) Startup growth development monitoring	Industry Linkage Programs to increase commercialisation of technologies, services or products, targeting the following milestones: a) 10 new digital technologies/ products/ services adopted by industry per year b) 10 researchers attached to industry per year c) 5 industry collaborations per year	Start date	RM20 million, (12 MP)
		2021	
		End date	
		2030	
Project Owner	Implementing Agency	Other Stakeholders	
SDEC, MINTRED	SDEC	SMA, MESTR, University partners, Sarawak-based technology companies, private sector, technology partners, Federal partners (i.e. MDEC, MTDC, MIDA, TDA, etc.)	

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 5. Develop Digital Talent		
<b>Project</b>	: Digital readiness		
<b>Action step</b>	: 5.8		
Action step (s)	Output (s)	Timeline	Resources required
<b>5.8 Digital readiness</b> a) Questionnaire b) Inception report c) Draft final report d) Final report	Complete database on state of digital access and level of access to digital technology and facilities in the 44 towns/districts listed under different hubs /tiers	Start date	RM2 million, digital infrastructure, trainers and skill providers
		2021	
		End date	
		2030	
Project Owner	Implementing Agency	Other Stakeholders	
SMA	SDI	Government agencies, PUSTAKA, MLGH, UNIMAS, AZAM, Faradel Media, SMG	

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 5. Develop Digital Talent		
<b>Project</b>	: STEM and Digital Upskilling Programme for schools and institutions		
<b>Action step</b>	: 5.9		
Action step (s)	Output (s)	Timeline	Resources required
<b>5.9 STEM and Digital Upskilling Programme for schools and institutions</b>  a) Identify the schools which are rural and disadvantage b) Organisation of the innovation and Science fairs c) Organisation of the innovation competitors for students in primary, secondary and tertiary institution d) Organisation of 21st century education e) Production of creative contents such as animation, gaming, interactive media, digital comics, photography and videography f) Appoint the consultant to conduct the training	a) 1 innovation and Science Fair b) 1 innovation Competitors for students in primary, secondary and tertiary institution c) 1 21st Century Education (i.e. programmes incorporating elements of problem solving, innovation and entrepreneurship by means of digital tools) d) 1 creative content are commercialised e) Qualified consultant to conduct the training on STEM	Start date	RM42 million, digital infrastructure, trainers and skill providers
		2021	
		End date	
		2025	
Project Owner	Implementing Agency	Other Stakeholders	
SDEC	SDEC	MESTR	



## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 5. Develop Digital Talent		
<b>Project</b>	: Digital Community Centre		
<b>Action step</b>	: 5.10		
Action step (s)	Output (s)	Timeline	Resources required
<b>5.10 Digital Community Centre</b>  Implementing project as per the following steps: e) Impact study based on KPIs and reporting for each DCC established in the communities <ul style="list-style-type: none"> <li>Assess the impact to the poor households</li> <li>Determine the success of the programmes that designed for the poor household in terms of skills developed and job placement to conduct the training</li> </ul>	42 DCCs (i.e.10 Urban DCC & 32 Rural DCC)  Upcoming 3 new DCCs and facelift 32 existing DCC	Start date	RM136 million (total fund required for the project), contractor
		2021	
		End date	
		2030	
Project Owner	Implementing Agency	Other Stakeholders	
SMA	PUSTAKA	MLGH, Pustaka, UNIMAS, SDEC, CENTEX, AZAM, Faradale Media, SDI, SMG	

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 5. Develop Digital Talent		
<b>Project</b>	: People Accessible Network For Digital Empowerment and Inclusivity (PANDEI)		
<b>Action step</b>	: 5.11		
Action step (s)	Output (s)	Timeline	Resources required
<b>5.11 People Accessible Network For Digital Empowerment and Inclusivity (PANDEI)</b>  a) Provide digital training courses/programmes to Sarawakian of various readiness groups b) Feasibility study c) Requirement study d) Designation of system e) Training manual developing	Digital training and awareness programmes	Start date	RM3 million (total fund required for the project), training centre/ innovation hub, subject matter expert, 99% access to telecommunication service
		2021	
		End date	
		2025	
Project Owner	Implementing Agency	Other Stakeholders	
Pustaka	SDEC	Government agencies, business community, DGC, contractor/ consultant	

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 5. Develop Digital Talent		
<b>Project</b>	: Promotion and adoption to smart culture		
<b>Action step</b>	: 5.12		
Action step (s)	Output (s)	Timeline	Resources required
<b>5.12 Promotion and adoption to smart culture</b>  a) Develop spokesperson/ communicates of digital economy (agent) b) Capacity building communication/ PR	Development programmes for spokesperson/ PR for Digital Economy	Start date	RM10 million
		2021	
		End date	
		2030	
Project Owner	Implementing Agency	Other Stakeholders	
SMA	PUSTAKA, UNIMAS, MLGH, SDEC, CENTEX	State Government	

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 5. Develop Digital Talent		
<b>Project</b>	: Digital awareness & buy-in		
<b>Action step</b>	: 5.13		
Action step (s)	Output (s)	Timeline	Resources required
<b>5.13 Digital awareness &amp; buy-in</b> a) Developed content b) Community engagement c) Community training d) TV and radio broadcasts e) Exhibition/ video/ billboard/ print materials/ roadshows f) Workshop & brainstorming g) Workshop and monitoring	a) Informative short TV programme b) Wide dissemination/ broadcast of information and stories on DE achievements in Sarawak c) Viewers feedback d) Information gathering, scriptwriting e) Live or recorded sessions f) Publicity on scheduled broadcasts via various media g) 4 sets of radio campaign h) Social media promotion on radio programmes	Start date	RM22 million
		2021	
		End date	
		2022	
Project Owner	Implementing Agency	Other Stakeholders	
SMA	AZAM, Faradel Media	SDEC, DO, DOA, STB, CENTEX, MLGH, PUSTAKA, UNIMAS, MINTRED, Serba Dinamik, KMKK & JKKK	

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 5. Develop Digital Talent		
<b>Project</b>	: E-learning module for digital economy		
<b>Action step</b>	: 5.14		
Action step (s)	Output (s)	Timeline	Resources required
<b>5.14 E-learning module for digital economy</b>  a) Develop e-learning platform b) Identify the contents and programmes c) Appointment of content and program provider d) Deliver the online content	Online and immersive simulation based e-learning modules, 3D models and IPs in economic sectors on the areas such as telemedicine, mining, industry 4.0 (manufacturing), oil & gas, tourism, etc.  Participation and strategic partnership with industry, business and stakeholder	Start date	RM20 million equipment, software, tool, domain subject matter experts, manpowers (designers, developers)
		2022	
		End date	
		2025	
Project Owner	Implementing Agency	Other Stakeholders	
CENTEXS	CENTEXS, SDEC	CENTEXS industry partners, SMA, MESTR/IHLs, SHRU, SCOPE, LI	

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 5. Develop Digital Talent		
<b>Project</b>	: Upskilling and reskilling for digital economy		
<b>Action step</b>	: 5.15		
Action step (s)	Output (s)	Timeline	Resources required
<b>5.15 Upskilling and reskilling for digital economy</b>  a) Identify the trainers and program for the training b) Train the targeted groups c) Evaluate the training programme	a) Training programme b) Trained talents and skilled manpower	Start date	RM8.6 million
		2021	
		End date	
		2025	
Project Owner	Implementing Agency	Other Stakeholders	
SDEC/ CENTEXS	SDEC/ CENTEXS	-	

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 5. Develop Digital Talent		
<b>Project</b>	: Digital Academy Industry Training Centres		
<b>Action step</b>	: 5.16		
Action step (s)	Output (s)	Timeline	Resources required
<p><b>5.16 Digital Academy Industry Training Centres</b></p> <p>This project will establish industry standard centres at CENTEXS Digital Academy in partnership with the industry. The industry training centres includes:</p> <ul style="list-style-type: none"> <li>• Bosch and GE Industry 4.0 Training Centre;</li> <li>• IBM Training Centre for Big Data, and Artificial Intelligence training;</li> <li>• Microsoft Cloud &amp; Software Centre;</li> <li>• Keysight Technologies, Microsoft Cybersecurity training Centre</li> <li>• Keysight Internet of Things Training Centre</li> <li>• IBM Blockchain and/ or others</li> </ul> <p>Implementing project as per the following steps:</p> <p>a) Provision of infrastructure, facilities, and technologies to enable industry relevant training through the Digital Academy</p> <p>b) Develop Trainers</p> <p>c) Develop specific programmes</p> <p>d) Identify specific skills required in the job market</p>	<p>a) Provision of infrastructure, facilities and technologies to enable industry relevant training through the Digital Academy</p> <p>b) Develop trainers</p> <p>c) Develop specific programmes</p> <p>d) Identify specific skills required in the job market</p>	Start date	RM60 million subject matter expert (recruitment in process)
		2022	
		End date	
		2023	
Project Owner	Implementing Agency	Other Stakeholders	
CENTEXS	CENTEXS and CENTEXS industry partners	CENTEXS industry partners, SMA, MESTR/IHLs, SHRU, SCOPE, LI	

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 5. Develop Digital Talent		
<b>Project</b>	: Competency map		
<b>Action step</b>	: 5.17		
Action step (s)	Output (s)	Timeline	Resources required
<p><b>5.17 Competency map</b></p> <p>This project is to facilitate skill and talent matching to meet the requirement of the industry, and monitor the progress and journey while providing relevant subsidy/aid wherever necessary</p> <ul style="list-style-type: none"> <li>Streamline the education, and academic/ non-academic provider</li> <li>Central state level body to oversee and coordinate other entities with more localised focus</li> <li>Optimise resources, streamline development program, targeted area of development, primary point of contact, consolidated view return of investment</li> </ul> <p>Implementing project as per the following steps:</p> <ol style="list-style-type: none"> <li>Develop competency dictionary</li> <li>Develop baseline and targets for skills/ expertise required for digital economy</li> <li>Develop competency management system</li> <li>Implement competency management process</li> </ol>	<ol style="list-style-type: none"> <li>A comprehensive study report, to facilitate skill and talent matching to meet the Industry needs</li> <li>Skill Matrix on supply and demand of industry needs</li> <li>Adoption of the system statewide, with API services provided for other systems such as contractor registration and evaluation systems, procurement systems, recruitment systems, etc.</li> </ol>	Start date	RM0.3 million (total fund required for the project), funding, equipment, software, domain experts, industry experts
		2022	
		End date	
		2023	
Project Owner	Implementing Agency	Other Stakeholders	
CENTEXS, MESTR	CENTEXS, SMA	CENTEXS industry partners, SMA, MESTR/IHLs, SHRU, SCOPE, LI, Industry reps, institutions of higher learning, schools	

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 5. Develop Digital Talent		
<b>Project</b>	: Digital R&D Talent Development		
<b>Action step</b>	: 5.18		
Action step (s)	Output (s)	Timeline	Resources required
<b>5.18 Digital R&amp;D Talent Development</b>  Implementing project as per the following steps: a) Identify the skills required b) Conduct awareness workshops - BMC, financial, IP awareness and commercialisation c) Innovation assessment - patent search, commercial business assessment d) Technology accelerator - technology validation, benchmarking e) Identify and manage IP protection and management f) Commercialisation accelerator - business plan, market validation, funding, commercialisation	a) 150 high value IPs are produced b) 25 commercialised ready output	Start date	RM6.2 million training centre/ innovation hub, subject matter expert, 99% access to telecommunication service
		2021	
		End date	
		2023	
Project Owner	Implementing Agency	Other Stakeholders	
SDEC	SDEC	Government agencies, private sectors, universities and industry sector	

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 5. Develop Digital Talent		
<b>Project</b>	: R&D Scholarship for Digital Economy		
<b>Action step</b>	: 5.19		
Action step (s)	Output (s)	Timeline	Resources required
<b>5.19 R&amp;D Scholarship for Digital Economy</b>  Implementing project as per the following steps: a) Identify the skills required b) Identify the candidate to receive the digital economy scholarship c) Identify the human resource for the scholarship	50 expertise in digital economy	Start date	RM4 million training centre/ innovation hub, subject matter expert, 99% access to telecommunication service
		2021	
		End date	
		2025	
Project Owner	Implementing Agency	Other Stakeholders	
SDEC	SDEC	-	

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 5. Develop Digital Talent		
<b>Project</b>	: Increase awareness on eCommerce to the general public		
<b>Action step</b>	: 5.20		
Action step (s)	Output (s)	Timeline	Resources required
<b>5.20 Increase awareness on eCommerce to the general public</b>  Organise: a) Awareness campaign through online advertising (i.e. Facebook, Twitter, Instagram) b) External linked to other websites c) Competition, advertising (i.e. buses, buildings, billboards, electronics and printed media) d) Courses, training, talks, etc.	Completion of scope of works	Start date	RM1.2 million digital infrastructure, trainers and skill providers
		2021	
		End date	
		2025	
Project Owner	Implementing Agency	Other Stakeholders	
MINTRED	SMA	SDEC, CENTEX	

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 5. Develop Digital Talent		
<b>Project</b>	: International Digital Economy Conference Sarawak (IDECS)		
<b>Action step</b>	: 5.21		
Action step (s)	Output (s)	Timeline	Resources required
<b>5.21 International Digital Economy Conference Sarawak (IDECS)</b>  Implementing project as per the following steps: a) Event expenses / exhibitions b) Promotional / marketing items c) Conference materials and webinar expenses d) Food and beverage & rental space e) Production fee f) Conference speakers / panelists / moderators	Eleven conference speakers / panelists/ moderators in the conference on digital economy topics:  1 Conference Report 1 Evaluation Report 5 Strategic collaboration 15 Exhibition	Start date	RM50 million (total fund required for the project), digital infrastructure, trainers and skill providers
		2021	
		End date	
		2030	
Project Owner	Implementing Agency	Other Stakeholders	
SMA	SMA	State Government, SCOPE	

## AIP Level 2 - Digital Transformation sector

<b>Sector</b>	: Digital Transformation		
<b>Initiative</b>	: 5. Develop Digital Talent		
<b>Project</b>	: Digital Talent Development for Public Service and GLCs		
<b>Action step</b>	: 5.22		
Action step (s)	Output (s)	Timeline	Resources required
<b>5.22 Digital Talent Development for Public Service and GLCs</b>  a) Training and competency development for government servants and GLCs b) Identify the trainers and programmes needed to train the public service and GLCs officers c) Identify the officers who need the training d) Train the targeted groups e) Evaluate the effectiveness of the training programmes conducted	Trained government servants and GLCs officers in skills and talents needed  5,000 training session person	Start date	RM10 million (total fund required for the project), trainers and skill providers
		2022	
		End date	
		2025	
Project Owner	Implementing Agency	Other Stakeholders	
State agencies	Leadership Institute/ SCOPE	SSMU, SHRU, SMA	

# 1.2 Innovation

## **Aspiration for Innovation Sector**

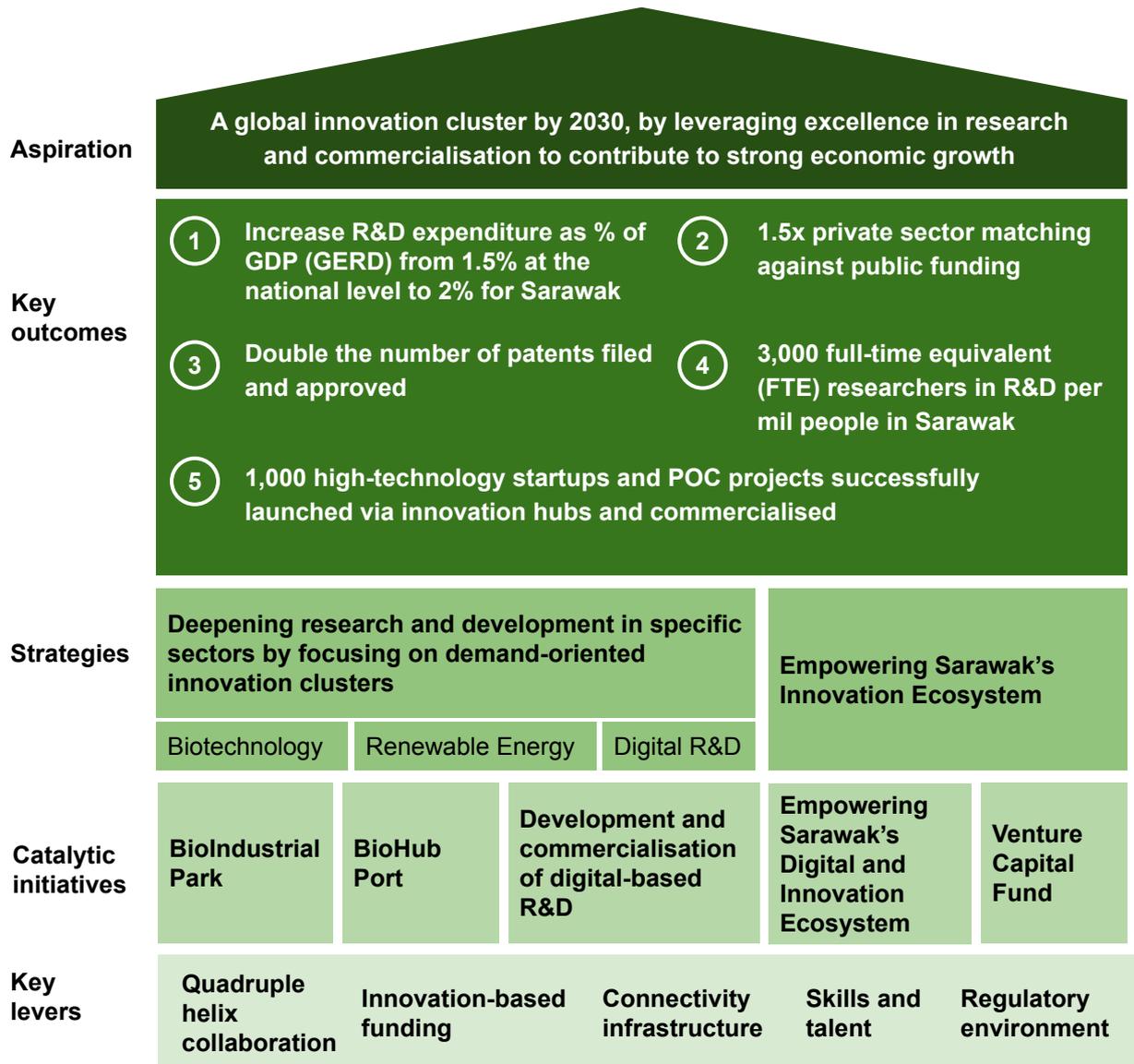
Innovation is key towards Sarawak's aim to be a high income state. In line with this, the State aspires to leverage excellence in research and commercialisation to become a global innovation cluster.

An efficient innovation policy addresses the overall innovation climate, while also providing focus towards supporting targeted sectors to thrive. Sarawak will continue to reduce barriers to innovation in competition and regulatory frameworks and by funding R&D structures and programmes. The State will also enhance education systems towards prioritising STEM, and improve access for start-ups or entrepreneurs.

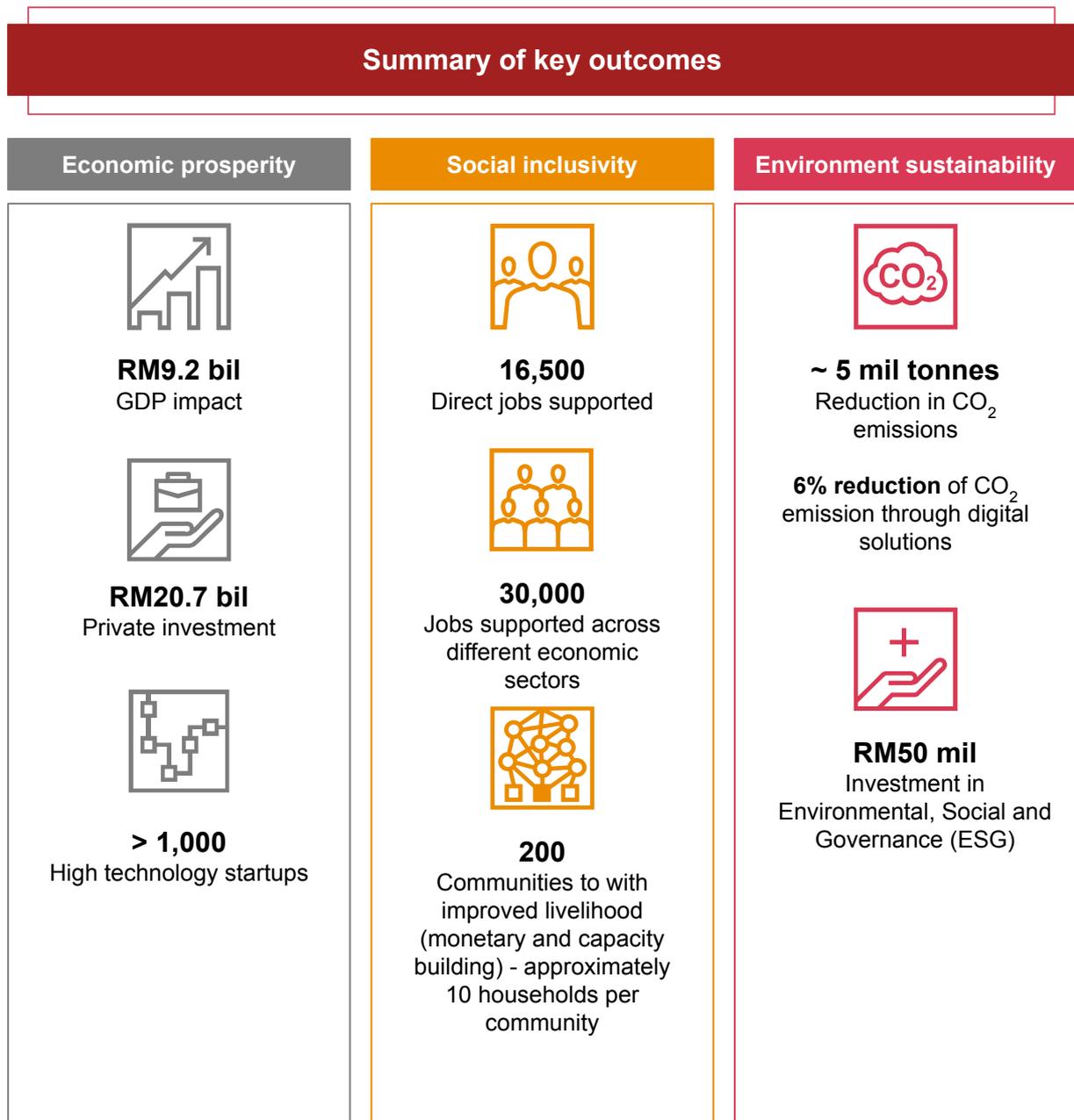
Sarawak will be able to create significant impact in the innovation based economy through establishing demand-based private-led innovation clusters. Innovation clusters are primarily focused areas with concentration in knowledge output (patents and intellectual property) and technology output. This will be enabled by supportive public policy, access to significant R&D funding and human capital.

Examples of recognised innovation clusters around the world typically leverage on having a high talent concentration and market demand in a particular industry. This translates ideas into new products and services that creates value and commercial success.

**Figure 1.2.1: Aspiration framework for innovation sector**



**Figure 1.2.2: Summary of desired outcomes for innovation sector**



Note: Outcomes are to be verified further with sectors

## AIP Level 1 - Innovation sector

<b>Sector</b>	: Innovation		
<b>Strategy</b>	: Deepening research and development in specific sectors by focusing on demand-oriented innovation clusters		
<b>Initiative</b>	: 1. Biotechnology Innovation		
<b>Initiative</b>	<b>Desired Outcome(s)</b>		
<p><b>1. Biotechnology Innovation</b></p> <p>BioIndustrial Park</p> <p>Promote bioindustry based on local resources with high value products that are commercialised globally</p> <p>(Key niche areas: Bioactives, Biohealth, Biomaterials, Bioenergy, and Bioenvironment)</p>	<p><b>Economic Prosperity</b></p> <ol style="list-style-type: none"> <li>1. RM1.4 billion GDP impact</li> <li>2. RM500 million private investment</li> <li>3. 8 (20 likely) patents filed and approved</li> <li>4. 10 high technology startups and POC projects</li> </ol> <p><b>Social Inclusivity</b></p> <ol style="list-style-type: none"> <li>1. 7,000 FTE researchers in R&amp;D</li> <li>2. Community Benefit – improving livelihood monetary (RM40 million) and capacity building – 200 communities, 10 households per community</li> </ol> <p><b>Environmental Sustainability</b></p> <ol style="list-style-type: none"> <li>1. 20 Bioresource-based products worth RM200 million (SBC project only)</li> <li>2. Effective interagency collaboration and close collaboration with Federal agencies (i.e. MOSTI, KeTSA, KASA, TDA, MyIPO) to work towards achieving targets, policies and achieve national biotechnology focal point</li> </ol>		
<b>Timeline</b>		<b>Resources Required</b>	
<b>Start Date</b>	<b>End Date</b>		
2021	2030	<ul style="list-style-type: none"> <li>• RM230 million</li> <li>• (Phase 1 – RM50 million)</li> <li>• 9,000 manpower</li> <li>• (80% professional, scientific and technician;</li> <li>• 20% administrative support)</li> <li>• Policies: System integrator, land matters, tenant related, investment, bio-preferred manufacturing (public procurement for biobased products)</li> </ul>	
<b>Project Owner</b>	<b>Implementing Agency</b>	<b>Other Stakeholders</b>	
MESTR	SBC	EPU Sarawak, Land and Survey, JKR, MOSTI, MITI, MIDA, MINTRED, SRDC, Venture capital, SEB, Water Board, SMA, Resident Office, Custom, Investors, MANRED, MUDeNR, universities and other economic / enablers (Agriculture, Manufacturing, Renewable Energy).	

## AIP Level 2 - Innovation sector

<b>Sector</b> : Innovation			
<b>Initiative</b> : 1. Biotechnology Innovation			
<b>Action step</b> : 1.1 - 1.2			
Action step (s)	Output (s)	Timeline	Resources required
<b>1.1 Earth works</b> a. JKR to prepare scope of works and to appoint Land Surveyor b. Survey works (Topography Survey) and Soil Investigation (SI) c. Tender process d. Appointment of contractor for earth filling	Completion of scope of works  Completion of earth filling	Start date	RM10 mil (Project Rakyat)
		Aug 2021	
		End date	
		Dec 2022	
<b>1.2 Detailed Design and Building consultant</b> a. JKR to prepare scope of works for detailed design and building for SDBC approval b. JKR to prepare scope and Tender process until approval	Appointment of building consultant	Start date	RM4 million (12MP)
		Dec 2021	
		End date	
		Sept 2022	
Project Owner	Implementing Agency	Other Stakeholders	
SBC	JKR	EPU Sarawak, Land and Survey, MESTR, SFS, Kuching Water Board, SMA, SESCO, Treinekens, MPKS, MUDeNR	

## AIP Level 2 - Innovation sector

<b>Sector</b> : Innovation			
<b>Initiative</b> : 1. Biotechnology Innovation			
<b>Action step</b> : 1.3			
Action step (s)	Output (s)	Timeline	Resources required
<b>1.3 Development of Phase 1 (26 acres)</b> a. Progress work of main building and infrastructure b. Utilities and Road works c. Telco d. Water e. Electrical f. Access Road to Senari Port	1. Completion of Phase 1 main building and infrastructure. 2. Completion of utilities and road works. 3. Establish telco in SBP (current nearest is approximately 1.7km away) 4. Water supply available at the adjacent Kota Samarahan Industrial Estate (ready) 5. One 33/11kV substation located in Kota Samarahan Industrial Estate (KSIE) that has ample capacity to cater for immediate needs of SBP (ready) 6. Second Kuching-Samarahan trunk road. This new access road will connect SBP directly to Sejingkat, where the Kuching Port, Senari Terminal is located (construction works is expected to be completed in Q1 of 2025)	Start date	RM46 million (12MP)
		Oct 2022	
		End date	
		Oct 2025	
Project Owner	Implementing Agency	Other Stakeholders	
SBC	JKR	EPU Sarawak, Land and Survey, MESTR, SFS, Kuching Water Board, SMA, SESCO, Treinekens, MPKS, MUDeNR	

## AIP Level 2 - Innovation sector

<b>Sector</b> :		Innovation	
<b>Initiative</b> :		1. Biotechnology Innovation	
<b>Action step</b> :		1.4	
Action step (s)	Output (s)	Timeline	Resources required
<b>1.4 Building consultant</b> 1. JKR to prepare scope of works and carry out tender process up to approval 2. Progress work of main building, infrastructure, road works & utilities	<b>Occupancy rate of Phase 1 (5 lots):</b> 1. 40% (2 lots) at 2024 2. 80% (4 lots) at 2025 3. 100% (5 lots) at 2026  - Kick-off Phase 2 in 2026 - Completion of Phase 2 by end of 2027	Start date	RM23 mil
		2026	
		End date	
	2027		
	<b>Occupancy rate of Phase 2 (5 lots):</b> 1. 40% (2 lots) at 2028 2. 80% (4 lots) at 2029 3. 100% (5 lots) at 2030  - Kick-off Phase 3 in 2030 - Completion of Phase 3 by end of 2031	Start date	RM88 mil
		2030	
		End date	
	2031		
	<b>Occupancy rate of Phase 3 (7 lots):</b> 1. 43% (3 lots) at 2032 2. 86% (6 lots) at 2033 3. 100% (7 lots) at 2034  - Kick-off Phase 4 in 2034 - Completion by end of 2035	Start date	RM33 mil
2034			
End date			
2035			
Project Owner	Implementing Agency	Other Stakeholders	
SBC	JKR	EPU Sarawak, Land and Survey, MESTR, SFS, Kuching Water Board, SMA, SESCO, Treinekens, MPKS, MUDeNR	

## AIP Level 2 - Innovation sector

<b>Sector</b> : Innovation			
<b>Initiative</b> : 1. Biotechnology Innovation			
<b>Action step</b> : 1.5			
Action step (s)	Output (s)	Timeline	Resources required
<b>1.5 Contract farming to support supply of raw materials</b>	<ol style="list-style-type: none"> <li>Obtain 100 ha of agriculture land for contract farming under Samarahan Masterplan</li> <li>Manage and monitor contract farming</li> <li>Sustainable supply of raw materials</li> </ol>	<b>Start date</b>	RM15 mil
		2021	<i>Estimation based on SBP: RM6.6 mil/ 100 acre.</i>
		<b>End date</b>	<i>RM0.06 mil / acre</i>
		2030	<i>For 100 Ha (250 acre) = RM15 mil</i>
Project Owner	Implementing Agency	Other Stakeholders	
SBC	SBC	L&S, DOA, LCDA	



## AIP Level 2 - Innovation sector

<b>Sector</b> : Innovation			
<b>Initiative</b> : 1. Biotechnology Innovation			
<b>Action step</b> : 1.7-1.8			
Action step (s)	Output (s)	Timeline	Resources required
<b>1.7 Set up Project Management Committee (PMC)</b>  <i>During the 60th meeting of Sarawak Biodiversity Council, MESTR has been appointed as the Chairman for Project Management Committee (PMC) which responsible to oversee the implementation of SBP</i>	1. Appointment of MESTR as Chairman to the PMC  2. PMC to play a leadership role and providing strategic objectives for SBP's physical development, promotion of the park and business development of SBP as a whole	Start date	-
		Aug 2021	
		End date	
		Oct 2025	
Project Owner	Implementing Agency	Other Stakeholders	
SBC	MESTR	JKR	
Action step (s)	Output (s)	Timeline	Resources required
<b>1.8 Human Resource Recruitment</b>	1. Management and marketing / R&D / support team of SBP  2. Establish partnership between institute of higher learnings (IHLs) and industry players for human capital development to create an ongoing pipeline of future full-time employees  3. Host training programmes for graduates (20 pax / year) to be industry-ready.  4. Attract foreign talent to fill in short to medium term gaps  5. Provision of incentives to lure back diaspora to Sarawak	Start date	RM350,000* (OPEX)  In 2022, four (4) Officers to be recruited on contract for marketing and promotional of SBP subject to Budget approval.
		2022	
		End date	
		2022	
	SBC reorganisation to undertake new function of SBP	Start date	RM21 mil 244 posts  <i>(subject to SODC and Budget approval.)</i>
	2023		
	End date		
	2031		

## AIP Level 2 - Innovation sector

<b>Sector</b> : Innovation			
<b>Initiative</b> : 1. Biotechnology Innovation			
<b>Action step</b> : 1.9			
Action step (s)	Output (s)	Timeline	Resources required
<b>1.9 Adoption of policies</b>	<ol style="list-style-type: none"> <li>Federal government to register BioPreferred Programme as national policy. Sarawak to elevate it.</li> <li>To review for adoption: <ul style="list-style-type: none"> <li>National Biotechnology Policy 2.0</li> <li>National Policy on Biological Diversity 2016 - 2025</li> <li>MOH Traditional and Complementary Medicine Blueprint 2018-2027</li> <li>The Formulation of Sarawak Biodiversity Masterplan (UNDP, Oct 2020 - Dec 2022)</li> <li>National 2022 Budget</li> </ul> </li> <li>Establish State STIE policy for GERD to be 2%, number of patents to reach 2,000 and 3,000 FTE researchers per million population by 2030.</li> </ol>	Start date	-
		2021	
		End date	
		2030	

## AIP Level 1 - Innovation sector

<b>Sector</b> :		Innovation	
<b>Strategy</b> :		Deepening research and development in specific sectors by focusing on demand-oriented innovation clusters	
<b>Initiative</b> :		2. Renewable Energy Innovation	
<b>Initiatives</b>		<b>Desired Outcome(s)</b>	
<p><b>2. Renewable Energy Innovation</b></p> <p>BioHub Port</p> <p>Research and development and commercialisation of cleantech/ greentech/ biotech (hydrogen, biomass, biofuel, biomaterials and end products) that will create sustainable high value products leading the way towards a true Circular Economy.</p>		<p><b>Economic Prosperity</b></p> <ol style="list-style-type: none"> <li>1. RM4.8 billion GDP in 2030</li> <li>2. RM20 billion in BioHub Port, Bio-Manufacturing and Satellite Centres (Exclude EUR 5 billion on downstream plants across Biofuels, Biochemical and Green Hydrogen)</li> </ol> <p><b>Social Inclusivity</b></p> <ol style="list-style-type: none"> <li>1. 5,000 highly skilled and high income jobs (15% = ~750 FTE researchers)</li> <li>2. Community income generation through biomass and crop plantation operation aggregation hubs</li> </ol> <p><b>Environmental Sustainability</b></p> <ol style="list-style-type: none"> <li>1. ~ 5 million tonnes of reduction in CO<sub>2</sub> emissions with focus on zero waste targets.</li> <li>2. b) Pivotal role at the regional level as Sustainable Flagship project with a target of being a fully sustainable bio industrial cluster supporting national emission targets and 45% reduction in CO<sub>2</sub> emissions by 2050. (Carbon Net Zero Cluster)</li> </ol>	
<b>Timeline</b>		<b>Resources Required</b>	
<b>Start Date</b>	<b>End Date</b>		
2020	2050	<ul style="list-style-type: none"> <li>• RM20 billion (private sector investment)</li> <li>• Exclude Investments by Downstream Companies (EUR 5 billion, 2020-2030 timeframe)</li> <li>• Overall Size of the Project 2,500 hectares (Phase 1 – at least 700 hectares)</li> <li>• Policy / Regulation:  Waste / Biomass Management, land gazetting, Joint venture Clusters, Dedicated Crops on Marginal Land and incentives</li> </ul>	
<b>Project Owner</b>	<b>Implementing Agency</b>	<b>Other Stakeholders</b>	
SEDC, MIDA	MIDA, SEDC, EPU Sarawak, RECODA	<p>SEDC, Bintulu Port Holdings Berhad, Port of Rotterdam, Regal Group &amp; consortium partners, SBC, Dutch Government, downstream companies, oil palm mill owners, concession holders, industrial tree plantations, research institutes, universities, local companies and other economic /enablers sector (renewable energy, infrastructure, agriculture, and manufacturing)</p> <p>Regenerative renewable and sustainable feedstock and partnership with Forestry (fast rotation crops on marginal land and community contract farming) and Algae biomass partnership with SBC</p>	

## AIP Level 2 - Innovation sector

<b>Sector</b> : Innovation			
<b>Initiative</b> : 2. Renewable Energy Innovation			
<b>Action step</b> : 2.1 - 2.2			
Action step (s)	Output (s)	Timeline	Resources required
<b>2.1 Complete Phase 1: Overall Feasibility and Opportunity Assessment for BioHub Port Project in Sarawak</b>	Project owners satisfied with assessment and have agreed to move into Phase 2 of the Project	<b>Start date</b>	RM5-8 million (Completed and Funded by Consortium Members)
		Jul 2020	
		<b>End date</b>	
		Feb 2021	
<b>2.2 Review and completion of Phase 2 MOU with inclusion of core founding partners</b>	Signed Partnership MOU between all key parties	<b>Start date</b>	Funded by Consortium Members
		Apr 2021	
		<b>End date</b>	
		Sep 2021	
Project Owner	Implementing Agency	Other Stakeholders	
MIDA, SEDC	SEDC	Port of Rotterdam, Bintulu Port and Regal Group	

## AIP Level 2 - Innovation sector

<b>Sector</b>	: Innovation		
<b>Initiative</b>	: 2. Renewable Energy Innovation		
<b>Action step</b>	: 2.3		
Action step (s)	Output (s)	Timeline	Resources required
<b>2.3 Completion and execution of Partnership Agreement (This is critical phase of the project) on Full Project Development Masterplan</b>	2.3.1 Kick off full Development work with Port of Rotterdam as the leading partner of this project in this phase.	Start date	Estimated RM15-25 million Funded by Consortium (EUR3-5 million)  (Dependent on data availability and on-ground access)
		Sep 2021	
		End date	
		Mar 2022	
Project Owner	Implementing Agency	Other Stakeholders	
MIDA, SEDC	SEDC, MIDA	Port of Rotterdam, Bintulu Port and Regal Group and other stakeholders	
Action step (s)	Output (s)	Timeline	Resources required
	2.3.2 Full Stakeholder Mapping and Definition	Start date	Funded by Port of Rotterdam
		Sep 2021	
		End date	
		Dec 2021	
Project Owner	Implementing Agency	Other Stakeholders	
MIDA, SEDC	SEDC, POR, MIDA	Value Chain Enablers and Actors in Sarawak	
Action step (s)	Output (s)	Timeline	Resources required
	2.3.3 Setup of Project Committee (industry players like SHELL, BASF have all expressed interest to be part of) – expansion of Pro-Tem Committee for Hydrogen to include Renewables	Start date	Funded by Consortium
		Oct 2021	
		End date	
		Mar 2022	
Project Owner	Implementing Agency	Other Stakeholders	
MIDA, SEDC	SEDC	Port of Rotterdam, Bintulu Port and Regal Group and Other Downstream Interest MNCs	

## AIP Level 2 - Innovation sector

<b>Sector</b>	: Innovation						
<b>Initiative</b>	: 2. Renewable Energy Innovation						
<b>Action step</b>	: 2.3 (cont'd)						
<b>Action step (s)</b>	<b>Output (s)</b>	<b>Timeline</b>	<b>Resources required</b>				
	2.3.4 Submission of Application for Land Location for the Project to Authorities  Policy: Speed up overall project land gazetting and also title to SEDC the primary local partner which shall inject it as an asset into the BioHub Port project. (submitted in July 2021)	<table border="1"> <tr> <td><b>Start date</b></td> <td>Jul 2021</td> </tr> <tr> <td><b>End date</b></td> <td>Dec 2030 and beyond</td> </tr> </table>	<b>Start date</b>	Jul 2021	<b>End date</b>	Dec 2030 and beyond	7,000 hectares gross (Est. RM30-50 per square metre)
<b>Start date</b>	Jul 2021						
<b>End date</b>	Dec 2030 and beyond						
<b>Project Owner</b>	<b>Implementing Agency</b>	<b>Other Stakeholders</b>					
SEDC	SEDC	Land and Survey, BDA					
<b>Action step (s)</b>	<b>Output (s)</b>	<b>Timeline</b>	<b>Resources required</b>				
	2.3.5 Full Masterplan which includes a 30 year Development Plan, Synergies with other SEDC driven State Projects, Incentives and Grants, Sharing of Infrastructure Planning, Defining interest of downstream commercial parties, and overall business model and structure of Joint Venture between POR and SEDC led partners)	<table border="1"> <tr> <td><b>Start date</b></td> <td>Sep 2021</td> </tr> <tr> <td><b>End date</b></td> <td>Apr 2022</td> </tr> </table>	<b>Start date</b>	Sep 2021	<b>End date</b>	Apr 2022	Funded by Consortium  (RM2 billion of incentives, grants and in-kind contribution will be defined in this stage of the project, Majority of Funds provided by Private Sector)
<b>Start date</b>	Sep 2021						
<b>End date</b>	Apr 2022						
<b>Project Owner</b>	<b>Implementing Agency</b>	<b>Other Stakeholders</b>					
MIDA, SEDC	SEDC, MIDA	Bintulu Port Holdings and Regal Group (other Government Partners will be determined by partner SEDC during this stage)					

## AIP Level 2 - Innovation sector

<b>Sector</b> : Innovation			
<b>Initiative</b> : 2. Renewable Energy Innovation			
<b>Action step</b> : 2.3 (cont'd)			
Action step (s)	Output (s)	Timeline	Resources required
	2.3.6 Site Visitation by Port of Rotterdam Senior Management and Board Members	<b>Start date</b>	Funded by Consortium (expects around team of 10-15 from POR HQ and Consortium Partners)
		Nov 2021	
		<b>End date</b>	
		Jan 2022	
<b>Project Owner</b>	<b>Implementing Agency</b>	<b>Other Stakeholders</b>	
MIDA, SEDC	SEDC, MIDA	Bintulu Port and Regal Group	
Action step (s)	Output (s)	Timeline	Resources required
	2.3.7 Crafting and Providing a Complete Storyline around Palm Oil Industry and Sustainability in Sarawak (this is key component of the project besides economic feasibility) Existing policy: Development Plan for the Biomass Industry in Sarawak (2015-2016)	<b>Start date</b>	Funded by Port of Rotterdam
		Oct 2021	
		<b>End date</b>	
		Dec 2021	
<b>Project Owner</b>	<b>Implementing Agency</b>	<b>Other Stakeholders</b>	
MIDA, SEDC	SEDC, MIDA	Other local stakeholders will be roped in but largely led by group of EU experts paid for by POR	
Action step (s)	Output (s)	Timeline	Resources required
	2.3.8 Defined Joint Venture Structure and Overall Funding Model Existing policy: Development Plan for the Biomass Industry in Sarawak (2015-2016)	<b>Start date</b>	Funded by Consortium (expects around team of 10-15 from POR HQ and Consortium Partners)
		Oct 2021	
		<b>End date</b>	
		March 2022	
<b>Project Owner</b>	<b>Implementing Agency</b>	<b>Other Stakeholders</b>	
MIDA, SEDC	SEDC, MIDA	Bintulu Port and Regal Group	

## AIP Level 2 - Innovation sector

<b>Sector</b> : Innovation									
<b>Initiative</b> : 2. Renewable Energy Innovation									
<b>Action step</b> : 2.3 (cont'd)									
Action step (s)	Output (s)	Timeline	Resources required						
	2.3.9 Groundbreaking of Project at Site and Official Ground Launching of Flagship Project in Sarawak.	<table border="1"> <tr> <td><b>Start date</b></td> <td rowspan="3">Funded by Consortium Partners</td> </tr> <tr> <td>May 2022 (subject to Gazetting)</td> </tr> <tr> <td><b>End date</b></td> </tr> <tr> <td>Oct 2022</td> <td></td> </tr> </table>	<b>Start date</b>	Funded by Consortium Partners	May 2022 (subject to Gazetting)	<b>End date</b>	Oct 2022		
<b>Start date</b>	Funded by Consortium Partners								
May 2022 (subject to Gazetting)									
<b>End date</b>									
Oct 2022									
Project Owner	Implementing Agency	Other Stakeholders							
MIDA, SEDC	SEDC, MIDA	POR, Bintulu Port and Regal Group							

## AIP Level 2 - Innovation sector

Sector : Innovation			
Initiative : 2. Renewable Energy Innovation			
Action step : 2.4			
Action step (s)	Output (s)	Timeline	Resources required
<b>2.4 Overall Project Promotion Office for BioHub Port Development with participation from State and Federal Agencies</b>	2.4.1 Setup of Focal Point for Project Promotion and Development	Start date	Funded by Consortium in Partnership with MIDA and MINTRED (Dedicated Office for Everything BioHub Port) – Includes work on International marketing and Promotion Globally.
		Dec 2021	
		End date	
		Jan 2022	
<b>Project Owner</b>	<b>Implementing Agency</b>	<b>Other Stakeholders</b>	
MIDA, SEDC	SEDC, MIDA	MINTRED and Appointed State Agency	
Action step (s)	Output (s)	Timeline	Resources required
	2.4.2 Setup of Project Implementation Office by POR and SEDC	Start date	OPEX for Project
		2021	
		End date	
		2030	
<b>Project Owner</b>	<b>Implementing Agency</b>	<b>Other Stakeholders</b>	
MIDA, SEDC	SEDC, MIDA	Joint Venture and Others	

## AIP Level 2 - Innovation sector

<b>Sector</b> : Innovation			
<b>Initiative</b> : 2. Renewable Energy Innovation			
<b>Action step</b> : 2.5 - 2.6			
Action step (s)	Output (s)	Timeline	Resources required
<b>2.5 Setup of Federal and Local Government Coordination Office for Project</b>	<ol style="list-style-type: none"> <li>1. Monitor and operates the project</li> <li>2. To adopt Waste Management policy and licence for to collect and aggregate biomass and waste for the support of the BioHub within key radius within the 3 major clusters identified. Key however, is that only State Government Agency as in SEDC will have the sole licence to do so. SEDC is a key partner in this project to represent the State Government Interest and supplies direct to the BioHub as a feedstock partner.</li> </ol>	Start date	OPEX for Project
		2021	
		End date	
		2030	
Project Owner	Implementing Agency	Other Stakeholders	
MIDA, SEDC	SEDC, MIDA	Joint Venture and Others	
Action step (s)	Output (s)	Timeline	Resources required
<b>2.6 Physical Development</b>  a) Collection, Pre-Treatment, Recycling and Processing Facilities b) Bio Hub and Bio manufacturing Hub c) Aggregation hubs and facilities	<ul style="list-style-type: none"> <li>• Completion of physical development: facilities, hubs and aggregation hubs</li> </ul> <p><i>Linked to KPI on AIP Level 1: Social and environmental Total Biomass or Resources under Management (4,000 tonnes per day*365)</i></p> <ul style="list-style-type: none"> <li>• 450 (people that will be employed at the Plant when fully operational)</li> <li>• Approximate 1,800 (1:4) indirect employment from supply chain mobilisation such as logistics, warehousing and intermediate storing</li> </ul>	Start date	RM360 mil (RM120 mil per site – expected 3 Clusters)
		May 2022	
		End date	
		2024	
Project Owner	Implementing Agency	Other Stakeholders	
BioHub Port Consortium	SEDC, MIDA	Regal and Private Sector Consortium Partners (Technology and Operations)	

## AIP Level 2 - Innovation sector

<b>Sector</b> : Innovation			
<b>Initiative</b> : 2. Renewable Energy Innovation			
<b>Action step</b> : 2.7 - 2.8			
Action step (s)	Output (s)	Timeline	Resources required
<b>2.7 Land Clearing</b>  BioHub Port and Industrial Area Land Clearing (Subjected to State Government gazette the land and made available for use)	<ul style="list-style-type: none"> <li>Construction work and supply chain engaged</li> <li>Expects around clearing of 2 acres per day for first phase of 700 hectares, which will likely be done in two stages, at 300 hectares followed by 400 hectares.</li> </ul>	Start date	Cost to be Provided by Consortium at Later Stage during Masterplan
		Oct 2022	
		End date	
		2030	
Project Owner	Implementing Agency	Other Stakeholders	
Consortium led by POR and SEDC	SEDC, MIDA	Regal and Private Sector Consortium Partners (Technology and Operations)	
Action step (s)	Output (s)	Timeline	Resources required
<b>2.8 Development of 30-year value chain certification and sustainability plan</b>	<ul style="list-style-type: none"> <li>Complete long-term concrete 30-year plan and certification for entire supply chain.</li> <li>Products from the BioHub to be scientifically proven and certified.</li> <li>Products accepted by the International Markets in the long term.</li> </ul>	Start date	Funded by Consortium Partners
		2022	
		End date	
		2050	
Project Owner	Implementing Agency	Other Stakeholders	
MIDA	SEDC	SAG, Ministries, Agencies	

## AIP Level 1 - Innovation sector

<b>Sector</b> :		Innovation	
<b>Strategy</b> :		Deepening research and development in specific sectors by focusing on demand-oriented innovation clusters	
<b>Initiative</b> :		3. Digital R&D Innovation	
<b>Initiatives</b>		<b>Desired Outcome(s)</b>	
<p><b>3. Digital R&amp;D Innovation</b></p> <p>Empowering and intensifying digital-based research and development focusing on:</p> <p>a) Development of new digital technologies/ products/ services through digital-based research and development and innovation.</p> <p>b) Commercialisation of R&amp;D in digital fields</p>		<p><b>Economic Prosperity</b></p> <ol style="list-style-type: none"> <li>1. The commercialisation of high value intellectual properties and creation of spin-off companies from R&amp;D activities will contribute to the projected State's GDP growth in 2030</li> <li>2. Sarawak higher learning institutes to be Top 300 In Global Tech R&amp;D University Ranking to increase the capacity and capability to commercialise research outputs.</li> </ol> <p><b>Social Inclusivity</b></p> <ol style="list-style-type: none"> <li>1. 2,000 tech researchers &amp; talent to increase the socio-economic status through the creation of high paying jobs</li> </ol> <p><b>Environmental Sustainability</b></p> <ol style="list-style-type: none"> <li>1. 6% reduction of CO<sub>2</sub> emission through digital solutions in energy, manufacturing, agriculture and land use, buildings, services, transportation and traffic management.</li> </ol>	
<b>Timeline</b>		<b>Resources Required</b>	
<b>Start Date</b>	<b>End Date</b>		
2021	2030	<ul style="list-style-type: none"> <li>• RM150 mil</li> <li>• Policy: <ul style="list-style-type: none"> <li>○ Liberalisation of data</li> <li>○ Support private sectors to engage or collaborate with research and development in developing new digital technologies/ products/ services</li> <li>○ Support digital talent development</li> <li>○ Commercialisation of research</li> </ul> </li> </ul>	
<b>Project Owner</b>	<b>Implementing Agency</b>	<b>Other Stakeholders</b>	
SMA	SDEC	<p>SMA, MESTR, Universities, Technology Startups, Private companies, Technology Partners, MDEC, MTDC, MIDA, TDA.</p> <p>All ecosystem players in the 6 Economic Sectors and syncs with the 7 enablers.</p>	

## AIP Level 2 - Innovation sector

<b>Sector</b> : Innovation			
<b>Initiative</b> : 3. Digital R&D Innovation			
<b>Action step</b> : 3.1 - 3.4			
Action step (s)	Output (s)	Timeline	Resources required
<b>3.1 Refinement of the State Data Sharing Policy</b>	Liberalisation of Non-Sensitive Government Data	Start date	Policy enhancement and harmonisation
		2021	
		End date	
2030			
<b>3.2 Enhancement of Data Quality to be published on the Open Data Platform</b>	Improvement on the data quality for all data published on the Open Data Platform	Start date	CIO, CDO
		2021	
		End date	
2030			
Project Owner	Implementing Agency	Other Stakeholders	
SMA	SMA, SSMU	SMA, SSMU, all other State Government departments and agencies, Digital Government Committee (DGC), private sector, universities	
Action step (s)	Output (s)	Timeline	Resources required
<b>3.3 Development of favourable policies, incentives or scheme programmes for industries to engage/invest in digital R&amp;D activities</b>	Favourable policies, Incentive or scheme program for industries	Start date	Government fund for incentives or Scheme program
		2021	
		End date	
2030			
<b>3.4 Development of favourable policies, incentives or scheme programmes for industries to engage/invest in digital R&amp;D adopt locally developed digital technologies</b>	Favourable policies, Incentive or scheme program for industries	Start date	Government fund for incentives or Scheme program
		2021	
		End date	
2030			
Project Owner	Implementing Agency	Other Stakeholders	
SMA	SMA	SMA, SSMU, all other State Government departments and agencies, Digital Government Committee (DGC), private sector, universities	

## AIP Level 2 - Innovation sector

<b>Sector</b> : Innovation			
<b>Initiative</b> : 3. Digital R&D Innovation			
<b>Action step</b> : 3.5 - 3.7			
Action step (s)	Output (s)	Timeline	Resources required
<b>3.5 Determine the grant to be awarded and KPI (digital-based projects, number of researchers, IPs and products / services) for the institutions to achieve.</b>	1. 30 digital-based R&D projects per year 2. 2,000 tech researchers & talents by 2030 3. 100 IPs by 2030	Start date	RM100 mil (12MP)
		2021	
		End date	
2030			
<b>3.6 Collaborate with universities to commercialise digital R&amp;D outputs through Technology Accelerator Program</b>	Improvement on the data quality for all data published on the Open Data Platform	Start date	
		2021	
		End date	
2030			
<b>3.7 Collaborate with domestic and international academic institutions and corporations to organise digital-based symposiums or workshops for knowledge sharing</b>  Conduct Digital Skills and Talent development programmes focusing on upskilling/reskilling and digital workforce transformation	10 digital-based conferences/ seminars/ workshops per year	Start date	
		2021	
		End date	
2030			
Project Owner	Implementing Agency	Other Stakeholders	
SDEC	SDEC	3.5: University partners, Sarawak-based technology companies, private sector, technology partners	
		3.6, 3.7: SMA, MESTR, university partners, Sarawak-based technology companies, private sector, technology partners, Federal Partners (MDEC, MTDC, MIDA, TDA, etc.)	

## AIP Level 2 - Innovation sector

Sector : Innovation			
Initiative : 3. Digital R&D Innovation			
Action step : 3.8 - 3.9			
Action step (s)	Output (s)	Timeline	Resources required
<b>3.8 Conduct Industry Linkage Programs to spur collaborations and industries' participation in digital R&amp;D</b>	1. 10 new digital technologies/ products/ services adopted by industry per year	Start date 2021	RM20 mil (12MP)
	1. 5 industry collaborations per year	End date	
	1. 10 researchers attached to industry per year	2030	
<b>3.9 Establish economic Sector focused Testbeds (Living Labs) focusing on the following:</b>  a) Showcase on Digital Technologies and Solutions developed/provided by local universities/agencies/private sectors and MNC Tech Companies  b) Research, Development, Innovation & Commercialisation  c) Workforce Transformation	1. Testbed established per year (Smart City Testbed, Industry 4.0 Testbed, Smart Agriculture Testbed, Digital Health Testbed, Digital Tourism Testbed)	Start date 2021	RM30 mil (12MP)
	1. 5 industry partnerships per year	End date	
		2030	
Project Owner	Implementing Agency	Other Stakeholders	
SMA	SDEC	SMA, MESTR, university partners, Sarawak-based technology companies, private sector, technology partners, Federal Partners (MDEC, MTDC, MIDA, TDA, etc.)	

## AIP Level 1 - Innovation sector

<b>Sector</b>	: Innovation		
<b>Strategy</b>	: Empowering Sarawak's Innovation Ecosystem		
<b>Initiative</b>	: 4. Empowering Sarawak Digital and Innovation Ecosystem (SDIE)		
<b>Initiatives</b>	<b>Desired Outcome(s)</b>		
<p><b>4. Empowering Sarawak Digital and Innovation Ecosystem (SDIE)</b></p> <p>Coordination of policies and programmes between agencies focusing on:</p> <ol style="list-style-type: none"> <li>1. Expand digitalisation and intensity of startups / entrepreneurship support programmes</li> <li>2. Intervention programmes to assist innovators throughout the entrepreneurship journey; and</li> <li>3. Infrastructure deployment and sharing of facilities towards optimisation of assets</li> </ol>	<p><b>Economic Prosperity</b></p> <ol style="list-style-type: none"> <li>1. Contributing to RM3 billion in GDP (cumulative)</li> <li>2. 1,000 high technology startups &amp; POC</li> <li>3. 450 high impact startups (&lt;RM1 million) across 12 Digital Innovation Hubs and Private Sector Hubs</li> <li>4. 100 scale ups (&gt; RM1 million) produce estimated total revenue of more than RM50 million through Digital Village and other Scale Up programmes</li> <li>5. 10,000 businesses digitilised</li> <li>6. RM10 million private sector investment across Entrepreneurship (digital and digital-enabled businesses)</li> </ol> <p><b>Social Inclusivity</b></p> <ol style="list-style-type: none"> <li>1. 30,000 Jobs created across different economic sectors</li> <li>2. Structured commercialisation pathway program for innovation for each of the 6 economic sectors (digital and digital-enabled)</li> </ol> <p><b>Environmental Sustainability</b></p> <ol style="list-style-type: none"> <li>1. Incubating and implementation of at least 45 startups and innovation focusing on environmental solution</li> <li>2. All 100 scale ups commit to annual SDG /Environmental Impact Report Card</li> <li>3. Incorporating environmental sustainability and SDG within Ecosystem programmes across 6 digital entrepreneurship verticals.</li> </ol>		
<b>Timeline</b>		<b>Resources Required</b>	
<b>Start Date</b>	<b>End Date</b>		
2021	2030	<ul style="list-style-type: none"> <li>• RM393 million (12MP)</li> <li>• Policy / Regulation: <ul style="list-style-type: none"> <li>○ Sarawak Digital Innovation Ecosystem (Incentive / Guide), support workers in the gig economy, attract offshoring jobs to Sarawak, digital talent development</li> </ul> </li> </ul>	
<b>Project Owner</b>	<b>Implementing Agency</b>	<b>Other Stakeholders</b>	
SMA	SDEC	<p>SMG, TEGAS, SBC, Private Sector Innovation Partners, Federal Partners (MDEC, MAGIC, etc.), State Partners MINTRED, MESTR</p> <p>The Innovation Ecosystem supports the 6 Economic Sectors and syncs with the 7 enablers.</p>	

## AIP Level 2 - Innovation sector

<b>Sector</b> :		Innovation	
<b>Initiative</b> :		4. Empowering SDIE	
<b>Action step</b> :		4.1 - 4.3	
Action step (s)	Output (s)	Timeline	Resources required
<b>4.1 Providing effective Innovation Entrepreneurship Opportunities at Digital Innovation Hubs and Digital Village</b>	1. Innovation Entrepreneurship opportunities available at all 12 divisions by Q1 2022	<b>Start date</b> 2021	RM107 mil (12MP)  Policy that supports attracting local and international high-potential startups to set up operations in Sarawak
	1. 6 scale ups a year until 2025	<b>End date</b>	
	1. 12 scale ups a year 2025-2030	2030	
<b>4.2 Creative Digital Content Development</b>	5 Content IP a year	<b>Start date</b> 2021	RM25 mil (12MP)
		<b>End date</b> 2030	
<b>4.3 STEM and Digital Upskilling Programs for Schools (inculcating Innovation Culture)</b>	1,000 schools have Robotics, Programming and Innovation based opportunities Extra focus on disadvantaged and rural schools as per MOE classification	<b>Start date</b> 2021	RM50.5 mil (12MP)
		<b>End date</b> 2030	
Project Owner	Implementing Agency	Other Stakeholders	
SMA	SDEC	SMA, SMG, TEGAS, private sector, innovation partners, Federal partners (MDEC, MAGIC, etc.), MINTRED, MESTR	

## AIP Level 2 - Innovation sector

<b>Sector</b> : Innovation			
<b>Initiative</b> : 4. Empowering SDIE			
<b>Action step</b> : 4.4 - 4.7			
Action step (s)	Output (s)	Timeline	Resources required
<b>4.4 Business Digitilisation and Go Digital Consultancy Program</b>	1,000 businesses onboarded onto digitilisation annually  Tracking: SERAPI (Ecosystem platform) and Digital Business Listing platform operational by Q3 2022	<b>Start date</b>	RM50 mil (12MP)  Policy support for gig workers in digital economy
		2021	
		<b>End date</b>	
		2030	
<b>4.5 High Tech Entrepreneurship Development Program</b>	1 high tech industry development/year	<b>Start date</b>	RM50 mil (12MP)
		2021	
		<b>End date</b>	
		2030	
<b>4.6 Startup Ecosystem Development Support</b>	1. 1,000 high skilled tech developers trained by 2030	<b>Start date</b>	RM32.5 mil (12MP)  Policy to attract offshoring jobs to Sarawak, focusing on remote workers and digital nomads  Streamlining policy on digital talent
	1. 30,000 jobs created by 2030	2021	
	1. 1,000 foreign tech talents based in Sarawak by 2030	<b>End date</b>	
	1. 1,000 high impact startups by 2030	2030	
<b>4.7 Startup Growth Development Support</b>		<b>Start date</b>	RM50 mil (12MP)
		2021	
		<b>End date</b>	
		2030	
Project Owner	Implementing Agency	Other Stakeholders	
SMA	SDEC	SMA, SMG, TEGAS, private sector, innovation partners, Federal partners (MDEC, MAGIC, etc.), MINTRED, MESTR	

## AIP Level 1 - Innovation sector

<b>Sector</b> :		Innovation
<b>Strategy</b> :		Empowering Sarawak's Innovation Ecosystem
<b>Initiative</b> :		5. Venture Capital Fund
Initiatives		Desired Outcome(s)
<p><b>5. Venture Capital Fund</b></p> <p>Establishment of a RM100 mil (50 public/50 private) Venture Capital fund in partnership with angel investors and existing VCs to invest in R&amp;D, innovation and commercialisation</p> <p>In a typical venture capital, 5% of investments achieve more than 3 times investment return; 10% achieves 2-3 times return; 35% yield 1-2 times returns; while 50% of investment is usually effectively written off. Only 1% is expected to be "unicorns" (company valued at over \$1 billion).</p>		<p><b>Economic Prosperity</b></p> <ol style="list-style-type: none"> <li>1. RM50 million fund (private investors)</li> <li>2. Achieve RM60 million return of investment (ROI) contributing to GDP (accumulative value 2025 onwards)</li> <li>3. 40% revenue contribution to GDP. (Target RM20 mil per company x 10 companies, hence RM80 mil contributes to GDP)</li> </ol> <p><b>Social Inclusivity</b></p> <ol style="list-style-type: none"> <li>1. 10 companies with direct employment of around 50 high earners per company.</li> <li>2. Strong collaboration with private and government companies with networking capabilities for capacity building</li> </ol> <p><b>Environmental Sustainability</b></p> <ol style="list-style-type: none"> <li>1. RM50 million fund invested in companies aligned with Environmental, Social and Governance (ESG) criteria.</li> </ol>
Timeline		Resources Required
Start Date	End Date	
2021	2030	<ul style="list-style-type: none"> <li>• RM50 million (Public fund)</li> <li>• Outsource to other VC companies</li> <li>• Approach other entities for funding</li> <li>• Policy / Mandate: <ul style="list-style-type: none"> <li>○ VC fund, Operation constitution</li> </ul> </li> </ul>
Project Owner	Implementing Agency	Other Stakeholders
EPU Sarawak	SBC, SDEC  New Venture capital management company (VCMC)	All economic and enablers, MAVCAP, MINTRED, public & private funds, higher education institutions, entrepreneurs

## AIP Level 2 - Innovation sector

<b>Sector</b> : Innovation			
<b>Initiative</b> : 5. Venture Capital Fund			
<b>Action step</b> : 5.1 - 5.3			
Action step (s)	Output (s)	Timeline	Resources required
<b>5.1 Set up and outline holistic investment policies and guidelines</b> (i.e. set up of offices in Sarawak, employment, ESG compliant)	1. Policy that depicts the application and operation of the VC	Start date	Consultants
	1. Govern the operation of the VC	2021	
	1. Clearly define mandate of fund type	End date	
		2022	
Project Owner	Implementing Agency	Other Stakeholders	
EPU Sarawak	SBC, SDEC	MAVCAP	
Action step (s)	Output (s)	Timeline	Resources required
<b>5.2 Firm up structure of Venture Capital Management Company (VCMC)</b>  Joint venture between Sarawak and licensed VC company	1. VCMC established	Start date	2% Management fee of fund managed (annually)  RM2 mil annually for RM100 mil
	1. Board of Directors / management team set up	2021	
	1. JV agreement to outsource VC company	End date	
	1. Investment management agreement with VC	2022	
	1. Create VC professionals and ecosystem		
Project Owner	Implementing Agency	Other Stakeholders	
EPU Sarawak	SBC, SDEC	Venture capital companies, all economic and enablers	
Action step (s)	Output (s)	Timeline	Resources required
<b>5.3 Establish and gazette constitution of the VC fund</b>	1. Constitution of VC fund (Investment return, fund type, tenure stages)	Start date	RM200,000 (Lawyer fees)
		2021	
	1. Fund set up	End date	
		2022	
Project Owner	Implementing Agency	Other Stakeholders	
EPU Sarawak	SAG, New VCMC	VC fund lawyers	

## AIP Level 2 - Innovation sector

Sector		: Innovation	
Initiative		: 5. Venture Capital Fund	
Action step		: 5.4 - 5.5	
Action step (s)	Output (s)	Timeline	Resources required
<b>5.4 Fund raising from limited partners / co-investment</b>	1. Achieve RM50 million seed / matched fund cumulatively from private investors	Start date	RM100 mil (50 public: 50 private)
	1. Identify companies and deploy fund	2022	
	1. Launch Sarawak Program	End date	
	1. 3 VC partnerships	2030	
	1. 25 scaleups invested		
<b>5.5 KPI setting for VCMC</b>	1. Investment volume	Start date	
	1. Return of investments	2022	
	1. Progress of invested companies	End date	
	1. Employment of Sarawakians	2030	
	1. Set up of high-tech companies		
Project Owner	Implementing Agency	Other Stakeholders	
5.4: EPU Sarawak SMA	5.4: SBC, SDEC, VCMC, New VC company (VCC)	5.4: Private high net worth individual, institutional investors, innovation partners, Federal Partners (MDEC, MAGIC, etc.), MINTRED, MESTR	
5.5: EPU Sarawak	5.5: SBC, SDEC New VCMC	5.5: Startups, all economic sectors and enablers	

# 1.3 Education and Human Capital

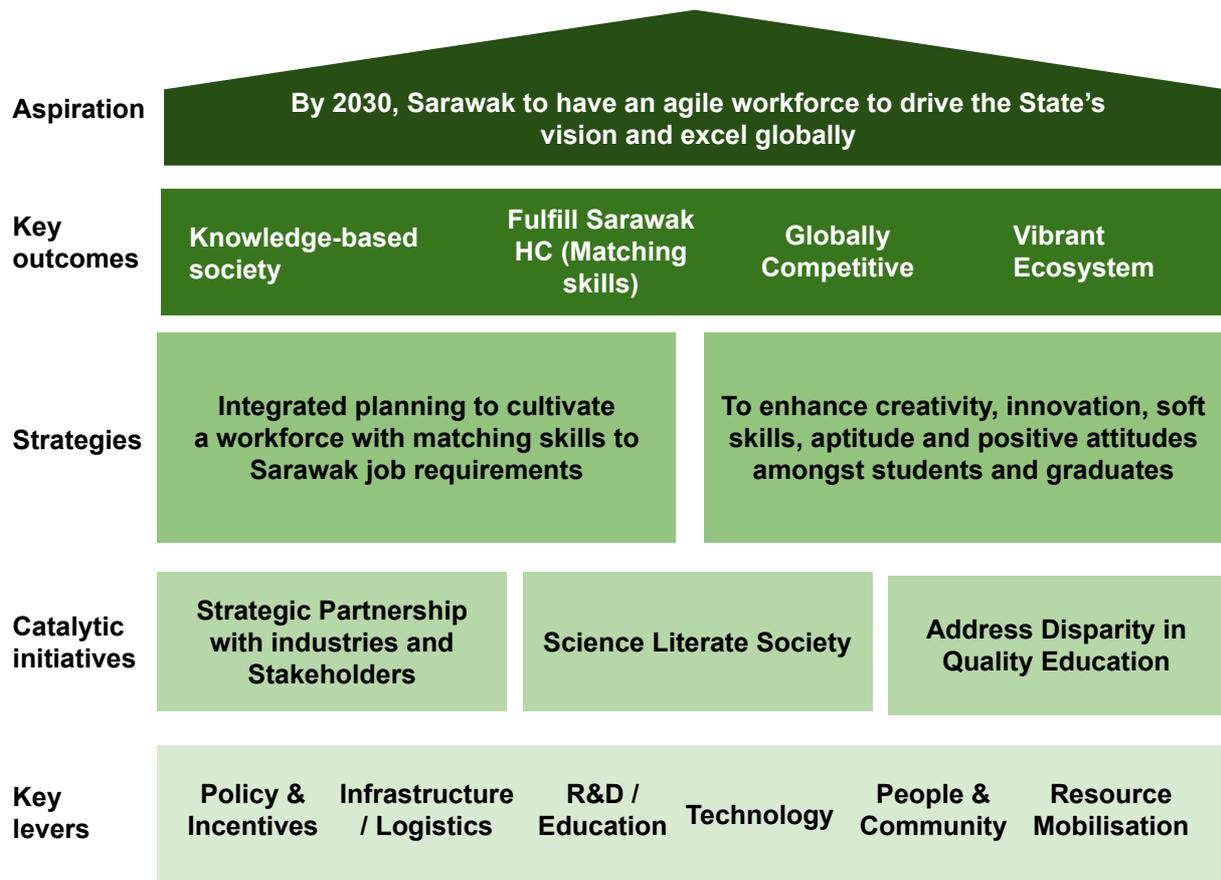
## Aspiration for Education and Human Capital Sector

A highly skilled and educated workforce is required to power various initiatives that will propel the State towards its 2030 aspiration. The sector aims to develop an agile workforce that can excel globally and drive Sarawak’s vision by 2030.

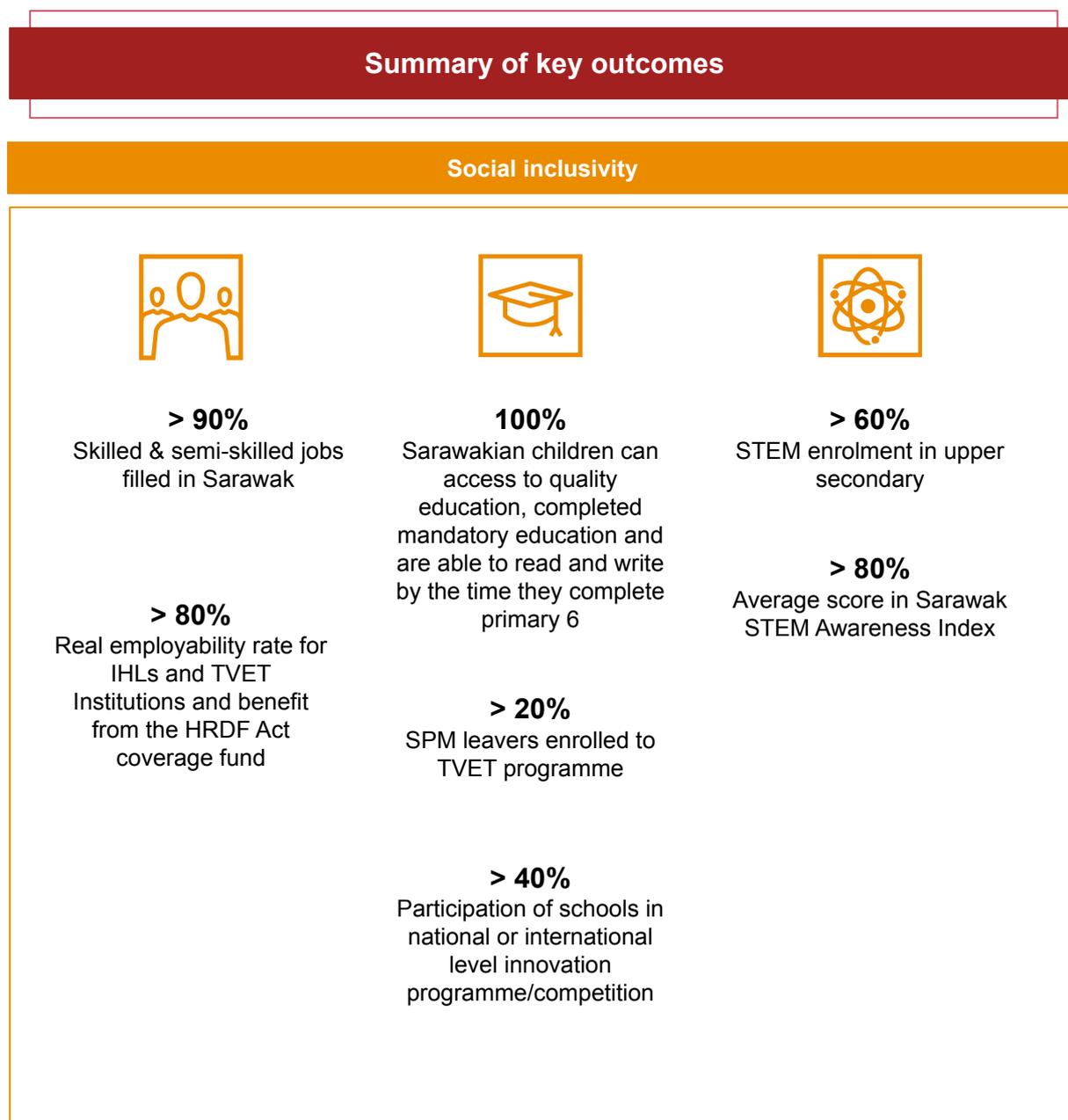
Investment in skill capacity development, knowledge-building and innovation is required to produce competent, skilled and agile human capital. Policies developed by the State should complement existing Federal education policies to suit State requirements when needed.

Effectiveness of catalytic initiatives is key in driving Sarawak’s evolution towards Sarawak 2030. This will be supported by key levers, such as policy and incentives, infrastructure and logistics, R&D, technology, people & community and resource mobilisation. Objectives of these levers are to produce and retain quality and sustainable human capital in the State.

**Figure 1.3.1: Aspiration framework for education and human capital**



**Figure 1.3.2: Summary of desired outcomes for education and human capital**



Note: Outcomes are to be verified further with sectors

## AIP Level 1 - Education and human capital sector

<b>Sector</b> :		Education and human capital	
<b>Strategy</b> :		Enhance creativity, innovation, soft skills, aptitude and positive attitudes amongst students and graduates	
<b>Initiative</b> :		1. Address disparity in quality education	
Initiatives		Desired Outcome(s)	
<p><b>1. Address disparity in quality education (Disparity between rural and urban students as well as income groups)</b></p> <p>Main Programs/ Projects:</p> <p>a) Establishment of Yayasan Sarawak International Secondary Schools</p> <p>b) CPD/ programmes for teachers, school leaders and students</p> <p>c) Continuous improvement/ upgrading/ repairs of dilapidated schools, provision of basic utilities, etc.</p> <p>d) Engagement with PTAs and Community (4 activities annually)</p>		<p><b>Social Inclusivity</b></p> <p>1. 100% of Sarawakian children can access to quality education</p> <ul style="list-style-type: none"> <li>● 1,020 dilapidated schools (415 critically dilapidated)</li> <li>● Low enrolment schools (non-conducive T&amp;L environment)</li> <li>● Issue of access to trained subject teachers (~8,000+ in Science, Math &amp; English)</li> </ul> <p>1. 100% of students completed mandatory education</p> <ul style="list-style-type: none"> <li>● Drop out rate (~2,000 – 3,000) after Primary 6</li> </ul> <p>1. 100% of students are able to read and write by the time they complete primary 6</p> <ul style="list-style-type: none"> <li>● ~500 pupils still require kelas pemulihan at Primary 6 level</li> </ul>	
Timeline		Resources Required	
Start Date	End Date	<ul style="list-style-type: none"> <li>● RM1.2 billion</li> <li>● Passionate and competent teachers</li> <li>● Safe and conducive teaching and learning environment</li> <li>● Teaching and learning resources</li> <li>● Clear policy and framework on Sarawak's roles with regard to education</li> </ul>	
2021	2030		
Project Owner	Implementing Agency	Other Stakeholders	
MESTR	MESTR, agencies under MOE, Yayasan Sarawak	JKR, MOU, Pustaka Negeri Sarawak, KWKPK, parents and communities	

## AIP Level 2 - Education and human capital sector

<b>Sector</b> :		Education and human capital sector	
<b>Initiative</b> :		1. Address disparity in quality education	
<b>Action step</b> :		1.1	
Action step (s)	Output (s)	Timeline	Resources required
<b>1.1 Establishment of Yayasan Sarawak International Schools</b>	a) Five international schools established	Start date	RM300 million (construction only), RM75 million/ year (operation), at least 300 full time teachers and 2,500 students (full capacity)
	b) 100% students graduated with International General Certificate of Secondary Education (IGCSE) and SPM annually starting 2029	2019	
	c) 80% students of YSIS qualified to enter international universities annually starting 2029	End date	
		2030	
Project Owner	Implementing Agency	Other Stakeholders	
MESTR	YSIE SB/ Yayasan Sarawak	JPNS/S FS	

## AIP Level 2 - Education and human capital sector

<b>Sector</b>	: Education and human capital sector		
<b>Initiative</b>	: 1. Address disparity in quality education - Establishment of Yayasan Sarawak International Schools		
<b>Project</b>	: YSISS Petra Jaya		
<b>Action step</b>	: 1.1.1 - 1.1.5		
Action step (s)	Output (s)	Timeline	Resources required
<b>1.1.1 YSISS Petra Jaya</b>  a) Finalising the school operation model b) Identification of site/ school c) Obtaining school licence d) Staff recruitment e) Promotion and selection of students f) Repair and renovation works g) Construction of new hostels, staff quarters & other extra facilities h) School operation	Completion of scope of work	Start date	a) RM100,000 b) RM27.5 million c) Manpower, capacity of project owner d) Manpower e) Manpower, capacity of project owner f & g) RM32.5 million h) RM15 million/year
		2019	
		End date	
		2030	
Project Owner	Implementing Agency	Other Stakeholders	
MESTR, Yayasan Sarawak & YSIE S/B	Yayasan Sarawak and YSIE S/B, BDC	JPNS, L&S, YSIE S/B, DBKU, Bomba, SFS, MESTR	

## AIP Level 2 - Education and human capital sector

<b>Sector</b>	: Education and human capital sector		
<b>Initiative</b>	: 1. Address disparity in quality education - Establishment of Yayasan Sarawak International Schools		
<b>Project</b>	: YSISS Mile 12 Kuching Construction		
<b>Action step</b>	: 1.1.2		
Action step (s)	Output (s)	Timeline	Resources required
<b>1.1.2 YSISS Mile 12 Kuching Construction</b>  a) Finalising the school operation model b) Identification of site/school c) Construction of school building and facilities d) Obtaining school licence e) Staff recruitment f) Promotion and selection of students g) School operation	Completion of scope of work	Start date	a) RM100,000 b) RM5,000 c) RM60 million d) Manpower, capacity of project owner e) Manpower f) Manpower, capacity of project owner g) RM15 million/year
		2019	
		End date	
		2030	
Project Owner	Implementing Agency	Other Stakeholders	
MESTR, Yayasan Sarawak & YSIE S/B	Yayasan Sarawak and YSIE S/B, BDC	JPNS, L&S, YSIE S/B, DBKU, Bomba, SFS, MESTR	

## AIP Level 2 - Education and human capital sector

<b>Sector</b>	: Education and human capital sector		
<b>Initiative</b>	: 1. Address disparity in quality education - Establishment of Yayasan Sarawak International Schools		
<b>Project</b>	: YSISS Sibü		
<b>Action step</b>	: 1.1.3		
Action step (s)	Output (s)	Timeline	Resources required
<b>1.1.3 YSISS Sibü</b>  a) Finalising the school operation model b) Identification of site c) Construction of school building and facilities d) Obtaining school licence e) Staff recruitment f) Promotion and selection of students g) School operation	Completion of scope of work	<b>Start date</b>	a) RM100,000 b) RM5,000 c) RM60 million d) Manpower, capacity of project owner e) Manpower f) Manpower, capacity of project owner g) RM15 million/year
		2019	
		<b>End date</b>	
		2030	
Project Owner	Implementing Agency	Other Stakeholders	
MESTR, Yayasan Sarawak & YSIE S/B	Yayasan Sarawak and YSIE S/B, BDC	JPNS, L&S, YSIE S/B, DBKU, Bomba, SFS, MESTR	

## AIP Level 2 - Education and human capital sector

<b>Sector</b>	: Education and human capital sector		
<b>Initiative</b>	: 1. Address disparity in quality education - Establishment of Yayasan Sarawak International Schools		
<b>Project</b>	: YSISS Miri		
<b>Action step</b>	: 1.1.4		
Action step (s)	Output (s)	Timeline	Resources required
<b>1.1.4 YSISS Miri</b>  a) Finalising the school operation model b) Identification of site c) Construction of school building and facilities d) Obtaining school licence e) Staff recruitment f) Promotion and selection of students g) School operation	Completion of scope of work	<b>Start date</b>	a) RM100,000 b) RM3 million c) RM60 million d) Manpower, capacity of project owner e) Manpower f) Manpower, capacity of project owner g) RM15 million/year
		2019	
		<b>End date</b>	
		2030	
Project Owner	Implementing Agency	Other Stakeholders	
MESTR, Yayasan Sarawak & YSIE S/B	Yayasan Sarawak and YSIE S/B, BDC	JPNS, L&S, YSIE S/B, DBKU, Bomba, SFS, MESTR	

## AIP Level 2 - Education and human capital sector

<b>Sector</b>	: Education and human capital sector		
<b>Initiative</b>	: 1. Address disparity in quality education - Establishment of Yayasan Sarawak International Schools		
<b>Project</b>	: YSISS Bintulu		
<b>Action step</b>	: 1.1.5		
Action step (s)	Output (s)	Timeline	Resources required
<b>1.1.5 YSISS Bintulu</b>  a) Finalising the school operation model b) Identification of site c) Construction of school building and facilities d) Obtaining school licence e) Staff recruitment f) Promotion and selection of students g) School operation	Completion of scope of work	<b>Start date</b>	a) RM100,000 b) RM60 million c) Manpower, capacity of project owner d) Manpower e) Manpower, capacity of project owner f) RM15 million/year
		2019	
		<b>End date</b>	
		2030	
Project Owner	Implementing Agency	Other Stakeholders	
MESTR, Yayasan Sarawak & YSIE S/B	Yayasan Sarawak and YSIE S/B, BDC	JPNS, L&S, YSIE S/B, DBKU, Bomba, SFS, MESTR	

## AIP Level 2 - Education and human capital sector

<b>Sector</b>	: Education and human capital sector		
<b>Initiative</b>	: 1. Address disparity in quality education		
<b>Action step</b>	: 1.2		
Action step (s)	Output (s)	Timeline	Resources required
<b>1.2 CPD for teachers</b> a) Identifying relevant courses/ course module development b) Identifying teachers c) Implementation of programmes d) Evaluation of programmes	40,000 teachers and school leaders increase their skills and competency and Sarawak Gred Purata Negeri (GPN) is on par or better than National average	Start date	RM4.8 million, trainers
		2022	
		End date	
		2030	
Project Owner	Implementing Agency	Other Stakeholders	
MESTR	MESTR, JPNS/ PPD, IAB, IPGM	Teachers	

## AIP Level 2 - Education and human capital sector

<b>Sector</b> : Education and human capital sector			
<b>Initiative</b> : 1. Address disparity in quality education			
<b>Action step</b> : 1.3			
Action step (s)	Output (s)	Timeline	Resources required
<b>1.3 Upgrade/ repairs of dilapidated schools and provide access to basic utilities</b>  a) Identifying of dilapidated schools and proposed scope of works b) Submission of proposed list of schools to be upgraded/ repaired to the authorities c) Implementation of projects d) Evaluation and monitoring of projects	a) 100% of the schools are safe and conducive for teaching and learning b) 100% students passing rate in all schools	Start date	RM500 million, capacity of implementing agencies, capacity of contractors
		2021	
		End date	
		2030	
Project Owner	Implementing Agency	Other Stakeholders	
MESTR	JKR Sarawak, RECODA, JBALB, SEB (MOU)	JPNS, L&S, SPU, SFS	

## AIP Level 2 - Education and human capital sector

<b>Sector</b> : Education and human capital sector			
<b>Initiative</b> : 1. Address disparity in quality education			
<b>Action step</b> : 1.4			
Action step (s)	Output (s)	Timeline	Resources required
<b>1.4 Engagement with PTAs and Community</b>  a) Identifying of priority areas for programmes b) Submission of programmes' proposals to higher authorities for budget consideration c) Implementation, monitoring and evaluation of programmes	a) 100% of students completed mandatory education b) Drop out rate (~2,000 – 3,000) after Primary 6 c) 100% of students are able to read and write by the time they complete primary 6 d) 100% of students are able to read and write by the time they complete primary 6	Start date	RM5 million
		2021	
		End date	
		2030	
Project Owner	Implementing Agency	Other Stakeholders	
MESTR	MESTR, JPNS, PPDs, PTAs	MOE, parents, teachers, community	

## AIP Level 1 - Education and human capital sector

<b>Sector</b>	: Education and human capital	
<b>Strategy</b>	: Enhance creativity, innovation, soft skills, aptitude, and positive attitude amongst students and graduates	
<b>Initiative</b>	: 2. Science Literate Society	
<b>Initiatives</b>	<b>Desired Outcome(s)</b>	
<b>2. Science Literate Society</b>  a) Establishment of Science Centre b) Operations of Science Centre c) Teaching of Maths and Science in English d) Cultivating ICT /Digital Skills among students and teachers e) Establish STEM labs in PPDs f) STEM Explore Programme/ Campaign g) STEM Awareness Index h) Community STEM Outreach	<b>Social Inclusivity</b> 1. To equip students with 21st century skills: <ul style="list-style-type: none"> <li>• &gt;60% STEM enrolment in upper secondary</li> <li>• On par with the international average score of 490 in PISA (Programme for International Student Assessment)</li> <li>• &gt;40% participation of schools in national or international level innovation programme/ competition</li> </ul> 1. Science literate society: >80% average score in Sarawak STEM Awareness Index	
<b>Timeline</b>		<b>Resources Required</b>
<b>Start Date</b>	<b>End Date</b>	
2021	2030	<ul style="list-style-type: none"> <li>• RM350 million for 8 projects/ programmes</li> <li>• Legislation, i.e. Sarawak Science Centre Bill, 202X (to be tabled in DUN)</li> <li>• Policy &amp; guiding framework for promotion of STEM</li> <li>• Infrastructure, i.e. internet connectivity &amp; logistics</li> </ul>
<b>Project Owner</b>	<b>Implementing Agency</b>	<b>Other Stakeholders</b>
MESTR	MESTR, Science Centre, SMA, JPNS, relevant agencies	State Research Agencies, NGOs, parents and communities

## AIP Level 2 - Education and human capital sector

<b>Sector</b> : Education and human capital sector			
<b>Initiative</b> : 2. Science Literate Society			
<b>Action step</b> : 2.1			
Action step (s)	Output (s)	Timeline	Resources required
<b>2.1 Establish Science Centre Sarawak</b>  a) Masterplan development b) Earthworks c) Building design (drawings) d) Submission to SIMU e) Submission to SPA f) Building plan submission to local authority g) Preparation of tender drawing & document and negotiation process h) Main building construction i) Exhibit & content development j) Test and commissioning	A modern and sophisticated operational science centre for Sarawak	Start date	RM200 million (CAPEX), Sarawak Science Centre Ordinance, exhibits and contents, comprehensive masterplan, reliable consultants and contractors
		Jan 2021	
		End date	
		Dec 2024	
Project Owner	Implementing Agency	Other Stakeholders	
MESTR	MESTR, Science Centre, BDC	JPNS, State Research Agencies, Sarawak State Library, SMA, SDEC, NGOs	

## AIP Level 2 - Education and human capital sector

<b>Sector</b>	: Education and human capital sector		
<b>Initiative</b>	: 2. Science Literate Society		
<b>Action step</b>	: 2.2 - 2.3		
Action step (s)	Output (s)	Timeline	Resources required
<b>2.2 Operation of Science Centre</b>	a) Fully patronised Science Centre b) 600,000 visitors/engagement annually (2,000 x 300 days) c) Estimated annual revenue: RM3 million (RM600K x RM5) d) Programmes with a total of 10 schools and tertiary institutions / month	Start date	RM15 million/year x 5 years (OPEX), 120 staffs
		-	
		End date	
		Dec 2030	
Project Owner	Implementing Agency	Other Stakeholders	
Science Centre Sarawak	Sarawak Government, MESTR, JPNS, NGOs, parents and communities	Sarawak Government, MESTR, JPNS, NGOs, parents and communities	
Action step (s)	Output (s)	Timeline	Resources required
<b>2.3 Teaching of Science and Mathematics in English</b>	a) Improved communication in English and scored >490 in PISA (Programme for International Student Assessment) b) All government 1,265 primary schools implemented the programme c) All government 193 secondary schools implemented the programme	Start date	RM10 million, teachers/ parents
		Jan 2021	
		End date	
		Dec 2030	
a) Classroom implementation of teaching of Science and Mathematics in English in all government primary schools b) Classroom implementation of teaching of Science and Mathematics in English in all government secondary schools			
Project Owner	Implementing Agency	Other Stakeholders	
MESTR	MESTR	Sarawak Government, MOE, JPNS, IPGM, SFS	

## AIP Level 2 - Education and human capital sector

<b>Sector</b> : Education and human capital sector			
<b>Initiative</b> : 2. Science Literate Society			
<b>Action step</b> : 2.4			
Action step (s)	Output (s)	Timeline	Resources required
<b>2.4 Cultivating ICT/ digital skills amongst teachers and students - provision of Raspberry Pi computer to all primary schools in Sarawak</b>  a) Distribution of Raspberry Pi to all PPDs and primary schools b) Raspberry Pi training programme for ICT teachers c) Raspberry Pi workshop and competition for students	a) Promote innovation and equip students with digital literacy skills b) 9,400 units of Raspberry Pi computer delivered and installed at all PPDs and primary schools. c) 1,265 teachers trained to conduct ICT courses using Raspberry Pi	Start date	RM10 million, ICT teachers, computer facilities, teaching and learning materials, computer room in each school
		Jan 2021	
		End date	
		Dec 2030	
Project Owner	Implementing Agency	Other Stakeholders	
MESTR	MESTR, JPNS	Sarawak Government, JPNS, parents	

## AIP Level 2 - Education and human capital sector

<b>Sector</b> : Education and human capital sector			
<b>Initiative</b> : 2. Science Literate Society			
<b>Action step</b> : 2.5 - 2.6			
Action step (s)	Output (s)	Timeline	Resources required
<b>2.5 Research and survey to measure public knowledge and attitudes towards STEM (Sarawak STEM Public Awareness / Literacy Index)</b>	Published cumulative 5 reports on Sarawak STEM Index with average score of >80%	<b>Start date</b>	RM6 million, Science communicators and survey team
		Nov 2022	
		<b>End date</b>	
		Dec 2030	
<b>Project Owner</b>	<b>Implementing Agency</b>	<b>Other Stakeholders</b>	
MESTR	MESTR, Science Centre	Sarawak Government, public	
Action step (s)	Output (s)	Timeline	Resources required
<b>2.6 Community STEM Outreach Programme</b>	Engaged and impacted total of 360 rural communities	<b>Start date</b>	RM10 million, Science communicators/ researchers, props and materials, logistic and transportation
		Jan 2022	
		<b>End date</b>	
		Dec 2030	
<b>Project Owner</b>	<b>Implementing Agency</b>	<b>Other Stakeholders</b>	
MESTR	MESTR, Science Centre	Sarawak Government, communities	

## AIP Level 1 - Education and human capital sector

<b>Sector</b> :		Education and human capital	
<b>Strategy</b> :		Integrated planning to cultivate a workforce with matching skills and adaptable to Sarawak job requirements	
<b>Initiative</b> :		3. Strategic partnership with stakeholders and industries (supply vs demand)	
Initiatives		Desired Outcome(s)	
<b>3. Strategic partnership with stakeholders and industries (supply vs demand)</b>  a) Enhance participation in Sarawak Workforce Information System (SWIS) b) Continue upskilling via Industry Workforce Development Programmes c) Advanced Automotive Centre d) Establishment of center for TVET certified trainer at UCTS e) Provision for Sarawak TVET Scholarship		<b>Social Inclusivity</b> 1. >90% of skilled & semi-skilled jobs will be filled by Sarawakian 2. >80% real employability rate for IHLs and TVET Institutions 3. To maintain full employment (unemployment rate <3%) 4. >80% of employees will benefit from the HRDF Act coverage/funds 5. >20% of SPM leavers enrolled to TVET programmes	
Timeline		Resources Required	
Start Date	End Date	<ul style="list-style-type: none"> <li>• RM235 million for 7 projects/ initiatives</li> <li>• Policies (e.g. partnership framework)</li> <li>• Labour and Industry officers</li> </ul>	
2022	2030		
Project Owner	Implementing Agency	Other Stakeholders	
MESTR	Institutions, industries, HRDF	MESTR, relevant government agencies (i.e. MIDA, MINTRED, EPU Sarawak, statistics, JTK, JPNS, PERKESO, etc.), community based organisation, NGOs	

## AIP Level 2 - Education and human capital sector

<b>Sector</b>	: Education and human capital sector		
<b>Initiative</b>	: 3. Strategic partnership with stakeholders and industries (supply vs demand)		
<b>Action step</b>	: 3.1		
Action step (s)	Output (s)	Timeline	Resources required
<b>3.1 Acquiring reliable and comprehensive supply and demand data for manpower planning</b>  a) Select and appoint the service provider to conduct the data collection program b) Identify the medium & large companies in Sarawak c) Conduct data collection program for TVET/IHL and companies in Sarawak d) Promote SWIS through briefings, trainings and collaboration programmes with JTK, HRDF, SOCSO, etc.	a) Availability of reliable and comprehensive data for manpower planning b) 60% support and participation from medium/ large companies and TVET & IHL to SWIS	Start date	RM3 million, Data Scientist, Employment Information Act 1953 (Sec 3 & Sec 4), Sarawak Labour Ordinance (Sec 60)
		2022	
		End date	
		Dec 2030	
Project Owner	Implementing Agency	Other Stakeholders	
MESTR	Service provider	Service provider, JTK, PERKESO, Statistic Department, industries and institutions, State government and Federal government	

## AIP Level 2 - Education and human capital sector

<b>Sector</b>	: Education and human capital sector		
<b>Initiative</b>	: 3. Strategic partnership with stakeholders and industries (supply vs demand)		
<b>Action step</b>	: 3.2		
Action step (s)	Output (s)	Timeline	Resources required
<b>3.2 Continue upskilling via Industry Workforce Development Programmes</b>  a) Develop "Place-and-Train" Framework and Guidelines b) Develop Academic and Teaching Staff Industry Placement & Certification Framework and Guidelines c) Develop Industry Practitioner as (Adjunct) Faculty Member Framework and Guidelines d) Develop Teaching Factory Framework and Guidelines (refer to Dual Training System) e) Implementation	a) 400 graduates hired under "place-and-train" concept at technician/ semi-skilled level and above b) 300 academic and teaching staff of public and government-linked institutions undergo industry placement or certifications c) Public and government linked institutions involved with hiring industry practitioner as faculty member (5 Universities and 9 TVET institutions) d) 2 companies involved as teaching factory (dual training system) with 300 students graduating	Start date	RM12.75 million, MESTR desk officers
		Jan 2022	
		End date	
		Dec 2025	
Project Owner	Implementing Agency	Other Stakeholders	
MESTR	All SEAC sectors, public and government-linked HE & TVET institutions (shall be expanded to all institutions once governance well established)	Chambers of Commerce & Industry/ trade associations/ companies	

## AIP Level 2 - Education and human capital sector

<b>Sector</b>	: Education and human capital sector		
<b>Initiative</b>	: 3. Strategic partnership with stakeholders and industries (supply vs demand)		
<b>Action step</b>	: 3.3		
Action step (s)	Output (s)	Timeline	Resources required
<b>3.3 Establishment of Advanced Automotive Centre</b>  a) Development of the new Advanced Automotive Training Centre in Demak Laut, Kuching b) Advanced Automotive Training Centre Operations	a) One Advanced Automotive Training Centre established in Kuching b) Provision of 150 skilled manpower annually to the automotive industry in general and logistics generally (total number of graduates produced between 2026 - 2030 will be 750 persons)	<b>Start date</b>	RM50 million, competent trainers, relevant tools, equipment and machineries (Internal Combustion engine (ICE), Hybrid, Electric Vehicle (EV) and Hydrogen)
		2022	
		<b>End date</b>	
		2030	
Project Owner	Implementing Agency	Other Stakeholders	
PPKS	PPKS	Yayasan Sarawak , Sarawak Metro, Malaysia Automotive Robotics and IoT Institute, Sibul Automotive Repairers' Association, KANGAN Institute, Australia, HWK Aachen, Germany	

## AIP Level 2 - Education and human capital sector

<b>Sector</b>	: Education and human capital sector		
<b>Initiative</b>	: 3. Strategic partnership with stakeholders and industries (supply vs demand)		
<b>Action step</b>	: 3.4 - 3.5		
Action step (s)	Output (s)	Timeline	Resources required
<b>3.4 Establishment of center for TVET certified trainer at UCTS</b>	<ul style="list-style-type: none"> <li>a) A centre to train TVET trainers established in UCTS</li> <li>b) Produce 100 certified trainers per annum (total number of certified trainers produced between 2022 - 2030 will be 900 trainers)</li> <li>c) Enable higher level TVET training</li> <li>d) Industry-fit TVET graduates</li> <li>e) Increase participation of bumiputra graduates in private sectors and technopreneurs</li> </ul>	Start date	RM7.5 million
		2022	
		End date	
		2030	
Project Owner	Implementing Agency	Other Stakeholders	
MESTR	UCTS	PPKS, JPN, JPK, Sarawak Skills, TVET Education Institution	
Action step (s)	Output (s)	Timeline	Resources required
<b>3.5 Provision for Sarawak TVET Scholarship</b>	<ul style="list-style-type: none"> <li>a) List of eligible to be given scholarship (5,000 students will sponsored to Technical Vocational Education and Training (TVET)</li> <li>b) All eligible students receive their scholarship to pursue their studies in TVET</li> </ul>	Start date	RM90 million
		2021	
		End date	
		2030	
Project Owner	Implementing Agency	Other Stakeholders	
EPU Sarawak	Yayasan Sarawak	TVET & IHL Institutions in Sarawak	

# 1.4 Basic Infrastructure

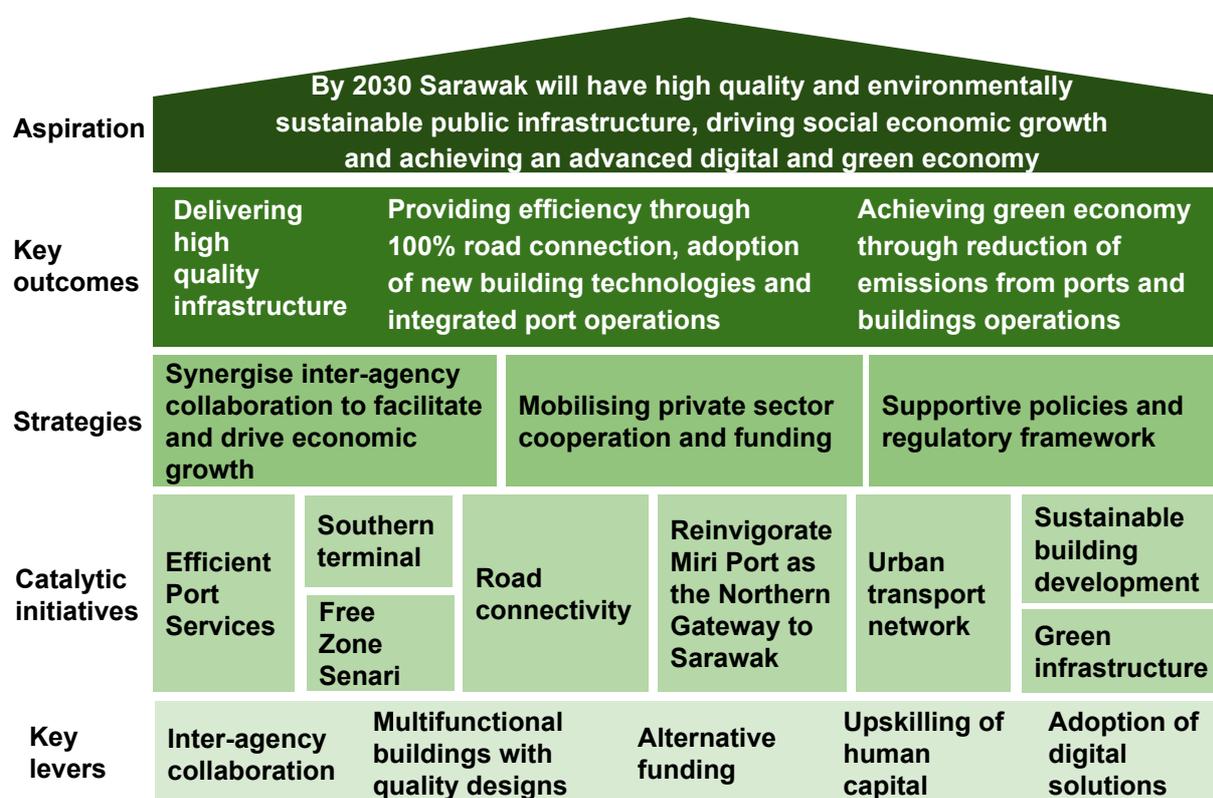
## Aspiration for Basic Infrastructure Sector

### Develop high quality and sustainable infrastructure for Sarawak

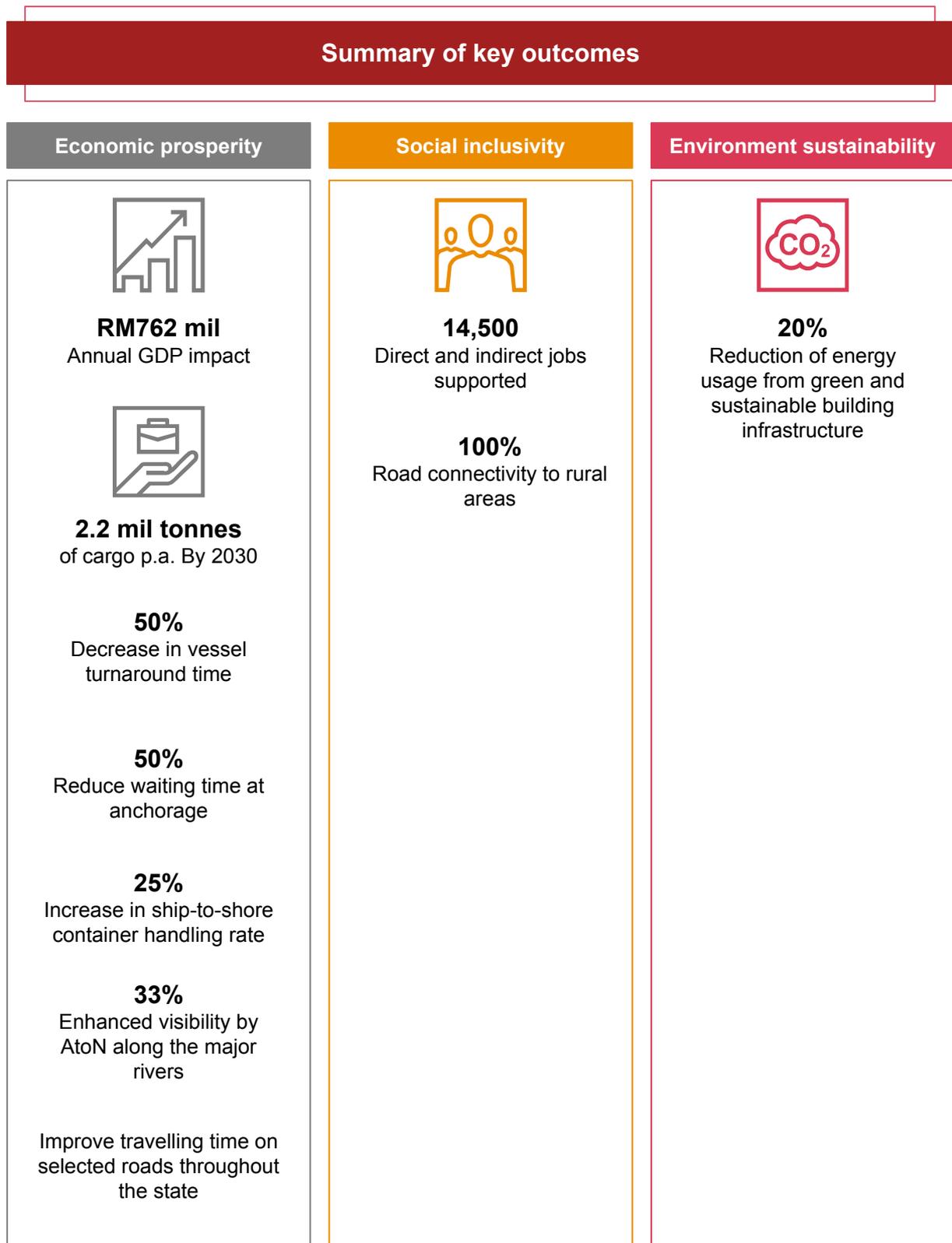
Sarawak has abundant resources and raw materials that are high in demand. Hence, continuous development of basic infrastructure such as roads and ports are vital in connecting the social and economic centres within Sarawak and also to link Sarawak to the global stage.

Basic infrastructure development will be the driving force of the State's socioeconomic growth. It will provide opportunities for Sarawakians to play a more active role in the global economy via improved connectivity. As Sarawak aims to achieve its targets, efforts will be focused towards infrastructure development that provides reliable access to the economic areas (e.g. Kuching, Bintulu, Miri) through the adoption of technology and sustainable development approach.

**Figure 1.4.1: Aspiration framework for basic infrastructure sector**



**Figure 1.4.2: Summary of desired outcomes for Basic Infrastructure sector**



## AIP Level 1 - Basic Infrastructure sector

<b>Sector</b> :		Basic Infrastructure	
<b>Strategy</b> :		Mobilising private sector funding	
<b>Initiative</b> :		1. Reinvigorate Miri Port as the Northern Gateway to Sarawak	
<b>Initiatives</b>		<b>Desired Outcome(s)</b>	
<b>1. Reinvigorate Miri Port as Northern Gateway to Sarawak</b>		<p><b>Economic Prosperity</b></p> <ol style="list-style-type: none"> <li>1. Generate additional revenue (port charges) of RM20 mil per annum to MPA based on increased cargo throughput (current 1.0 mil cargo handled to 2.2 mil tonnes p.a. in 2030)</li> <li>2. 10,000 jobs (3,250 direct and 6,750 indirect) created from the increased oil and gas activities, ship building and manufacturing by 2030</li> <li>3. Cost savings to shipping industries of RM7.2 mil p.a. (currently industries are absorbing RM300 in additional shipping and logistics costs per TEU).</li> </ol> <p><b>Environmental Sustainability</b></p> <ol style="list-style-type: none"> <li>1. Reduced average vessel turnaround from currently 120 hours to 96 hours</li> </ol>	
<b>Timeline</b>		<b>Resources Required</b>	
<b>Start Date</b>	<b>End Date</b>	<ul style="list-style-type: none"> <li>• RM540 million               <ul style="list-style-type: none"> <li>○ RM20 million from internal fund</li> <li>○ RM5 million from 12MP MTR (proposed)</li> <li>○ RM515 million from 13MP (proposed)</li> </ul> </li> </ul>	
2022	2030		
<b>Project Owner</b>	<b>Implementing Agency</b>	<b>Other Stakeholders</b>	
MIPD	MPA	Related government agencies and private sectors	

## AIP Level 2 - Basic Infrastructure sector

<b>Sector</b>	: Basic Infrastructure		
<b>Initiative</b>	: 1. Reinvigorate Miri Port as the Northern Gateway to Sarawak		
<b>Action step</b>	: 1.1 - 1.3		
Action step (s)	Output (s)	Timeline	Resources required
<b>1.1 Kuala Baram initial maintenance dredging works</b>	Dredged channel of -3 below Chart Datum (CD)	Start date	RM20 mil (internal funding - Channel Maintenance Fee)
		2022	
		End date	
		2023	
<b>1.2 Kuala Baram Capital Dredging Works - Survey and Design</b>	A “cangkul ready” project for implementation	Start date	RM5 mil (12MP MTR)
		2024	
		End date	
		2025	
<b>1.3 Kuala Baram Capital Dredging Works - Physical dredging</b>	<ol style="list-style-type: none"> <li>Dredged channel of -8m below Chart Datum (CD) to Miri Port</li> <li>Enable vessels up to 10,000 DWT to enter Kuala Baram access channel to Miri Port</li> </ol>	Start date	RM515 mil (13MP)
		2024	
		End date	
		2025	
Project Owner	Implementing Agency	Other Stakeholders	
MIPD	MPA	Related Government Agencies and Private Sectors	

## AIP Level 1 - Basic Infrastructure sector

<b>Sector</b> :		Basic Infrastructure	
<b>Strategy</b> :		Mobilising private sector funding	
<b>Initiative</b> :		2. Senari Free Zone	
Initiatives		Desired Outcome(s)	
2. Senari Free Zone		<b>Economic Prosperity</b> <ol style="list-style-type: none"> <li>1. Generate additional revenue of RM25 million per annum to KPA from port charges based on increased cargo throughput generated by Senari Free Zone (current 240,000 TEUs to 330,000 TEUs in 2030)</li> <li>2. Generate an estimated RM150 million per annum in sales turnover for Senari Free Zone companies (estimated 25 private companies participation)</li> <li>3. 500 direct jobs created by 2030 from Free Zone activities</li> </ol>	
Timeline		Resources Required	
Start Date	End Date	<ul style="list-style-type: none"> <li>• RM100 million               <ul style="list-style-type: none"> <li>○ RM5 million from 12MP</li> <li>○ RM95 million from 12MP MTR and 13MP (proposed)</li> </ul> </li> </ul>	
2022	2028		
Project Owner	Implementing Agency	Other Stakeholders	
MIPD	KPA / JKR	Related government agencies, manufacturing and logistic companies	

## AIP Level 2 - Basic Infrastructure sector

<b>Sector</b> : Basic Infrastructure			
<b>Initiative</b> : 2. Senari Free Zone			
<b>Action step</b> : 2.1 - 2.2			
Action step (s)	Output (s)	Timeline	Resources required
<b>2.1 Senari Free Zone - Survey and design</b>	A “cangkul ready” project for implementation	Start date	RM5 mil (12MP)
		2022	
		End date	
		2023	
<b>2.2 Senari Free Zone - Development of infrastructure and facilities</b>	Senari Free Zone infrastructure and facilities ready for private investment and operation	Start date	RM95 mil (12MP MTR & 13MP)
		2025	
		End date	
		2028	
Project Owner	Implementing Agency	Other Stakeholders	
MIPD	KPA / JKR	Related Government Agencies, manufacturing logistic companies	

## AIP Level 1 - Basic Infrastructure sector

<b>Sector</b>		: Basic Infrastructure
<b>Strategy</b>		: Synergise inter-agency collaboration to facilitate and drive economic growth
<b>Initiative</b>		: 3. Efficient port services
Initiatives		Desired Outcome(s)
<b>3. Efficient port services</b>  a. Ease of doing business		<b>Economic Prosperity</b> 1. Time reduction of 4 hours (current 8 hours) and cost saving of RM100 (current RM200) per transaction  <b>Environmental Sustainability</b> 1. 90% paperless transaction by 2030 from the current 5% paperless
Timeline		Resources Required
Start Date	End Date	
2024	2030	<ul style="list-style-type: none"> <li>• RM30 million               <ul style="list-style-type: none"> <li>○ RM30 million from 12MP MTR (proposed)</li> <li>○ RM10 million from 13MP (proposed)</li> </ul> </li> </ul>
Project Owner	Implementing Agency	Other Stakeholders
MIPD	Respective port authorities (KPA, RPA, MPA, TMPA & LPS)	Related government agencies and private sectors

## AIP Level 1 - Basic Infrastructure sector

<b>Sector</b>		: Basic Infrastructure	
<b>Strategy</b>		: Synergise inter-agency collaboration to facilitate and drive economic growth	
<b>Initiative</b>		: 3. Efficient port services	
<b>Initiatives</b>		<b>Desired Outcome(s)</b>	
<b>3. Efficient port services</b>  b. Master plan study for Sarawak Ports		<b>Economic Prosperity</b> 1. 100% completion of a viable study and an implementable Master Plan proposal for all State ports.	
<b>Timeline</b>		<b>Resources Required</b>	
<b>Start Date</b>	<b>End Date</b>		
2022	2030	<ul style="list-style-type: none"> <li>• RM24 million                         <ul style="list-style-type: none"> <li>○ RM4 million from 12MP</li> <li>○ RM20 million from 12MP MTR and 13MP (proposed)</li> </ul> </li> </ul>	
<b>Project Owner</b>	<b>Implementing Agency</b>	<b>Other Stakeholders</b>	
MIPD	Respective port authorities (KPA, RPA, MPA, TMPA & LPS)	Related government agencies and private sectors	

## AIP Level 2 - Basic Infrastructure sector

<b>Sector</b> : Basic Infrastructure			
<b>Initiative</b> : 3. Efficient port services			
<b>Action step</b> : 3.1 - 3.2			
Action step (s)	Output (s)	Timeline	Resources required
<b>3.1 E-Community application - software and system development</b>	A “cangkul ready” project for implementation	Start date	RM20 mil (12MP MTR)  RM10 mil (13MP)
		2024	
		End date	
		2030	
<b>3.2 Master plan study for Sarawak Ports (MPA, RPA, TMPA, KPA &amp; LPS) including port consolidation</b>	Master plan for respective Sarawak Ports	Start date	RM4 mil (12MP)  RM20 mil (12MP MTR & 13MP)
		2022	
		End date	
		2030	
Project Owner	Implementing Agency	Other Stakeholders	
MIPD	Respective Port Authorities (KPA, RPA, MPA, TMPA & LPS)	Related Government Agencies and private sectors	

## AIP Level 1 - Basic Infrastructure sector

<b>Sector</b>		: Basic Infrastructure	
<b>Strategy</b>		: Synergise inter-agency collaboration to facilitate and drive economic growth	
<b>Initiative</b>		: 4. Port safety and efficient improvement	
<b>Initiatives</b>		<b>Desired Outcome(s)</b>	
<b>4. Efficient port and efficient improvement</b>  a. Port safety (aids to navigation (AtoN) and lighthouse)		<b>Economic Prosperity</b> 1. Enhanced visibility of Aton by 33% (Lighthouse coverage increased from 18 to 24 Nautical Miles in accordance with international standards)	
<b>Timeline</b>		<b>Resources Required</b>	
<b>Start Date</b>	<b>End Date</b>		
2020	2030	<ul style="list-style-type: none"> <li>• RM222 million               <ul style="list-style-type: none"> <li>○ RM40 million from 11MP and 12MP</li> <li>○ RM50 million from 12MP MTR (proposed)</li> <li>○ RM132 million from 13MP (proposed)</li> </ul> </li> </ul>	
<b>Project Owner</b>	<b>Implementing Agency</b>	<b>Other Stakeholders</b>	
MIPD	LBAS (JLWS)	Related port authorities and SRB	

## AIP Level 1 - Basic Infrastructure sector

<b>Sector</b>		: Basic Infrastructure	
<b>Strategy</b>		: Synergise inter-agency collaboration to facilitate and drive economic growth	
<b>Initiative</b>		: 4. Port safety and efficient improvement	
<b>Initiatives</b>		<b>Desired Outcome(s)</b>	
<b>4. Efficient port and efficient improvement</b>  b. Efficient improvement (auto mooring and quay and gantry crane)		<b>Economic Prosperity</b> <ol style="list-style-type: none"> <li>1. 25% increase in ship-to-shore container handling rate (from 20 to 25 gross moves per hour per vessel)</li> <li>2. 50% decrease in vessel turnaround time (from 3 days to 1.5 days)</li> <li>3. Reduced waiting time at anchorage by 50% (from 6 hours to 3 hours)</li> </ol>	
<b>Timeline</b>		<b>Resources Required</b>	
<b>Start Date</b>	<b>End Date</b>	<ul style="list-style-type: none"> <li>• RM222 million                             <ul style="list-style-type: none"> <li>○ RM40 million from 11MP and 12MP</li> <li>○ RM50 million from 12MP MTR (proposed)</li> <li>○ RM132 million from 13MP (proposed)</li> </ul> </li> </ul>	
2020	2030		
<b>Project Owner</b>	<b>Implementing Agency</b>	<b>Other Stakeholders</b>	
MIPD	LBAS (JLWS)	Related port authorities and private sectors	

## AIP Level 2 - Basic Infrastructure sector

<b>Sector</b> :		Basic Infrastructure	
<b>Initiative</b> :		4. Port safety and efficient improvement	
<b>Action step</b> :		4.1 - 4.2	
Action step (s)	Output (s)	Timeline	Resources required
<b>4.1 Port safety (aids to navigation (AtoN) and lighthouse)</b>	Development of port safety facilities	Start date	RM40mil (11MP & 12MP)
		2020	
		End date	RM50 mil (12MP MTR)
		2030	RM132 mil (13MP)
<b>4.2 Efficient improvement (auto mooring and quay and gantry crane)</b>	Improvement of port facilities at KPA, RPA, MPA & TMPA	Start date	RM70 mil (12MP)
		2021	
		End date	RM50 mil (12MP MTR)
		2030	RM510 (13MP)
Project Owner	Implementing Agency	Other Stakeholders	
3.3 MIPD	LBAS (JLWS)	Respective Port Authorities, L&S & SRB	
3.4 MIPD	Respective Port Authorities (KPA, RPA, MPA and TMPA)	Related Government Agencies and private sectors	

## AIP Level 1 - Basic Infrastructure sector

<b>Sector</b>		: Basic Infrastructure	
<b>Strategy</b>		: Synergise inter-agency collaboration to facilitate and drive economic growth	
<b>Initiative</b>		: 5. Southern Terminal	
<b>Initiatives</b>		<b>Desired Outcome(s)</b>	
5. Southern Terminal		<b>Economic Prosperity</b> <ol style="list-style-type: none"> <li>1. Generate revenue of RM320 million per annum to KPA from port charges based on cargo throughput generated at Tanjung Po Terminal (estimated handling 450,000 TEUs container and 4.5 mil tonnes of timber, dry bulk and general cargo )</li> </ol>	
<b>Timeline</b>		<b>Resources Required</b>	
<b>Start Date</b>	<b>End Date</b>		
2020	2030	<ul style="list-style-type: none"> <li>• RM2.8 billion <ul style="list-style-type: none"> <li>○ RM8 million from 11MP and 12MP</li> <li>○ RM2.8 billion from 12MP MTR and 13MP (proposed)</li> </ul> </li> </ul>	
<b>Project Owner</b>	<b>Implementing Agency</b>	<b>Other Stakeholders</b>	
MIPD	JKR	Related port authorities and private sectors	

## AIP Level 2 - Basic Infrastructure sector

<b>Sector</b> : Basic Infrastructure			
<b>Initiative</b> : 5. Southern Terminal			
<b>Action step</b> : 5.1 - 5.2			
Action step (s)	Output (s)	Timeline	Resources required
<b>5.1 Master Plan Study</b>	Master Plan for implementation	Start date	RM8 mil (11MP & 12MP)
		2020	
		End date	
		2022	
<b>5.2 Physical construction of Deep Water Port</b>	New Tanjung Po Deep Water Port (Southern Terminal Gateway)	Start date	RM2.8 bil (12MP MTR & 13MP)
		2024	
		End date	
		2030	
Project Owner	Implementing Agency	Other Stakeholders	
MIPD	JKRS	Related government agencies and private sectors	

## AIP Level 1 - Basic Infrastructure sector

<b>Sector</b>		: Basic Infrastructure	
<b>Strategy</b>		: Synergise inter-agency collaboration to facilitate and drive economic growth	
<b>Initiative</b>		: 6. Urban transport network	
Initiatives		Desired Outcome(s)	
<b>6. Urban transport network</b>		<b>Economic Prosperity</b> <ol style="list-style-type: none"> <li>1. Improvement of Level Of Service (LOS) from F to C by 2030</li> <li>1. Improvement of Level of Service (LOS) from F to A</li> <li>1. Improvement of Level Of Service (LOS) from F to B</li> <li>1. Reduce travelling time by 30 minutes</li> </ol> <p>* Level of Service (LOS)  A = 90 km/hr  B = 60 km/hr  C = 50 km/hr  D = 40 km/hr  E = 30 km/hr  F = 25 km/hr</p>	
Timeline		Resources Required	
Start Date	End Date		
2024	2030	<ul style="list-style-type: none"> <li>• RM1.5 billion</li> </ul>	
Project Owner	Implementing Agency	Other Stakeholders	
MIPD	JKR	KKR, MOU, MOTS, DID and local governments	

## AIP Level 2 - Basic Infrastructure sector

<b>Sector</b>	: Basic Infrastructure				
<b>Initiative</b>	: 6. Urban transport network				
<b>Action step</b>	: 6.1 Development of underpass at Jalan Matang / Jalan Matang Baru Roundabout (1/2)				
Action step (s)	Output (s)	Timeline	Resources required		
<b>Siting application and land acquisition</b>	Land acquired	Start date	RM5 mil (proposed for 12MP MTR)		
		2021			
		End date			
2024					
				Start date	
				2022	
End date					
2022					
				Start date	
				2022	
End date					
2022					
				Start date	
				2022	
End date					
2022					
				Start date	
				2022	
End date					
2022					
				Start date	RM2 mil (proposed for 12MP MTR)
				2022	
End date					
2022					
				Start date	RM20 mil (proposed for 12MP MTR)
				2022	
End date					
2024					
				Start date	RM3 mil (proposed for 12MP MTR)
				2020	
End date					
2022					

## AIP Level 2 - Basic Infrastructure sector

<b>Sector</b>	: Basic Infrastructure		
<b>Initiative</b>	: 6. Urban transport network		
<b>Action step</b>	: 6.1 Development of underpass at Jalan Matang / Jalan Matang Baru Roundabout (2/2)		
Action step (s)	Output (s)	Timeline	Resources required
<b>Tender</b>	Tender evaluation report, letter of appointment and tender document	Start date	
		2021	
		End date	
2024			
<b>Construction and supervision</b>	Infrastructure completed	Start date	RM100 mil (contract)  RM4 mil (supervision and design fees)  (proposed for 12MP MTR)
		2021	
		End date	
2024			
<b>Outcome based assessment (OBA)</b>	OBA report	Start date	
		2021	
		End date	
2024			
Project Owner	Implementing Agency	Other Stakeholders	
MIPD	JKRS	EPU Sarawak, Federal Government, DID, Utility agencies, local authorities and L&S	

## AIP Level 2 - Basic Infrastructure sector

<b>Sector</b>	: Basic Infrastructure		
<b>Initiative</b>	: 6. Urban transport network		
<b>Action step</b>	: 6.2 Development of inner ring road of package D Mile 7 traffic light junction to Stephen Yong / Datu Wee traffic light junction (1/2)		
Action step (s)	Output (s)	Timeline	Resources required
<b>Siting application and land acquisition</b>	Land acquired	Start date	RM8 mil (proposed for 12MP MTR)
		2024	
		End date	
<b>Appointment of consultant (if required)</b>	Consultant identified and appointed	Start date	
		Completed	
		End date	
<b>Preliminary works</b> (i.e. survey works, side investigation works, EIA, traffic study, utility mapping)	Survey report, site investigation report, EIA report, traffic study report and utility mapping report	Start date	
		Completed	
		End date	
<b>Coordination with utilities agencies</b>	Utilities relocation and protection report with implementation plan	Start date	
		2024	
		End date	
<b>Design and tender documentation</b>	Route location and conceptual design, preliminary and detailed engineering design report and tender documentation	Start date	
		Completed	
		End date	
		Completed	

## AIP Level 2 - Basic Infrastructure sector

<b>Sector</b>	: Basic Infrastructure		
<b>Initiative</b>	: 6. Urban transport network		
<b>Action step</b>	: 6.2 Development of inner ring road of package D Mile 7 traffic light junction to Stephen Yong / Datu Wee traffic light junction (2/2)		
Action step (s)	Output (s)	Timeline	Resources required
<b>Tender</b>	Tender evaluation report, letter of appointment and tender document	Start date	
		2024	
		End date	
		2024	
<b>Construction and supervision</b>	Infrastructure completed	Start date	RM160 mil (contract)  RM2.5 mil (supervision and design fees)  (proposed for 12MP MTR)
		2024	
		End date	
		2027	
<b>Outcome based assessment (OBA)</b>	OBA report	Start date	
		2028	
		End date	
		2028	
Project Owner	Implementing Agency	Other Stakeholders	
MIPD	JKRS	EPU Sarawak, Federal Government, DID, Utility agencies, local authorities and L&S	

## AIP Level 2 - Basic Infrastructure sector

<b>Sector</b>	: Basic Infrastructure		
<b>Initiative</b>	: 6. Urban transport network		
<b>Action step</b>	: 6.3 Development of inner ring road Batu Kawa /Stephen Yong Traffic Junction to Taman Kopodim (1/2)		
Action step (s)	Output (s)	Timeline	Resources required
<b>Siting application and land acquisition</b>	Land acquired	Start date	RM110 mil (proposed for 13MP)
		2026	
		End date	
		2026	
<b>Appointment of consultant (if required)</b>	Consultant identified and appointed	Start date	
		Completed	
		End date	
		Completed	
<b>Preliminary works</b> (i.e. survey works, side investigation works, EIA, traffic study, utility mapping)	Survey report, site investigation report, EIA report, traffic study report and utility mapping report	Start date	
		Completed	
		End date	
		Completed	
<b>Coordination with utilities agencies</b>	Utilities relocation and protection report with implementation plan	Start date	RM7 mil (proposed for 13MP)
		2026	
		End date	
		2026	
<b>Design and tender documentation</b>	Route location and conceptual design, preliminary and detailed engineering design report and tender documentation	Start date	
		Completed	
		End date	
		Completed	

## AIP Level 2 - Basic Infrastructure sector

<b>Sector</b>	: Basic Infrastructure		
<b>Initiative</b>	: 6. Urban transport network		
<b>Action step</b>	: 6.3 Development of inner ring road Batu Kawa /Stephen Yong Traffic Junction to Taman Kopodim (2/2)		
Action step (s)	Output (s)	Timeline	Resources required
<b>Tender</b>	Tender evaluation report, letter of appointment and tender document	Start date	
		2026	
		End date	
2026			
<b>Construction and supervision</b>	Infrastructure completed	Start date	RM190 mil (contract)  RM3 mil (supervision and design fees)  (proposed for 13MP)
		2026	
		End date	
2030			
<b>Outcome based assessment (OBA)</b>	OBA report	Start date	
		2030	
		End date	
2030			
Project Owner	Implementing Agency	Other Stakeholders	
MIPD	JKRS	EPU Sarawak, Federal Government, DID, Utility agencies, local authorities and L&S	

## AIP Level 2 - Basic Infrastructure sector

<b>Sector</b>	: Basic Infrastructure		
<b>Initiative</b>	: 6. Urban transport network		
<b>Action step</b>	: 6.4 Development of inner ring road Package A FAC to MARDI roundabout (1/2)		
Action step (s)	Output (s)	Timeline	Resources required
<b>Siting application and land acquisition</b>	Land acquired	Start date	RM3 mil (proposed for 13MP)
		2026	
		End date	
		2026	
<b>Appointment of consultant (if required)</b>	Consultant identified and appointed	Start date	
		Completed	
		End date	
		Completed	
<b>Preliminary works</b> (i.e. survey works, side investigation works, EIA, traffic study, utility mapping)	Survey report, site investigation report, EIA report, traffic study report and utility mapping report	Start date	
		Completed	
		End date	
		Completed	
<b>Coordination with utilities agencies</b>	Utilities relocation and protection report with implementation plan	Start date	
		2026	
		End date	
		2026	
<b>Design and tender documentation</b>	Route location and conceptual design, preliminary and detailed engineering design report and tender documentation	Start date	
		Completed	
		End date	
		Completed	

## AIP Level 2 - Basic Infrastructure sector

<b>Sector</b>	: Basic Infrastructure		
<b>Initiative</b>	: 6. Urban transport network		
<b>Action step</b>	: 6.4 Development of inner ring road Package A FAC to MARDI roundabout (2/2)		
Action step (s)	Output (s)	Timeline	Resources required
<b>Tender</b>	Tender evaluation report, letter of appointment and tender document	Start date	
		2026	
		End date	
2026			
<b>Construction and supervision</b>	Infrastructure completed	Start date	RM120 mil (contract)  RM2 mil (supervision and design fees)  (proposed for 13MP)
		2026	
		End date	
2028			
<b>Outcome based assessment (OBA)</b>	OBA report	Start date	
		2029	
		End date	
2029			
Project Owner	Implementing Agency	Other Stakeholders	
MIPD	JKRS	EPU Sarawak, Federal Government, DID, Utility agencies, local authorities and L&S	

## AIP Level 2 - Basic Infrastructure sector

Sector : Basic Infrastructure			
Initiative : 6. Urban transport network			
Action step : 6.5 Upgrading of Bulatan Setia Raja / Usahajaya(1/2)			
Action step (s)	Output (s)	Timeline	Resources required
<b>Siting application and land acquisition</b>	Land acquired	Start date	RM1 mil (proposed for 12MP MTR)
		2024	
		End date	
		2024	
		End date	
		2024	
<b>Appointment of consultant (if required)</b>	Consultant identified and appointed	Start date	
		2024	
		End date	
		2024	
		End date	
		2024	
<b>Preliminary works</b> (i.e. survey works, side investigation works, EIA, traffic study, utility mapping)	Survey report, site investigation report, EIA report, traffic study report and utility mapping report	Start date	RM1 mil (proposed for 12MP MTR)
		2024	
		End date	
		2024	
		End date	
		2024	
<b>Coordination with utilities agencies</b>	Utilities relocation and protection report with implementation plan	Start date	RM2 mil (proposed for 12MP MTR)
		2024	
		End date	
		2024	
		End date	
		2024	
<b>Design and tender documentation</b>	Route location and conceptual design, preliminary and detailed engineering design report and tender documentation	Start date	RM3 mil (proposed for 12MP MTR)
		2024	
		End date	
		2025	

## AIP Level 2 - Basic Infrastructure sector

<b>Sector</b> :		Basic Infrastructure	
<b>Initiative</b> :		6. Urban transport network	
<b>Action step</b> :		6.5 Upgrading of Bulatan Setia Raja / Usahajaya (2/2)	
Action step (s)	Output (s)	Timeline	Resources required
<b>Tender</b>	Tender evaluation report, letter of appointment and tender document	Start date	
		2025	
		End date	
2025			
<b>Construction and supervision</b>	Infrastructure completed	Start date	RM150 mil (contract)  RM500k (supervision and design fees)  (proposed for 12MP MTR)
		2025	
		End date	
2027			
<b>Outcome based assessment (OBA)</b>	OBA report	Start date	
		2028	
		End date	
2028			
Project Owner	Implementing Agency	Other Stakeholders	
MIPD	JKRS	EPU Sarawak, Federal Government, DID, Utility agencies, local authorities and L&S	

## AIP Level 2 - Basic Infrastructure sector

Sector : Basic Infrastructure			
Initiative : 6. Urban transport network			
Action step : 6.6 Upgrading of Stutong Link Road, Kuching (1/2)			
Action step (s)	Output (s)	Timeline	Resources required
<b>Siting application and land acquisition</b>	Land acquired	Start date	RM1.5 mil (proposed for 12MP MTR)
		2024	
		End date	
		2024	
		End date	
		2024	
<b>Appointment of consultant (if required)</b>	Consultant identified and appointed	Start date	
		2024	
		End date	
		2024	
		End date	
		2024	
<b>Preliminary works</b> (i.e. survey works, side investigation works, EIA, traffic study, utility mapping)	Survey report, site investigation report, EIA report, traffic study report and utility mapping report	Start date	RM1 mil (proposed for 12MP MTR)
		2024	
		End date	
		2024	
		End date	
		2024	
<b>Coordination with utilities agencies</b>	Utilities relocation and protection report with implementation plan	Start date	RM2 mil (proposed for 12MP MTR)
		2024	
		End date	
		2024	
		End date	
		2024	
<b>Design and tender documentation</b>	Route location and conceptual design, preliminary and detailed engineering design report and tender documentation	Start date	RM3 mil (proposed for 12MP MTR)
		2024	
		End date	
		2025	

## AIP Level 2 - Basic Infrastructure sector

<b>Sector</b> : Basic Infrastructure			
<b>Initiative</b> : 6. Urban transport network			
<b>Action step</b> : 6.6 Upgrading of Stutong Link Road, Kuching (2/2)			
Action step (s)	Output (s)	Timeline	Resources required
<b>Tender</b>	Tender evaluation report, letter of appointment and tender document	Start date	
		2025	
		End date	
2025			
<b>Construction and supervision</b>	Infrastructure completed	Start date	RM35 mil (contract)  RM500k (supervision and design fees)  (proposed for 12MP MTR)
		2025	
		End date	
		2027	
<b>Outcome based assessment (OBA)</b>	OBA report	Start date	
		2028	
		End date	
		2028	
Project Owner	Implementing Agency	Other Stakeholders	
MIPD	JKRS	EPU Sarawak, Federal Government, DID, Utility agencies, local authorities and L&S	

## AIP Level 2 - Basic Infrastructure sector

<b>Sector</b>	: Basic Infrastructure			
<b>Initiative</b>	: 6. Urban transport network			
<b>Action step</b>	: 6.7 SMART traffic light system in Miri Division (1/2)			
Action step (s)	Output (s)	Timeline	Resources required	
<b>Appointment of consultant (if required)</b>	Consultant identified and appointed	Start date		
		2024		
		End date		
	2024			
<b>Conduct traffic study</b>	Traffic study report	Start date		RM250k (proposed for 12MP MTR)
		2024		
		End date		
	2024			
<b>Coordination with Councils</b>	Traffic light system report with implementation plan	Start date		
		2024		
		End date		
	2024			
<b>Design and tender documentation</b>	Traffic light system preliminary and detailed design and tender documentation	Start date		RM500k (proposed for 12MP MTR)
		2024		
		End date		
	2025			
<b>Tender</b>	Tender evaluation report, letter of appointment and tender document	Start date		
		2025		
		End date		
	2025			

## AIP Level 2 - Basic Infrastructure sector

<b>Sector</b> : Basic Infrastructure			
<b>Initiative</b> : 6. Urban transport network			
<b>Action step</b> : 6.7 SMART traffic light system in Miri Division (2/2)			
Action step (s)	Output (s)	Timeline	Resources required
<b>Construction and supervision</b>	Infrastructure completed	Start date	RM35 mil (contract)  RM500k (supervision and design fees)  (proposed for 12MP MTR)
		2025	
		End date	
		2027	
<b>Outcome based assessment (OBA)</b>	OBA report	Start date	
		2028	
		End date	
		2028	
Project Owner	Implementing Agency	Other Stakeholders	
MIPD	JKRS	EPU Sarawak, Federal Government, DID, Utility agencies, local authorities and L&S	

## AIP Level 2 - Basic Infrastructure sector

<b>Sector</b>	: Basic Infrastructure		
<b>Initiative</b>	: 6. Urban transport network		
<b>Action step</b>	: 6.8 Upgrading of Jalan Padang Kerbau - Miri bypass link road, Miri Division (1/2)		
Action step (s)	Output (s)	Timeline	Resources required
<b>Siting application and land acquisition</b>	Land acquired	Start date	RM1.5 mil (proposed for 12MP MTR)
		2024	
		End date	
<b>Appointment of consultant (if required)</b>	Consultant identified and appointed	Start date	
		2024	
		End date	
<b>Preliminary works</b> (i.e. survey works, side investigation works, EIA, traffic study, utility mapping)	Survey report, site investigation report, EIA report, traffic study report and utility mapping report	Start date	RM1 mil (proposed for 12MP MTR)
		2024	
		End date	
<b>Coordination with utilities agencies</b>	Utilities relocation and protection report with implementation plan	Start date	RM1 mil (proposed for 12MP MTR)
		2024	
		End date	
<b>Design and tender documentation</b>	Route location and conceptual design, preliminary and detailed engineering design report and tender documentation	Start date	RM1.5 mil (proposed for 12MP MTR)
		2024	
		End date	
		2025	

## AIP Level 2 - Basic Infrastructure sector

<b>Sector</b> :		Basic Infrastructure	
<b>Initiative</b> :		6. Urban transport network	
<b>Action step</b> :		6.8 Upgrading of Jalan Padang Kerbau - Miri bypass link road, Miri Division (2/2)	
Action step (s)	Output (s)	Timeline	Resources required
<b>Tender</b>	Tender evaluation report, letter of appointment and tender document	Start date	
		2025	
		End date	
		2025	
<b>Construction and supervision</b>	Infrastructure completed	Start date	RM20 mil (contract)  RM500k (supervision and design fees)  (proposed for 12MP MTR)
		2025	
		End date	
		2027	
<b>Outcome based assessment (OBA)</b>	OBA report	Start date	
		2028	
		End date	
		2028	
Project Owner	Implementing Agency	Other Stakeholders	
MIPD	JKRS	EPU Sarawak, Federal Government, DID, Utility agencies, local authorities and L&S	

## AIP Level 2 - Basic Infrastructure sector

<b>Sector</b>	: Basic Infrastructure		
<b>Initiative</b>	: 6. Urban transport network		
<b>Action step</b>	: 6.9 Upgrading of Pujut 3 Round about (GK Supermarket) to signalised traffic junction, Miri Division (1/2)		
Action step (s)	Output (s)	Timeline	Resources required
<b>Siting application and land acquisition</b>	Land acquired	Start date	
		2024	
		End date	
2024			
<b>Preliminary works</b> (i.e. survey works, side investigation works, EIA, traffic study, utility mapping)	Survey report, site investigation report, EIA report, traffic study report and utility mapping report	Start date	RM500k (proposed for 12MP MTR)
		2024	
		End date	
2024			
<b>Coordination with utilities agencies</b>	Utilities relocation and protection report with implementation plan	Start date	RM1 mil (proposed for 12MP MTR)
		2024	
		End date	
2024			
<b>Design and tender documentation</b>	Route location and conceptual design, preliminary and detailed engineering design report and tender documentation	Start date	RM1 mil (proposed for 12MP MTR)
		2024	
		End date	
2025			

## AIP Level 2 - Basic Infrastructure sector

<b>Sector</b>	: Basic Infrastructure		
<b>Initiative</b>	: 6. Urban transport network		
<b>Action step</b>	: 6.9 Upgrading of Pujut 3 Round about (GK Supermarket) to signalised traffic junction, Miri Division (2/2)		
Action step (s)	Output (s)	Timeline	Resources required
<b>Tender</b>	Tender evaluation report, letter of appointment and tender document	Start date	
		2025	
		End date	
2025			
<b>Construction and supervision</b>	Infrastructure completed	Start date	RM17 mil (contract)  RM500k (supervision and design fees)  (proposed for 12MP MTR)
		2025	
		End date	
2027			
<b>Outcome based assessment (OBA)</b>	OBA report	Start date	
		2028	
		End date	
2028			
Project Owner	Implementing Agency	Other Stakeholders	
MIPD	JKRS	EPU Sarawak, Federal Government, DID, Utility agencies, local authorities and L&S	

## AIP Level 2 - Basic Infrastructure sector

Sector : Basic Infrastructure			
Initiative : 6. Urban transport network			
Action step : 6.10 Development of underpass di Bulatan Datuk Muhamad Zin bin Haji Salleh, Bahagian Kuching (1/2)			
Action step (s)	Output (s)	Timeline	Resources required
<b>Siting application and land acquisition</b>	Land acquired	Start date	RM2 mil (proposed for 13MP)
		2026	
		End date	
		2027	
		Start date	
		2026	
End date			
	Consultant identified and appointed	2026	
		Start date	
		2026	
End date			
	Preliminary detailed abstract (PDA) and value management report	2026	
		Start date	
		2026	
	Preliminary detailed abstract (PDA) and value management report	End date	
		2026	
		Start date	
<b>Preliminary works</b> (i.e. survey works, side investigation works, EIA, traffic study, utility mapping)	Survey report, site investigation report, EIA report, traffic study report and utility mapping report	2026	RM2 mil (proposed for 13MP)
		Start date	
		2026	
	Survey report, site investigation report, EIA report, traffic study report and utility mapping report	End date	
		2026	
		Start date	
<b>Coordination with utilities agencies</b>	Utilities relocation and protection report with implementation plan	2026	RM15 mil (proposed for 13MP)
		Start date	
		2027	
	Utilities relocation and protection report with implementation plan	End date	
		2027	
		Start date	
<b>Design and tender documentation</b>	Route location and conceptual design, preliminary and detailed engineering design report and tender documentation	2020	RM3 mil (proposed for 12MP)
		Start date	
		2022	
	Route location and conceptual design, preliminary and detailed engineering design report and tender documentation	End date	
		2022	
		Start date	

## AIP Level 2 - Basic Infrastructure sector

<b>Sector</b>	: Basic Infrastructure		
<b>Initiative</b>	: 6. Urban transport network		
<b>Action step</b>	: 6.10 Development of underpass di Bulatan Datuk Muhamad Zin bin Haji Salleh, Bahagian Kuching (2/2)		
Action step (s)	Output (s)	Timeline	Resources required
<b>Tender</b>	Tender evaluation report, letter of appointment and tender document	Start date	
		2027	
		End date	
2027			
<b>Construction and supervision</b>	Infrastructure completed	Start date	RM80 mil (contract)
		2027	RM3 mil (supervision and design fees)
		End date	(proposed for 13MP)
		2030	
<b>Outcome based assessment (OBA)</b>	OBA report	Start date	
		2030	
		End date	
		2030	
Project Owner	Implementing Agency	Other Stakeholders	
MIPD	JKRS	EPU Sarawak, Federal Government, DID, Utility agencies, local authorities and L&S	



## AIP Level 2 - Basic Infrastructure sector

<b>Sector</b> :		Basic Infrastructure	
<b>Initiative</b> :		6. Urban transport network	
<b>Action step</b> :		6.11 Development of flyover Jalan Mendu / Batu Lintang, Bahagian Kuching (2/2)	
Action step (s)	Output (s)	Timeline	Resources required
<b>Tender</b>	Tender evaluation report, letter of appointment and tender document	Start date	
		2027	
		End date	
2027			
<b>Construction and supervision</b>	Infrastructure completed	Start date	RM92 mil (contract)
		2027	RM3 mil (supervision and design fees)
		End date	(proposed for 13MP)
		2030	
<b>Outcome based assessment (OBA)</b>	OBA report	Start date	
		2030	
		End date	
		2030	
Project Owner	Implementing Agency	Other Stakeholders	
MIPD	JKRS	EPU Sarawak, Federal Government, DID, Utility agencies, local authorities and L&S	

## AIP Level 2 - Basic Infrastructure sector

<b>Sector</b>	: Basic Infrastructure				
<b>Initiative</b>	: 6. Urban transport network				
<b>Action step</b>	: 6.12 Development of upgrading of Foochow Road No 1, Tun Razak road junction (flyover) (1/2)				
Action step (s)	Output (s)	Timeline	Resources required		
<b>Siting application and land acquisition</b>	Land acquired	Start date	RM5 mil (proposed for 13MP)		
		2026			
		End date			
2027					
				Start date	
				2026	
End date					
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				Start date	
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End date					
2027					
				Start date	
				2027	
End date					
2022					
				Start date	
				2022	
End date					
2022					
				Start date	
				2022	
End date					

## AIP Level 2 - Basic Infrastructure sector

<b>Sector</b>	: Basic Infrastructure		
<b>Initiative</b>	: 6. Urban transport network		
<b>Action step</b>	: 6.12 Development of upgrading of Foochow Road No 1, Tun Razak road junction (flyover) (2/2)		
Action step (s)	Output (s)	Timeline	Resources required
<b>Tender</b>	Tender evaluation report, letter of appointment and tender document	Start date	
		2027	
		End date	
2027			
<b>Construction and supervision</b>	Infrastructure completed	Start date	RM92 mil (contract)
		2027	
		End date	RM3 mil (supervision and design fees)  (proposed for 13MP)
		2030	
<b>Outcome based assessment (OBA)</b>	OBA report	Start date	
		2030	
		End date	
		2030	
Project Owner	Implementing Agency	Other Stakeholders	
MIPD	JKRS	EPU Sarawak, Federal Government, DID, Utility agencies, local authorities and L&S	

## AIP Level 2 - Basic Infrastructure sector

<b>Sector</b>	: Basic Infrastructure		
<b>Initiative</b>	: 6. Urban transport network		
<b>Action step</b>	: 6.13 Upgrading of Rock Road / Laksamana Cheng Ho Junction, Kuching Division (flyover) (1/2)		
Action step (s)	Output (s)	Timeline	Resources required
<b>Siting application and land acquisition</b>	Land acquired	Start date	RM5 mil (proposed for 13MP)
		2026	
		End date	
		2027	
		Start date	
		2026	
End date			
	Consultant identified and appointed	2026	
		Start date	
		2026	
	Preliminary detailed abstract (PDA) and value management report	End date	
		2026	
		Start date	
	Survey report, site investigation report, EIA report, traffic study report and utility mapping report	2026	RM2 mil (proposed for 13MP)
		End date	
		2026	
	Utilities relocation and protection report with implementation plan	Start date	RM30 mil (proposed for 13MP)
		2026	
		End date	
	Route location and conceptual design, preliminary and detailed engineering design report and tender documentation	2027	RM3 mil (proposed for 13MP)
		Start date	
		2026	
		End date	
		2022	
		Start date	

## AIP Level 2 - Basic Infrastructure sector

<b>Sector</b>		: Basic Infrastructure	
<b>Initiative</b>		: 6. Urban transport network	
<b>Action step</b>		: 6.13 Upgrading of Rock Road / Laksamana Cheng Ho Junction, Kuching Division (flyover) (2/2)	
Action step (s)	Output (s)	Timeline	Resources required
<b>Tender</b>	Tender evaluation report, letter of appointment and tender document	Start date	
		2027	
		End date	
2027			
<b>Construction and supervision</b>	Infrastructure completed	Start date	RM97 mil (contract)
		2027	RM3 mil (supervision and design fees)
		End date	(proposed for 13MP)
2030			
<b>Outcome based assessment (OBA)</b>	OBA report	Start date	
		2030	
		End date	
2030			
Project Owner	Implementing Agency	Other Stakeholders	
MIPD	JKRS	EPU Sarawak, Federal Government, DID, Utility agencies, local authorities and L&S	

## AIP Level 2 - Basic Infrastructure sector

Sector : Basic Infrastructure			
Initiative : 6. Urban transport network			
Action step : 6.14 Sibu Link Road (1/2)			
Action step (s)	Output (s)	Timeline	Resources required
<b>Siting application and land acquisition</b>	Land acquired	Start date	RM5 mil (proposed for 13MP)
		2026	
		End date	
		2027	
		Start date	
		2026	
End date			
		2026	
		Start date	
		2026	
End date			
	Preliminary detailed abstract (PDA) and value management report	2026	
		Start date	
		2026	
End date			
	Preliminary detailed abstract (PDA) and value management report	2026	
		Start date	
		2026	
End date			
<b>Preliminary works</b> (i.e. survey works, side investigation works, EIA, traffic study, utility mapping)	Survey report, site investigation report, EIA report, traffic study report and utility mapping report	Start date	RM2 mil (proposed for 13MP)
		2026	
		End date	
		2026	
		Start date	
		2026	
End date			
<b>Coordination with utilities agencies</b>	Utilities relocation and protection report with implementation plan	Start date	RM30 mil (proposed for 13MP)
		2026	
		End date	
		2027	
		Start date	
		2026	
End date			
<b>Design and tender documentation</b>	Route location and conceptual design, preliminary and detailed engineering design report and tender documentation	Start date	RM3 mil (proposed for 13MP)
		2026	
		End date	
		2022	

## AIP Level 2 - Basic Infrastructure sector

<b>Sector</b> :		Basic Infrastructure	
<b>Initiative</b> :		6. Urban transport network	
<b>Action step</b> :		6.14 Sibu Link Road (2/2)	
Action step (s)	Output (s)	Timeline	Resources required
<b>Tender</b>	Tender evaluation report, letter of appointment and tender document	Start date	
		2027	
		End date	
2027			
<b>Construction and supervision</b>	Infrastructure completed	Start date	RM97 mil (contract)
		2027	RM3 mil (supervision and design fees)
		End date	(proposed for 13MP)
2030			
<b>Outcome based assessment (OBA)</b>	OBA report	Start date	
		2030	
		End date	
2030			
Project Owner	Implementing Agency	Other Stakeholders	
MIPD	JKRS	EPU Sarawak, Federal Government, DID, Utility agencies, local authorities and L&S	

## AIP Level 1 - Basic Infrastructure sector

<b>Sector</b>		: Basic Infrastructure	
<b>Strategy</b>		: Synergise inter-agency collaboration to facilitate and drive economic growth	
<b>Initiative</b>		: 7. Miri - Limbang - Lawas road connectivity	
<b>Initiatives</b>		<b>Desired Outcome(s)</b>	
<b>7. Miri - Limbang - Lawas road connectivity</b>		<p><b>Economic Prosperity</b></p> <ol style="list-style-type: none"> <li>Potential cost benefit after 2030: RM61.7 mil/year</li> <li>Potential job creation: Estimated &gt;1,000 through tourism and agriculture activities. (in 2030 targeted unemployment rate is</li> </ol> <p><u>Tourism spots:</u> UNESCO heritage sites &amp; National Park (e.g. Mulu National Park), Logan Bunut, Gunung Buda, etc.</p> <p><u>Agricultural Areas:</u> Beras Bario; Highland Agriculture (eg: Nanga Medamit; Long Lama; Bario)</p>	
<b>Timeline</b>		<b>Resources Required</b>	
<b>Start Date</b>	<b>End Date</b>		
2021	2028	<ul style="list-style-type: none"> <li>RM3.18 billion</li> </ul>	
<b>Project Owner</b>	<b>Implementing Agency</b>	<b>Other Stakeholders</b>	
MIPD	JKR / RECODA	MOTS, DID and local governments	

## AIP Level 2 - Basic Infrastructure sector

<b>Sector</b>	: Basic Infrastructure		
<b>Initiative</b>	: 7. Miri - Limbang - Lawas road connectivity		
<b>Action step</b>	: 7.1 Kuala Melinau-Limbang-Lawas /SSLR (Construction Period: 60 months) Phase 2: Nanga Medamit– Kuala Melinau (105km) (1/2)		
Action step (s)	Output (s)	Timeline	Resources required
<b>Siting application and land acquisition</b>	Land acquired	Start date	RM10.5 mil (proposed for 12MP MTR)
		2024	
		End date	
		2026	
		Start date	
		2024	
	Consultant identified and appointed	End date	
		2024	
		2024	
<b>Value management</b>	Preliminary detailed abstract (PDA) and value management report	Start date	
		2024	
		End date	
		2024	
		Start date	RM2.5 mil (proposed for 12MP MTR)
		2024	
End date			
	Survey report, site investigation report, EIA report, traffic study report and utility mapping report	2024	
		2025	
		End date	
<b>Coordination with utilities agencies</b>	Utilities relocation and protection report with implementation plan	Start date	RM5 mil (proposed for 12MP MTR)
		2024	
		End date	
		2026	
		Start date	RM40 mil (proposed for 12MP MTR)
		2025	
End date			
<b>Design and tender documentation</b>	Route location and conceptual design, preliminary and detailed engineering design report and tender documentation	2026	

## AIP Level 2 - Basic Infrastructure sector

<b>Sector</b>	: Basic Infrastructure		
<b>Initiative</b>	: 7. Miri - Limbang - Lawas road connectivity		
<b>Action step</b>	: 7.1 Kuala Melinau-Limbang-Lawas /SSLR (Construction Period: 60 months) Phase 2: Nanga Medamit– Kuala Melinau (105km) (2/2)		
Action step (s)	Output (s)	Timeline	Resources required
<b>Tender</b>	Tender evaluation report, letter of appointment and tender document	Start date	
		2026	
		End date	
		2026	
<b>Construction and supervision</b>	Infrastructure completed	Start date	RM1.88 bil (contract)  RM15 mil (supervision and design fees)  (proposed for 13MP)
		2026	
		End date	
		2031	
<b>Outcome based assessment (OBA)</b>	OBA report	Start date	
		2031	
		End date	
		2031	
Project Owner	Implementing Agency	Other Stakeholders	
MIPD	JKRS	EPU Sarawak, Federal Government, DID, Utility agencies, local authorities and L&S	

## AIP Level 2 - Basic Infrastructure sector

<b>Sector</b>	: Basic Infrastructure		
<b>Initiative</b>	: 7. Miri - Limbang - Lawas road connectivity		
<b>Action step</b>	: 7.2 Kuala Melinau-Limbang-Lawas/SSLR (Construction Period: 54 months) Phase 3: Long Merarap– Nanga Medamit (66km) (1/2)		
Action step (s)	Output (s)	Timeline	Resources required
<b>Siting application and land acquisition</b>	Land acquired	Start date	RM10 mil (proposed for 13MP)
		2026	
		End date	
		2027	
		Start date	
		2026	
End date			
	Consultant identified and appointed	2026	
		2026	
		2026	
<b>Value management</b>	Preliminary detailed abstract (PDA) and value management report	Start date	
		2026	
		End date	
		2026	
		Start date	RM2.5 mil (proposed for 13MP)
		2026	
End date			
	Survey report, site investigation report, EIA report, traffic study report and utility mapping report	2026	
		2026	
		2026	
<b>Coordination with utilities agencies</b>	Utilities relocation and protection report with implementation plan	Start date	RM5 mil (proposed for 13MP)
		2026	
		End date	
		2027	
		Start date	RM35 mil (proposed for 13MP)
		2026	
End date			
<b>Design and tender documentation</b>	Route location and conceptual design, preliminary and detailed engineering design report and tender documentation	2027	

## AIP Level 2 - Basic Infrastructure sector

<b>Sector</b>	: Basic Infrastructure		
<b>Initiative</b>	: 7. Miri - Limbang - Lawas road connectivity		
<b>Action step</b>	: 7.2 Kuala Melinau-Limbang-Lawas/SSLR (Construction Period: 54 months) Phase 3: Long Merarap– Nanga Medamit (66km) (2/2)		
Action step (s)	Output (s)	Timeline	Resources required
<b>Tender</b>	Tender evaluation report, letter of appointment and tender document	Start date	
		2027	
		End date	
		2027	
<b>Construction and supervision</b>	Infrastructure completed	Start date	RM1.62 bil (contract)  RM12.5 mil (supervision and design fees)  (proposed for 13MP & 14MP)
		2027	
		End date	
		2032	
<b>Outcome based assessment (OBA)</b>	OBA report	Start date	
		2032	
		End date	
		2032	
Project Owner	Implementing Agency	Other Stakeholders	
MIPD	JKRS	EPU Sarawak, Federal Government, DID, Utility agencies, local authorities and L&S	

## AIP Level 1 - Basic Infrastructure sector

<b>Sector</b>		: Basic Infrastructure	
<b>Strategy</b>		: Synergise inter-agency collaboration to facilitate and drive economic growth	
<b>Initiative</b>		: 8. Southern Region Development Corridor	
Initiatives		Desired Outcome(s)	
8. Southern Region Development Corridor		<p><b>Economic Prosperity</b></p> <ol style="list-style-type: none"> <li>Potential cost benefit after 2030: RM100 mil/year</li> <li>Potential job creation: Estimated &gt;2,000 through industrial, tourism, agriculture and commercial activities</li> </ol> <p><b>Tourism spots:</b> Bako National Park, Passenger Cruise, etc.</p> <p><b>Agricultural spots:</b> Fisheries (Small Scale/Cottage Industry_for keropok, shrimp paste, etc.)</p> <p><b>Industrial highlights:</b> Samajaya Industrial Area, Samarahan Industrial Area</p>	
Timeline		Resources Required	
Start Date	End Date	<ul style="list-style-type: none"> <li>RM1.5 billion</li> </ul>	
2021	2028		
Project Owner	Implementing Agency	Other Stakeholders	
MIPD	JKR	MOTS, DID and local governments	

## AIP Level 2 - Basic Infrastructure sector

<b>Sector</b>	: Basic Infrastructure				
<b>Initiative</b>	: 8. Southern Region Development Corridor				
<b>Action step</b>	: 8.1 Construction of dual-carriageway from Senari ports to the new Southern Terminal deepwater port (16km) (1/2)				
Action step (s)	Output (s)	Timeline	Resources required		
<b>Siting application and land acquisition</b>	Land acquired	Start date	RM40 mil (proposed for 12MP MTR)		
		2024			
		End date			
2026					
				Start date	
				2024	
End date					
2024					
Start date					
2024					
End date					
2024					
Start date					
2024					
End date					
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Start date					
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2025					
Start date					
2024					
End date					
2026					
Start date					
2024					
End date					
2026					
Start date					
2025					
End date					
2026					

## AIP Level 2 - Basic Infrastructure sector

<b>Sector</b> :		Basic Infrastructure	
<b>Initiative</b> :		8. Southern Region Development Corridor	
<b>Action step</b> :		8.1 Construction of dual-carriageway from Senari ports to the new Southern Terminal deepwater port (16km) (2/2)	
Action step (s)	Output (s)	Timeline	Resources required
<b>Tender</b>	Tender evaluation report, letter of appointment and tender document	Start date	
		2026	
		End date	
		2026	
<b>Construction and supervision</b>	Infrastructure completed	Start date	RM191.5 mil (contract)
		2026	
		End date	RM4 mil (supervision and design fees)
		2029	
<b>Outcome based assessment (OBA)</b>	OBA report	Start date	(proposed for 13MP)
		2030	
		End date	
		2030	
Project Owner	Implementing Agency	Other Stakeholders	
MIPD	JKRS	EPU Sarawak, Federal Government, DID, Utility agencies, local authorities, L&S and Forestry Dept.	

## AIP Level 2 - Basic Infrastructure sector

<b>Sector</b>	: Basic Infrastructure		
<b>Initiative</b>	: 8. Southern Region Development Corridor		
<b>Action step</b>	: 8.2 Road to Samajaya Industrial Park (extension) to Samarahan Industrial Park (10km) (1/2)		
Action step (s)	Output (s)	Timeline	Resources required
<b>Siting application and land acquisition</b>	Land acquired	Start date	RM30 mil (proposed for 13MP)
		2026	
		End date	
		2027	
		Start date	
		2026	
End date			
	Consultant identified and appointed	2026	
		2026	
		2026	
<b>Value management</b>	Preliminary detailed abstract (PDA) and value management report	Start date	
		2026	
		End date	
		2026	
		Start date	RM2 mil (proposed for 13MP)
		2026	
End date			
	Survey report, site investigation report, EIA report, traffic study report and utility mapping report	2026	
		2026	
		2026	
<b>Coordination with utilities agencies</b>	Utilities relocation and protection report with implementation plan	Start date	RM15 mil (proposed for 13MP)
		2026	
		End date	
		2027	
		Start date	RM7 mil (proposed for 13MP)
		2026	
End date			
	Route location and conceptual design, preliminary and detailed engineering design report and tender documentation	2027	

## AIP Level 2 - Basic Infrastructure sector

<b>Sector</b> : Basic Infrastructure			
<b>Initiative</b> : 8. Southern Region Development Corridor			
<b>Action step</b> : 8.2 Road to Samajaya Industrial Park (extension) to Samarahan Industrial Park (10km) (2/2)			
Action step (s)	Output (s)	Timeline	Resources required
<b>Tender</b>	Tender evaluation report, letter of appointment and tender document	Start date	
		2027	
		End date	
2027			
<b>Construction and supervision</b>	Infrastructure completed	Start date	RM125 mil (contract)  RM3 mil (supervision and design fees)  (proposed for 13MP)
		2027	
		End date	
2029			
<b>Outcome based assessment (OBA)</b>	OBA report	Start date	
		2030	
		End date	
2030			
Project Owner	Implementing Agency	Other Stakeholders	
MIPD	JKRS	EPU Sarawak, Federal Government, DID, Utility agencies, local authorities, L&S and Forestry Dept.	

## AIP Level 2 - Basic Infrastructure sector

<b>Sector</b>	: Basic Infrastructure		
<b>Initiative</b>	: 8. Southern Region Development Corridor		
<b>Action step</b>	: 8.3 Upgrading of road from Serian to Tebedu ICQS (42km) (1/2)		
Action step (s)	Output (s)	Timeline	Resources required
<b>Siting application and land acquisition</b>	Land acquired	Start date	RM10 mil (proposed for 12MP MTR)
		2024	
		End date	
<b>Appointment of consultant (if required)</b>	Consultant identified and appointed	Start date	
		2024	
		End date	
<b>Value management</b>	Preliminary detailed abstract (PDA) and value management report	Start date	
		2024	
		End date	
<b>Preliminary works</b> (i.e. survey works, side investigation works, EIA, traffic study, utility mapping)	Survey report, site investigation report, EIA report, traffic study report and utility mapping report	Start date	RM2.5 mil (proposed for 12MP MTR)
		2024	
		End date	
<b>Coordination with utilities agencies</b>	Utilities relocation and protection report with implementation plan	Start date	RM15 mil (proposed for 13MP)
		2024	
		End date	
<b>Design and tender documentation</b>	Route location and conceptual design, preliminary and detailed engineering design report and tender documentation	Start date	RM22.5 mil (proposed for 12MP MTR)
		2025	
		End date	
		2026	

## AIP Level 2 - Basic Infrastructure sector

<b>Sector</b> : Basic Infrastructure			
<b>Initiative</b> : 8. Southern Region Development Corridor			
<b>Action step</b> : 8.3 Upgrading of road from Serian to Tebedu ICQS (42km) (2/2)			
Action step (s)	Output (s)	Timeline	Resources required
<b>Tender</b>	Tender evaluation report, letter of appointment and tender document	Start date	
		2026	
		End date	
2026			
<b>Construction and supervision</b>	Infrastructure completed	Start date	RM57 mil (contract)
		2026	RM5 mil (supervision and design fees)
		End date	(proposed for 13MP)
		2029	
<b>Outcome based assessment (OBA)</b>	OBA report	Start date	
		2030	
		End date	
		2030	
Project Owner	Implementing Agency	Other Stakeholders	
MIPD	JKRS	EPU Sarawak, Federal Government, DID, Utility agencies, local authorities, L&S and Forestry Dept.	

## AIP Level 1 - Basic Infrastructure sector

<b>Sector</b>	: Basic Infrastructure	
<b>Strategy</b>	: Synergise inter-agency collaboration to facilitate and drive economic growth	
<b>Initiative</b>	: 9. Rural connectivity	
<b>Initiatives</b>	<b>Desired Outcome(s)</b>	
<b>9. Rural connectivity</b>	<p><b>Economic Prosperity</b></p> <ol style="list-style-type: none"> <li>1. To achieve 100% road connectivity to Rural area. Estimated 549 settlements connected in 2030 with approximately 2,338 km length road.             <ol style="list-style-type: none"> <li>a.</li> </ol> </li> <li>2. Bridge the gap between the rural areas and town areas (expected growth household income at rural areas increase by 231% (average) by 2030)             <ol style="list-style-type: none"> <li>a.</li> </ol> </li> <li>3. Facilitate the opening of commercial, agricultural and tourism industry at the rural areas/ settlements which lead to the creation of localised job opportunities (eg SMEs, etc.)</li> </ol>	
<b>Timeline</b>		<b>Resources Required</b>
<b>Start Date</b>	<b>End Date</b>	
2021	2040	<ul style="list-style-type: none"> <li>• RM4.55 billion</li> </ul>
<b>Project Owner</b>	<b>Implementing Agency</b>	<b>Other Stakeholders</b>
MIPD	JKRS	EPU Sarawak, KKR, JKR Malaysia, DID, utilities agencies, Forestry Dept and L&S

## AIP Level 2 - Basic Infrastructure sector

<b>Sector</b> :		Basic Infrastructure	
<b>Initiative</b> :		9. Rural connectivity	
<b>Action step</b> :		9.1 Phase 1: Construction of 786 km of roads to rural settlements	
Action step (s)	Output (s)	Timeline	Resources required
<b>Formulation of criteria for project prioritisation</b> (population affected, potential growth, etc.)	Project listing based on prioritisation in implementation	Start date	
		2025	
		End date	
		2025	
<b>Submission of project list for consideration and approval</b>	Project approval	Start date	
		2025	
		End date	
		2025	
<b>Construction of roads to rural settlements</b>	Completion of roads to rural settlement	Start date	RM3.93 bil (proposed for 13MP)
		2026	
		End date	
		2030	
<b>Outcome based assessment (OBA)</b>	OBA report	Start date	(Note: Cost to construct road at Rural area ranging between RM5 to RM10 mil per km)
		2030	
		End date	
		2031	
Project Owner	Implementing Agency	Other Stakeholders	
MIPD	JKRS	EPU Sarawak, KKR, JKR Malaysia, DID, utilities agencies, Forestry Dept and L&S	

## AIP Level 2 - Basic Infrastructure sector

<b>Sector</b>	: Basic Infrastructure		
<b>Initiative</b>	: 9. Rural connectivity		
<b>Action step</b>	: 9.2 Phase 2: Construction of 782 km of roads to rural settlements		
Action step (s)	Output (s)	Timeline	Resources required
<b>Formulation of criteria for project prioritisation</b> (population affected, potential growth, etc.)	Project listing based on prioritisation in implementation	Start date	
		2025	
		End date	
		2025	
<b>Submission of project list for consideration and approval</b>	Project approval	Start date	
		2025	
		End date	
		2025	
<b>Construction of roads to rural settlements</b>	Completion of roads to rural settlement	Start date	RM3.91 bil (proposed for 14MP)
		2031	
		End date	
		2035	
<b>Outcome based assessment (OBA)</b>	OBA report	Start date	(Note: Cost to construct road at Rural area ranging between RM5 to RM10 mil per km)
		2035	
		End date	
		2036	
Project Owner	Implementing Agency	Other Stakeholders	
MIPD	JKRS	EPU Sarawak, KKR, JKR Malaysia, DID, utilities agencies, Forestry Dept and L&S	

## AIP Level 2 - Basic Infrastructure sector

<b>Sector</b>	: Basic Infrastructure		
<b>Initiative</b>	: 9. Rural connectivity		
<b>Action step</b>	: 9.3 Phase 2: Construction of 770 km of roads to rural settlements		
Action step (s)	Output (s)	Timeline	Resources required
<b>Formulation of criteria for project prioritisation</b> (population affected, potential growth, etc.)	Project listing based on prioritisation in implementation	Start date	
		2025	
		End date	
		2025	
<b>Submission of project list for consideration and approval</b>	Project approval	Start date	
		2025	
		End date	
		2025	
<b>Construction of roads to rural settlements</b>	Completion of roads to rural settlement	Start date	RM3.85 bil (proposed for 14MP)
		2036	
		End date	
		2040	
<b>Outcome based assessment (OBA)</b>	OBA report	Start date	(Note: Cost to construct road at Rural area ranging between RM5 to RM10 mil per km)
		2040	
		End date	
		2041	
Project Owner	Implementing Agency	Other Stakeholders	
MIPD	JKRS	EPU Sarawak, KKR, JKR Malaysia, DID, utilities agencies, Forestry Dept and L&S	

## AIP Level 1 - Basic Infrastructure sector

<b>Sector</b>		: Basic Infrastructure	
<b>Strategy</b>		: Synergise inter-agency collaboration to facilitate and drive economic growth	
<b>Initiative</b>		: 10. Border Security Road	
<b>Initiatives</b>		<b>Desired Outcome(s)</b>	
<b>10. Border Security Road</b>		<b>Economic Prosperity</b> <ol style="list-style-type: none"> <li>Potential cost benefit after 2030: RM85 mil/year</li> <li>Potential job creation: Estimated &gt;1,000 by opening up tourism and large scale agriculture activities</li> </ol>	
<b>Timeline</b>		<b>Resources Required</b>	
<b>Start Date</b>	<b>End Date</b>		
2024	2033	<ul style="list-style-type: none"> <li>RM24 billion</li> </ul>	
<b>Project Owner</b>	<b>Implementing Agency</b>	<b>Other Stakeholders</b>	
MIPD and MINDEF	JKRS	EPU Sarawak, Royal Malaysia Custom, Immigration Department, JUPEM, Department, Utility Agencies, Forestry Dept. and L&S	

## AIP Level 2 - Basic Infrastructure sector

Sector : Basic Infrastructure			
Initiative : 10. Border Security Road			
Action step : 10.1 Border security road			
Action step (s)	Output (s)	Timeline	Resources required
<b>Feasibility study</b>	Feasibility study report	Start date	RM1 mil
		2024	
		End date	
		2025	
<b>Engagement with relevant agencies</b> (MKN, PGA, Immigration and Custom Dept, etc.)	Recommendation report to government	Start date	
		2025	
		End date	
		2025	
<b>Preparation and submission of project papers</b> (request for fund from Federal/State) for the following projects under border security program.  1.Bengoh Section (181km) 2.Batang Ai Section(141km) 3.Song Section (170km) 4.Baleh Section (371km) 5.Belaga Section (331km) 6.Baram Section (292km) 7.Lawas Section (155km)	Approval for implementation	Start date	
		2025	
		End date	
		2026	
<b>Project Owner</b>	<b>Implementing Agency</b>	<b>Other Stakeholders</b>	
MIPD and MINDEF	JKRS	EPU Sarawak, Royal Malaysia Custom, Immigration Department, JUPEM, Department, Utility Agencies, Forestry Dept. and L&S	

## AIP Level 2 - Basic Infrastructure sector

<b>Sector</b>	: Basic Infrastructure		
<b>Initiative</b>	: 10. Border Security Road		
<b>Action step</b>	: 10.2 Bengoh section (181 km) (1/2)		
Action step (s)	Output (s)	Timeline	Resources required
<b>Siting application and land acquisition</b>	Land acquired	Start date	RM67 mil (proposed for 13MP)
		2026	
		End date	
		2027	
		Start date	
		2026	
End date			
	Consultant identified and appointed	2026	
		2026	
		2026	
<b>Value management</b>	Preliminary detailed abstract (PDA) and value management report	Start date	
		2026	
		End date	
		2026	
		Start date	RM4.4 mil (proposed for 13MP)
		2026	
End date			
	Survey report, site investigation report, EIA report, traffic study report and utility mapping report	2026	
		2026	
		2026	
<b>Coordination with utilities agencies</b>	Utilities relocation and protection report with implementation plan	Start date	RM29.1 mil (proposed for 13MP)
		2026	
		End date	
		2027	
		Start date	RM72.8 mil (proposed for 13MP)
		2026	
End date			
<b>Design and tender documentation</b>	Route location and conceptual design, preliminary and detailed engineering design report and tender documentation	2027	

## AIP Level 2 - Basic Infrastructure sector

<b>Sector</b> : Basic Infrastructure			
<b>Initiative</b> : 10. Border Security Road			
<b>Action step</b> : 10.2 Bengoh section (181 km) (2/2)			
Action step (s)	Output (s)	Timeline	Resources required
<b>Tender</b>	Tender evaluation report, letter of appointment and tender document	Start date	
		2027	
		End date	
2027			
<b>Construction and supervision</b>	Infrastructure completed	Start date	RM2.73 bil (contract)
		2027	
		End date	RM5.8 mil (supervision and design fees) (proposed for 13MP and 14MP)
		2031	
<b>Outcome based assessment (OBA)</b>	OBA report	Start date	
		2031	
		End date	
		2031	
Project Owner	Implementing Agency	Other Stakeholders	
MIPD and MINDEF	JKRS	EPU Sarawak, Royal Malaysia Custom, Immigration Department, JUPEM, Department, Utility Agencies, Forestry Dept. and L&S	

## AIP Level 2 - Basic Infrastructure sector

Sector : Basic Infrastructure			
Initiative : 10. Border Security Road			
Action step : 10.3 Batang Ai section (141 km) (1/2)			
Action step (s)	Output (s)	Timeline	Resources required
<b>Siting application and land acquisition</b>	Land acquired	Start date	RM52.2 mil (proposed for 13MP)
		2026	
		End date	
		2027	
		Start date	
		2026	
End date			
	Consultant identified and appointed	2026	
		Start date	
		2026	
End date			
	Preliminary detailed abstract (PDA) and value management report	2026	
		Start date	
		2026	
End date			
	Survey report, site investigation report, EIA report, traffic study report and utility mapping report	2026	
		Start date	RM3.4 mil (proposed for 13MP)
		2026	
End date			
	Utilities relocation and protection report with implementation plan	2026	
		Start date	RM22.7 mil (proposed for 13MP)
		2026	
End date			
	Route location and conceptual design, preliminary and detailed engineering design report and tender documentation	2027	
		Start date	RM56.7 mil (proposed for 13MP)
		2026	
End date			
		2027	

## AIP Level 2 - Basic Infrastructure sector

<b>Sector</b> : Basic Infrastructure			
<b>Initiative</b> : 10. Border Security Road			
<b>Action step</b> : 10.3 Batang Ai section (141 km) (2/2)			
Action step (s)	Output (s)	Timeline	Resources required
<b>Tender</b>	Tender evaluation report, letter of appointment and tender document	Start date	
		2027	
		End date	
2027			
<b>Construction and supervision</b>	Infrastructure completed	Start date	RM2.13 bil (contract)  RM4.5 mil (supervision and design fees)  (proposed for 13MP and 14MP)
		2027	
		End date	
2031			
<b>Outcome based assessment (OBA)</b>	OBA report	Start date	
		2031	
		End date	
2031			
Project Owner	Implementing Agency	Other Stakeholders	
MIPD and MINDEF	JKRS	EPU Sarawak, Royal Malaysia Custom, Immigration Department, JUPEM, Department, Utility Agencies, Forestry Dept. and L&S	

## AIP Level 2 - Basic Infrastructure sector

Sector : Basic Infrastructure			
Initiative : 10. Border Security Road			
Action step : 10.4 Song section (170 km) (1/2)			
Action step (s)	Output (s)	Timeline	Resources required
<b>Siting application and land acquisition</b>	Land acquired	Start date	RM61.5 mil (proposed for 13MP)
		2026	
		End date	
		2027	
		Start date	
		2026	
End date			
	Consultant identified and appointed	2026	
		2026	
		2026	
<b>Value management</b>	Preliminary detailed abstract (PDA) and value management report	Start date	
		2026	
		End date	
		2026	
		Start date	RM4 mil (proposed for 13MP)
		2026	
End date			
	Survey report, site investigation report, EIA report, traffic study report and utility mapping report	2026	
		2026	
		2026	
<b>Coordination with utilities agencies</b>	Utilities relocation and protection report with implementation plan	Start date	RM26.7 mil (proposed for 13MP)
		2026	
		End date	
		2027	
		Start date	RM56.9 mil (proposed for 13MP)
		2026	
End date			
<b>Design and tender documentation</b>	Route location and conceptual design, preliminary and detailed engineering design report and tender documentation	2027	

## AIP Level 2 - Basic Infrastructure sector

<b>Sector</b> : Basic Infrastructure			
<b>Initiative</b> : 10. Border Security Road			
<b>Action step</b> : 10.4 Song section (170 km) (2/2)			
Action step (s)	Output (s)	Timeline	Resources required
<b>Tender</b>	Tender evaluation report, letter of appointment and tender document	Start date	
		2027	
		End date	
2027			
<b>Construction and supervision</b>	Infrastructure completed	Start date	RM2.51 bil (contract)  RM5.3 mil (supervision and design fees)  (proposed for 13MP and 14MP)
		2027	
		End date	
2031			
<b>Outcome based assessment (OBA)</b>	OBA report	Start date	
		2031	
		End date	
2031			
Project Owner	Implementing Agency	Other Stakeholders	
MIPD and MINDEF	JKRS	EPU Sarawak, Royal Malaysia Custom, Immigration Department, JUPEM, Department, Utility Agencies, Forestry Dept. and L&S	

## AIP Level 2 - Basic Infrastructure sector

Sector : Basic Infrastructure			
Initiative : 10. Border Security Road			
Action step : 10.5 Baleh section (371 km) (1/2)			
Action step (s)	Output (s)	Timeline	Resources required
<b>Siting application and land acquisition</b>	Land acquired	Start date	RM134.3mil (proposed for 13MP)
		2026	
		End date	
		2027	
		Start date	
		2026	
End date			
	Consultant identified and appointed	2026	
		2026	
		2026	
<b>Value management</b>	Preliminary detailed abstract (PDA) and value management report	Start date	
		2026	
		End date	
		2026	
		Start date	RM8.8 mil (proposed for 13MP)
		2026	
End date			
	Survey report, site investigation report, EIA report, traffic study report and utility mapping report	2026	
		2026	
		2026	
<b>Coordination with utilities agencies</b>	Utilities relocation and protection report with implementation plan	Start date	RM58.4 mil (proposed for 13MP)
		2026	
		End date	
		2027	
		Start date	RM145.9 mil (proposed for 13MP)
		2026	
End date			
<b>Design and tender documentation</b>	Route location and conceptual design, preliminary and detailed engineering design report and tender documentation	2027	

## AIP Level 2 - Basic Infrastructure sector

<b>Sector</b> : Basic Infrastructure			
<b>Initiative</b> : 10. Border Security Road			
<b>Action step</b> : 10.5 Baleh section (371 km) (2/2)			
Action step (s)	Output (s)	Timeline	Resources required
<b>Tender</b>	Tender evaluation report, letter of appointment and tender document	Start date	
		2027	
		End date	
2027			
<b>Construction and supervision</b>	Infrastructure completed	Start date	RM5.48 bil (contract)  RM11.7 mil (supervision and design fees)  (proposed for 13MP and 14MP)
		2027	
		End date	
		2033	
<b>Outcome based assessment (OBA)</b>	OBA report	Start date	
		2033	
		End date	
		2033	
Project Owner	Implementing Agency	Other Stakeholders	
MIPD and MINDEF	JKRS	EPU Sarawak, Royal Malaysia Custom, Immigration Department, JUPEM, Department, Utility Agencies, Forestry Dept. and L&S	

## AIP Level 2 - Basic Infrastructure sector

<b>Sector</b>	: Basic Infrastructure		
<b>Initiative</b>	: 10. Border Security Road		
<b>Action step</b>	: 10.6 Belaga section (331 km) (1/2)		
Action step (s)	Output (s)	Timeline	Resources required
<b>Siting application and land acquisition</b>	Land acquired	Start date	RM119.8 mil (proposed for 13MP)
		2026	
		End date	
		2027	
<b>Appointment of consultant (if required)</b>	Consultant identified and appointed	Start date	
		2026	
		End date	
		2026	
<b>Value management</b>	Preliminary detailed abstract (PDA) and value management report	Start date	
		2026	
		End date	
		2026	
<b>Preliminary works</b> (i.e. survey works, side investigation works, EIA, traffic study, utility mapping)	Survey report, site investigation report, EIA report, traffic study report and utility mapping report	Start date	RM7.8 mil (proposed for 13MP)
		2026	
		End date	
		2026	
<b>Coordination with utilities agencies</b>	Utilities relocation and protection report with implementation plan	Start date	RM52.1 mil (proposed for 13MP)
		2026	
		End date	
		2027	
<b>Design and tender documentation</b>	Route location and conceptual design, preliminary and detailed engineering design report and tender documentation	Start date	RM130.2 mil (proposed for 13MP)
		2026	
		End date	
		2027	

## AIP Level 2 - Basic Infrastructure sector

<b>Sector</b> : Basic Infrastructure			
<b>Initiative</b> : 10. Border Security Road			
<b>Action step</b> : 10.5 Belaga section (331 km) (2/2)			
Action step (s)	Output (s)	Timeline	Resources required
<b>Tender</b>	Tender evaluation report, letter of appointment and tender document	Start date	
		2027	
		End date	
2027			
<b>Construction and supervision</b>	Infrastructure completed	Start date	RM4.88 bil (contract)
		2027	
		End date	RM10.4 mil (supervision and design fees) (proposed for 13MP and 14MP)
		2033	
<b>Outcome based assessment (OBA)</b>	OBA report	Start date	
		2033	
		End date	
		2033	
Project Owner	Implementing Agency	Other Stakeholders	
MIPD and MINDEF	JKRS	EPU Sarawak, Royal Malaysia Custom, Immigration Department, JUPEM, Department, Utility Agencies, Forestry Dept. and L&S	

## AIP Level 2 - Basic Infrastructure sector

Sector : Basic Infrastructure			
Initiative : 10. Border Security Road			
Action step : 10.6 Baram section (292 km) (1/2)			
Action step (s)	Output (s)	Timeline	Resources required
<b>Siting application and land acquisition</b>	Land acquired	Start date	RM76.6 mil (proposed for 13MP)
		2026	
		End date	
		2027	
		Start date	
		2026	
End date			
	Consultant identified and appointed	2026	
		2026	
		2026	
<b>Value management</b>	Preliminary detailed abstract (PDA) and value management report	Start date	
		2026	
		End date	
		2026	
		Start date	RM5 mil (proposed for 13MP)
		2026	
End date			
	Survey report, site investigation report, EIA report, traffic study report and utility mapping report	2026	
		2026	
		2026	
<b>Coordination with utilities agencies</b>	Utilities relocation and protection report with implementation plan	Start date	RM52.1 mil (proposed for 13MP)
		2026	
		End date	
		2027	
		Start date	RM83.3 mil (proposed for 13MP)
		2026	
End date			
<b>Design and tender documentation</b>	Route location and conceptual design, preliminary and detailed engineering design report and tender documentation	2027	

## AIP Level 2 - Basic Infrastructure sector

<b>Sector</b> : Basic Infrastructure			
<b>Initiative</b> : 10. Border Security Road			
<b>Action step</b> : 10.6 Baram section (292 km) (2/2)			
Action step (s)	Output (s)	Timeline	Resources required
<b>Tender</b>	Tender evaluation report, letter of appointment and tender document	Start date	
		2027	
		End date	
2027			
<b>Construction and supervision</b>	Infrastructure completed	Start date	RM3.13 bil (contract)  RM6.7 mil (supervision and design fees)  (proposed for 13MP and 14MP)
		2027	
		End date	
2032			
<b>Outcome based assessment (OBA)</b>	OBA report	Start date	
		2032	
		End date	
2032			
Project Owner	Implementing Agency	Other Stakeholders	
MIPD and MINDEF	JKRS	EPU Sarawak, Royal Malaysia Custom, Immigration Department, JUPEM, Department, Utility Agencies, Forestry Dept. and L&S	

## AIP Level 2 - Basic Infrastructure sector

Sector : Basic Infrastructure			
Initiative : 10. Border Security Road			
Action step : 10.7 Lawas section (155 km) (1/2)			
Action step (s)	Output (s)	Timeline	Resources required
<b>Siting application and land acquisition</b>	Land acquired	Start date	RM40.7 mil (proposed for 13MP)
		2026	
		End date	
		2027	
		Start date	
		2026	
End date			
	Consultant identified and appointed	2026	
		2026	
		2026	
<b>Value management</b>	Preliminary detailed abstract (PDA) and value management report	Start date	
		2026	
		End date	
		2026	
		Start date	RM2.7 mil (proposed for 13MP)
		2026	
End date			
	Survey report, site investigation report, EIA report, traffic study report and utility mapping report	2026	
		2026	
		2026	
<b>Coordination with utilities agencies</b>	Utilities relocation and protection report with implementation plan	Start date	RM17.7 mil (proposed for 13MP)
		2026	
		End date	
		2027	
		Start date	RM42.2 mil (proposed for 13MP)
		2026	
End date			
<b>Design and tender documentation</b>	Route location and conceptual design, preliminary and detailed engineering design report and tender documentation	2027	

## AIP Level 2 - Basic Infrastructure sector

<b>Sector</b> : Basic Infrastructure			
<b>Initiative</b> : 10. Border Security Road			
<b>Action step</b> : 10.7 Baram section (155 km) (2/2)			
Action step (s)	Output (s)	Timeline	Resources required
<b>Tender</b>	Tender evaluation report, letter of appointment and tender document	Start date	
		2027	
		End date	
2027			
<b>Construction and supervision</b>	Infrastructure completed	Start date	RM1.66 bil (contract)  RM5.5 mil (supervision and design fees)  (proposed for 13MP and 14MP)
		2027	
		End date	
2031			
<b>Outcome based assessment (OBA)</b>	OBA report	Start date	
		2031	
		End date	
2031			
Project Owner	Implementing Agency	Other Stakeholders	
MIPD and MINDEF	JKRS	EPU Sarawak, Royal Malaysia Custom, Immigration Department, JUPEM, Department, Utility Agencies, Forestry Dept. and L&S	

## AIP Level 1 - Basic Infrastructure sector

<b>Sector</b>		: Basic Infrastructure	
<b>Strategy</b>		: Synergise inter-agency collaboration to facilitate and drive economic growth	
<b>Initiative</b>		: 11. Road Quality Index (RQI)	
<b>Initiatives</b>		<b>Desired Outcome(s)</b>	
11. Road Quality Index (RQI)		<b>Economic Prosperity</b> <ol style="list-style-type: none"> <li>1. Good facilities and infrastructure will boost economic sector productivity and reduce logistics and maintenance costs</li> <li>1. Provide safety and safer roads (reduction on number of accidents due to road quality condition)</li> <li>1. To achieve RQI 5 for all State roads</li> </ol>	
<b>Timeline</b>		<b>Resources Required</b>	
<b>Start Date</b>	<b>End Date</b>		
2021	2023	<ul style="list-style-type: none"> <li>• RM10 million</li> </ul>	
<b>Project Owner</b>	<b>Implementing Agency</b>	<b>Other Stakeholders</b>	
MIPD	JKR	MOTS, MOTS, DID, local governments, RECODA, DoA, R*DO, KKR and KPLB	

## AIP Level 1 - Basic Infrastructure sector

<b>Sector</b> :		Basic Infrastructure	
<b>Strategy</b> :		<ol style="list-style-type: none"> <li>1. Synergise inter-agency collaboration to facilitate and drive economic growth</li> <li>2. Supportive policies and regulatory framework</li> </ol>	
<b>Initiative</b> :		12. Sustainable Building Development	
Initiatives		Desired Outcome(s)	
<b>12. Sustainable Building Development</b>  <b>(i) State Policy for sustainable building development</b> (sustainable development throughout the building lifecycle)		<b>Environmental Sustainability</b> <ol style="list-style-type: none"> <li>1. Comply to MS1525 with feature in development that can save usage of energy by 20% (supporting State's commitment to reduce greenhouse gas emission by 45%)</li> <li>1. Category 1 and 2 buildings compulsory minimum GBI Certified rating. (Category 1: exceptional character and complexity; Category 2: average complexity)</li> <li>1. Remake/Adapt reuse of existing buildings (promoting recycling &amp; for new construction as the last resort)</li> <li>1. Incorporation of 70% IBS component in Category 1 and 2 buildings and set up of at least 3 new IBS factories throughout Sarawak</li> <li>1. Job creation (new/reskilling/ up-skilling)               <ol style="list-style-type: none"> <li>i. 30 certified GBI facilitator</li> <li>ii. 30 IBS specialist designing engineer</li> <li>iii. 30 IBS certifier</li> <li>iv. 30 Facility manager</li> </ol> </li> </ol> <p>IBS Factory Set-up</p> <ul style="list-style-type: none"> <li>o 360 workers including engineers, technicians, operators</li> </ul>	
Timeline		Resources Required	
Start Date	End Date		
2021	2030 and beyond	<ul style="list-style-type: none"> <li>• Current policies and by-laws, SPA, etc.</li> <li>• Tax incentives</li> </ul>	
Project Owner	Implementing Agency	Other Stakeholders	
MIPD	SBTB and JKR Sarawak	Relevant government agencies, local authorities academic, private sector's professionals, contractors and manufacturers	

## AIP Level 1 - Basic Infrastructure sector

<b>Sector</b> :		Basic Infrastructure	
<b>Strategy</b> :		<ol style="list-style-type: none"> <li>1. Synergise inter-agency collaboration to facilitate and drive economic growth</li> <li>2. Supportive policies and regulatory framework</li> </ol>	
<b>Initiative</b> :		12. Sustainable Building Development (cont'd)	
<b>Initiatives</b>		<b>Desired Outcome(s)</b>	
<b>12. Sustainable Building Development</b>  <b>(ii) State's Building Information Modelling (BIM) policy</b> for the building construction industry ( <i>Adoption of innovation &amp; digital solutions</i> )		<b>Economic Prosperity</b> <b>1. Application of digital process in building life cycle:</b> <ul style="list-style-type: none"> <li>○ Cost savings             <ul style="list-style-type: none"> <li>■ 5 to 10% cost savings through clash detection at pre contract stage</li> <li>■ 40% cost savings if implementation throughout project/building lifecycle</li> </ul> </li> <li>○ Databank of government asset</li> <li>○ 100% government projects to use BIM</li> <li>○ Private development - Category 1 and 2 buildings compulsory BIM application</li> <li>○ Job creation (new/reskilling/ up-skilling)             <ul style="list-style-type: none"> <li>• 3 BIM Manager</li> <li>• 5 BIM Coordinator</li> <li>• 5 BIM Modeller</li> </ul>             (per project basis, employer)           </li> <li>• 1 BIM Manager</li> <li>• 1 BIM Coordinator</li> <li>• 1 BIM Modeller</li> </ul> (per project basis, contractor)	
<b>Timeline</b>		<b>Resources Required</b>	
<b>Start Date</b>	<b>End Date</b>		
2021	2030 and beyond	<ul style="list-style-type: none"> <li>● RM28 million             <ul style="list-style-type: none"> <li>● for JKR to drive implementation (for acquisition of hardware/ software and training)</li> <li>● For private sector's incentives &amp; subsidies</li> </ul> </li> </ul>	
<b>Project Owner</b>	<b>Implementing Agency</b>	<b>Other Stakeholders</b>	
MIPD	SBTB and JKR Sarawak	Relevant government agencies, local authorities academic, private sector's professionals, contractors and manufacturers	

## AIP Level 2 - Basic Infrastructure sector

<b>Sector</b>	: Basic Infrastructure		
<b>Initiative</b>	: 12. Sustainable Building Development		
<b>Action step</b>	: 12. Create the Sarawak Building Technology Board (SBTB) (1/2)		
Action step (s)	Output (s)	Timeline	Resources required
<b>Recommend to State Government to establish Sarawak Building Technology Board</b>	SBTB established and operational  (A collaborative platform for government agencies & the private sector to formulate and regulate construction industry policies and regulations, and drive new innovations, etc.)	Start date	RM500k for administration and operation at JKR Research Centre (base on operation)
		2022	
		End date	
		2023	
<b>Propose Term of Reference (ToR) for SBTB and appointment board members</b>	Establishment of ToR and appointment of board members	Start date	
		2022	
		End date	
		2023	
<b>Review of existing relevant state and national policies, regulation and ordinances and make recommendation to adopt, adapt or formulate new.</b>  Review Sarawak Building Ordinance (SBO), Development Control Standards, Housing, Environment, Heritage, Forest, etc. (related to green planning and development), national IBS and BIM policies  Submit draft for SAG comments and MMKN for endorsement (if required)	Sustainable building development and construction practices  IBS as an accepted standard of construction for repetitive and modular buildings.  Building Information Modelling (BIM) application in building development process	Start date	RM500k for labs, workshops, conventions and study visits.  New localised green development standards from MUDeNR, NREB, MLGH, Forest and other planning authorities.
		2022	
		End date	
		2023	

## AIP Level 2 - Basic Infrastructure sector

<b>Sector</b>	: Basic Infrastructure		
<b>Initiative</b>	: 12. Sustainable Building Development		
<b>Action step</b>	: 12. Create the Sarawak Building Technology Board (SBTB) (2/2)		
Action step (s)	Output (s)	Timeline	Resources required
<b>Roadshow and awareness programme</b>	Measure industry's readiness on the sustainable development	Start date	RM2 mil
		2023	
		End date	
<b>Upskilling and competency programme</b>	Trained local manpower with required skills	Start date	RM16 mil
		2023	
		End date	
<b>Policy enforcement</b>	Development of sustainable of government and private buildings	Start date	RM6 mil
		2023	
		End date	
<b>Outcome Based Assessment (every 3 years)</b>	Identify progress of sustainable development in Sarawak	Start date	
		2023	
		End date	
<b>Research and development</b>	Innovative idea towards sustainable materials, method and technology in building construction	Start date	
		2023	
		End date	
		2030	
Project Owner	Implementing Agency	Other Stakeholders	
MIPD	JKRS / SCTB	Relevant government agencies, local authorities, private sectors, professionals, contractors and manufacturers	

# 1.5 Utilities

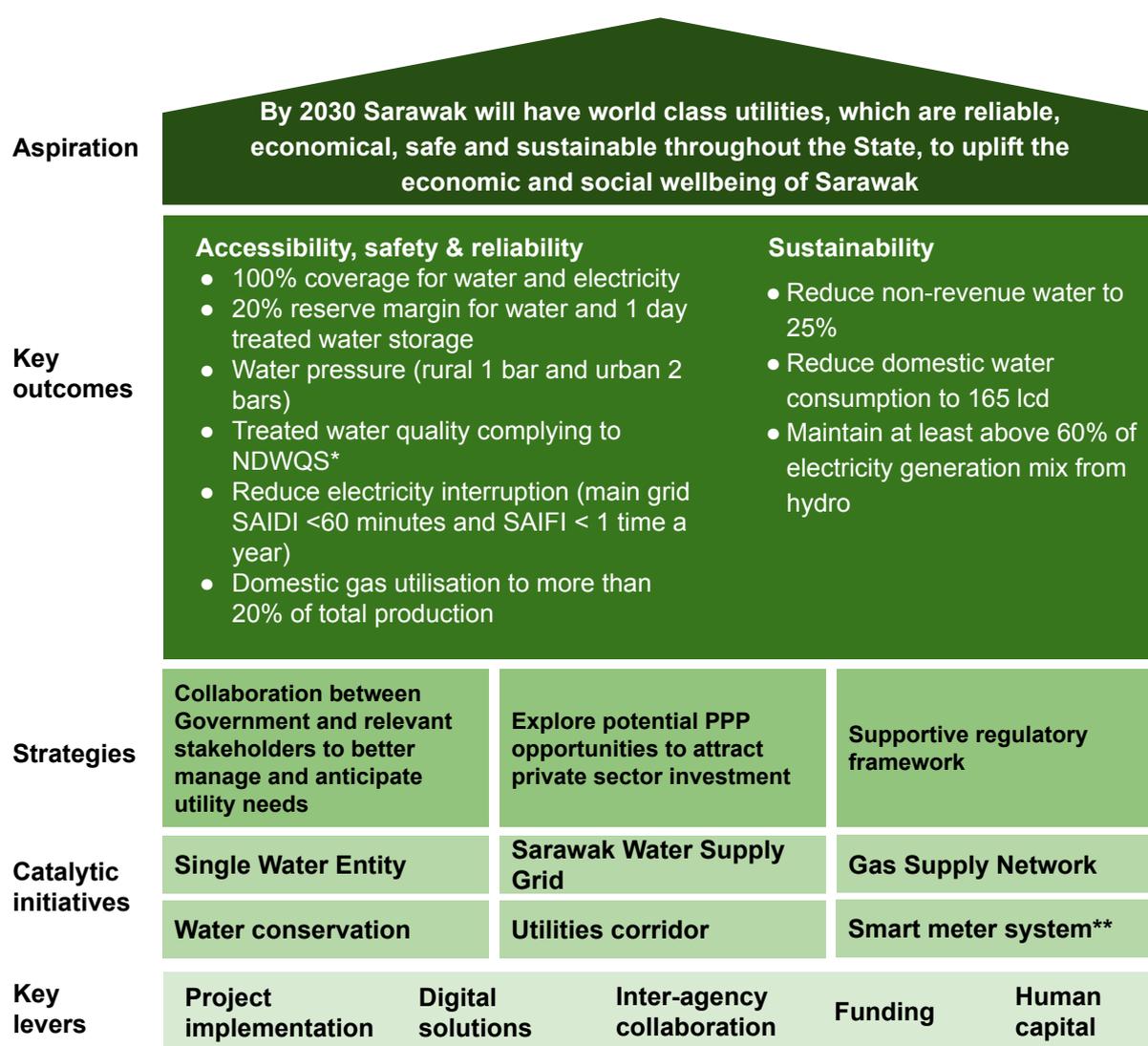
## Aspiration for Utilities Sector

### Develop world class utilities to uplift economic and social wellbeing

Sarawak has abundant natural resources which creates potential for the State to be a regional utility power house. The State should also capitalise on opportunities to act as a resource provider and leader in innovation, management and service delivery to end customers.

Utilities should be provided equitably to Sarawakians in a reliable, economical, safe and sustainable manner. The sector will be an enabler to catalyse socioeconomic development and create high quality job opportunities e.g. within renewable energy, digital and downstream gas industries among others.

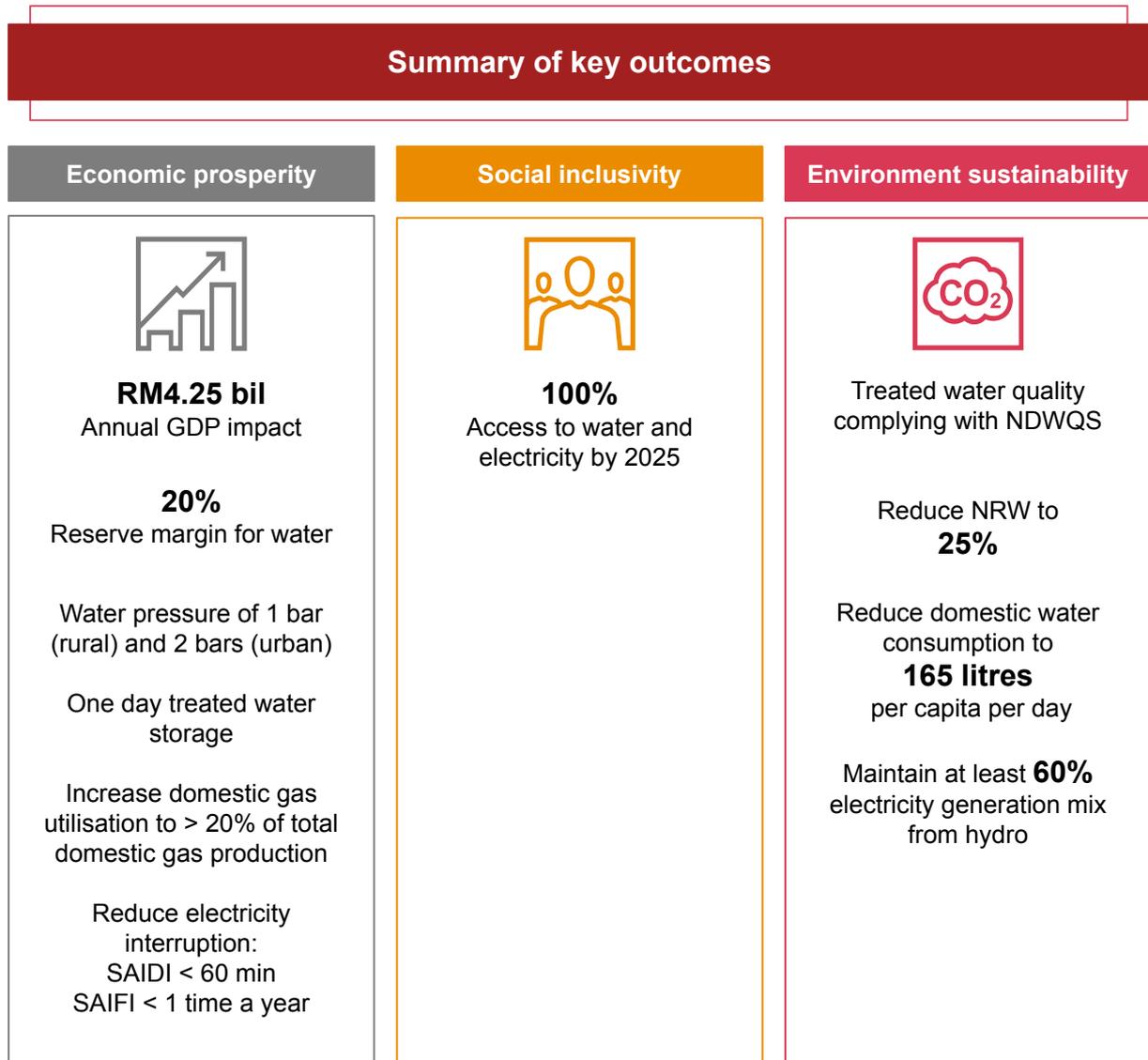
**Figure 1.5.1: Aspiration framework for utilities sector**



Sarawak should adopt a *whole-of-government* approach for coordination and planning to achieve 100% coverage within the time frame. The State should embrace innovative approaches to delivery methods and adoption of technology (e.g. digitalisation of utilities management) to ensure efficiency and sustainability. In addition, continuous upskilling of human capital should be carried out in line with changing development landscapes and technology adoption.

*Note:* \* National Drinking Water Quality Standards  
 \*\* Further discussed under Renewable Energy sector

**Figure 1.5.2: Summary of desired outcomes for utilities sector**



## AIP Level 1 - Utilities sector

<b>Sector</b>	: Utilities		
<b>Strategy</b>	: <ol style="list-style-type: none"> <li>1. Collaboration between Government and relevant stakeholders to better manage and anticipate utility needs</li> <li>2. Explore potential PPP opportunities to attract private sector investment</li> <li>3. Supportive regulatory framework</li> </ol>		
<b>Initiative</b>	: 1. Sarawak Water Supply Grid		
<b>Initiative</b>	<b>Desired Outcome(s)</b>		
<b>Sarawak Water Supply Grid</b>	<p><b>Economic Prosperity</b></p> <ol style="list-style-type: none"> <li>1. To cater for treated water demand of approximately 2,400 MLD in 2030</li> <li>2. Minimum water pressure: 1 bar for rural; 2 bars for urban.</li> <li>3. WTP Reserve margin: minimum 20%. Sufficient WTP capacity of about 3,000 MLD.</li> <li>4. Adequate water storage. One day treated water storage. 24/7 water supply.</li> <li>5. Target to have PPP participation to provide 30% alternative funding of about RM4.1 bil for the implementation 64 numbers of Distribution Network System projects which will serve about 5,000HH</li> </ol> <p><b>Social Inclusivity</b></p> <ol style="list-style-type: none"> <li>1. About additional 72,000 HH will benefit from this programme</li> </ol> <p><b>Environmental Sustainability</b></p> <ol style="list-style-type: none"> <li>1. Ensuring adequate monitoring through Environmental Impact Assessment (EIA) reports</li> </ol>		
<b>Timeline</b>		<b>Resources Required</b>	
<b>Start Date</b>	<b>End Date</b>		
2020	2030	<ul style="list-style-type: none"> <li>• RM14 bil</li> </ul>	
<b>Project Owner</b>	<b>Implementing Agency</b>	<b>Other Stakeholders</b>	
MOU	JBALB, KWB, SWB and LAKU	Industry players, all ministries and government agencies, local communities, private sectors, local YB's offices and RECODA	

## AIP Level 2 - Utilities sector

<b>Sector</b> : Utilities			
<b>Initiative</b> : 1. Sarawak Water Supply Grid			
<b>Action step</b> : 1.1 Review, update and validate Sarawak Water Supply Master Plan and Water Grid			
Action step (s)	Output (s)	Timeline	Resources required
<b>Collaboration and engagement with relevant stakeholders</b>	Revision of Sarawak Water Supply Master Plan and Water Grid (if any)	<b>Start date</b>	No fund required at the moment
		2023	
		<b>End date</b>	
		2030	
Project Owner	Implementing Agency	Other Stakeholders	
MOU	JBALB, KWB, SWB and LAKU	Industry players, all ministries and government agencies, local communities, private sectors, local YB's offices and RECODA	

## AIP Level 2 - Utilities sector

<b>Sector</b> : Utilities			
<b>Initiative</b> : 1. Sarawak Water Supply Grid			
<b>Action step</b> : 1.2 Raw Water Source (1 continuation project)			
Action step (s)	Output (s)	Timeline	Resources required
<b>Planning Process</b>	(i) Tender document (ii) Tender advertisement (iii) Tender evaluation report (iv) Approval from SCTB	Start date	RM13 mil
		2022	
		End date	
		2022	
<b>Appointment of contractor</b>	(i) Issuance of LOA to contractor	Start date	
		2022	
		End date	
		2022	
<b>Commencement of work or development</b> (including possession of site, rectification of defects if any, and preparation of final account)	(i) Issuance of CPC and CMGD	Start date	
		2022	
		End date	
		2025	
<b>MOU to monitor and facilitate via Project Monitoring Committee funded under State or Federal</b>	(i) Monthly project progress meeting and site inspections.	Start date	
		2022	
		End date	
		2025	
Project Owner	Implementing Agency	Other Stakeholders	
MOU	JBALB, KWB, SWB and LAKU	Industry players, all ministries and government agencies, local communities, private sectors, local YB's offices and RECODA	

## AIP Level 2 - Utilities sector

Sector		Utilities	
Initiative		1. Sarawak Water Supply Grid	
Action step		1.3 Raw Water Source (5 new projects)	
Action step (s)	Output (s)	Timeline	Resources required
<b>Planning Process</b> Project identification, funding approval)	(i) List of project identified (ii) Funding approved by State	Start date	Resources required: RM397.5 mil  Front end engineering RM5.52 mil
		2022	
		End date	
<b>Pre-development process</b> (appointment of consultant, site investigation, design, wayleave application and EIA report)	(i) Siting approved by State Planning Authority (SPA) (ii) Detailed building plan approved by State Building Design Committee (SBTC) (iii) Crops compensated & Land acquired (iv) Wayleave approval (v) EIA report approval	Start date	
		2022	
		End date	
<b>Tender</b> Prepare tender document, issue tender, tender evaluation and submission to STCB	(i) Tender document (ii) Tender advertisement (iii) Tender evaluation report (iv) Approval from SCTB	Start date	
		2022	
		End date	
<b>Appointment of contractor</b>	(i) Issuance of LOA to contractor	2024	
		End date	
		2024	
<b>Commencement of work or development</b> (including possession of site, rectification of defects if any, and preparation of final account)	(i) Issuance of CPC and CMGD	Start date	
		2024	
		End date	
<b>MOU to monitor and facilitate via Project Monitoring Committee funded under State or Federal</b>	(i) Monthly project progress meeting and site inspections.	2027	
		Start date	
		2022	
		End date	
		2030	
Project Owner	Implementing Agency	Other Stakeholders	
MOU	JBALB, KWB, SWB and LAKU	Industry players, all ministries and government agencies, local communities, private sectors, local YB's offices and RECODA	

## AIP Level 2 - Utilities sector

Sector : Utilities			
Initiative : 1. Sarawak Water Supply Grid			
Action step : 1.4 Water Treatment Plant (10 continuation projects)			
Action step (s)	Output (s)	Timeline	Resources required
<b>Pre-development process</b> (appointment of consultant, site investigation, design, wayleave application and EIA report)	(i) Siting approved by State Planning Authority (SPA) (ii) Detailed building plan approved by State Building Design Committee (SBTC) (iii) Crops compensated & Land acquired (iv) Wayleave approval (v) EIA report approval	Start date	RM679 mil
		2022	
		End date	
		2022	
		Start date	
<b>Tender</b> Prepare tender document, issue tender, tender evaluation and submission to WSA's board and STCB	(i) Tender document (ii) Tender advertisement (iii) Tender evaluation report (iv) Approval from WSA's board and SCTB	2021	
		End date	
		2022	
		Start date	
<b>Appointment of contractor</b>	(i) Issuance of LOA to contractor	2023	
		End date	
		2023	
		Start date	
<b>Commencement of work or development</b> (including possession of site, rectification of defects if any, and preparation of final account)	(i) Issuance of CPC and CMGD	2023	
		End date	
		2026	
		Start date	
<b>MOU to monitor and facilitate via Project Monitoring Committee funded under State or Federal</b>	(i) Monthly project progress meeting and site inspections.	2022	
		End date	
		2030	
		Project Owner	Implementing Agency
MOU	JBALB, KWB, SWB and LAKU	Industry players, all ministries and government agencies, local communities, private sectors, local YB's offices and RECODA	

## AIP Level 2 - Utilities sector

Sector : Utilities			
Initiative : 1. Sarawak Water Supply Grid			
Action step : 1.5 Water Treatment Plant (23 proposed new projects)			
Action step (s)	Output (s)	Timeline	Resources required
<b>Planning Process</b> Project identification, funding approval)	(i) List of project identified (ii) Funding approved by State	Start date	Resources required: RM5.18 bil  Front end engineering required: RM78.5 mil
		2020	
		End date	
<b>Pre-development process</b> (appointment of consultant, site investigation, design, wayleave application and EIA report)	(i) Issuance of LOA to consultant (ii) Siting approved by State Planning Authority (SPA) (iii) Detailed building plan approved by State Building Design Committee (SBTC) (iv) Crops compensated & Land acquired (v) Wayleave approval (vi) EIA report approval	Start date	
		2022	
		End date	
<b>Tender</b> Prepare tender document, issue tender, tender evaluation and submission to STCB	(i) Tender document (ii) Tender advertisement (iii) Tender evaluation report (iv) Approval from SCTB	Start date	
		2023	
		End date	
<b>Appointment of contractor</b>	(i) Issuance of LOA to contractor	2023	
		End date	
		2023	
<b>Commencement of work or development</b> (including possession of site, rectification of defects if any, and preparation of final account)	(i) Issuance of CPC and CMGD	Start date	
		2023	
		End date	
<b>MOU to monitor and facilitate via Project Monitoring Committee funded under State or Federal</b>	(i) Monthly project progress meeting and site inspections.	2028	
		Start date	
		2022	
		End date	
		2030	
Project Owner	Implementing Agency	Other Stakeholders	
MOU	JBALB, KWB, SWB and LAKU	Industry players, all ministries and government agencies, local communities, private sectors, local YB's offices and RECODA	

## AIP Level 2 - Utilities sector

Sector		Utilities	
Initiative		1. Sarawak Water Supply Grid	
Action step		1.6 Distribution Network System (44 11MP projects)	
Action step (s)	Output (s)	Timeline	Resources required
<b>Pre-development process</b> (appointment of consultant, site investigation, design, wayleave application and EIA report)	(i) Issuance of LOA to consultant (ii) Siting approved by State Planning Authority (SPA) (iii) Detailed building plan approved by State Building Design Committee (SBTC) (iv) Crops compensated & Land acquired (v) Wayleave approval (vi) EIA report approval	Start date	RM931 mil
		11 MP	
		End date	
		2021	
<b>Tender</b> Prepare tender document, issue tender, tender evaluation and submission to WSA's board and STCB	(i) Tender document (ii) Tender advertisement (iii) Tender evaluation report (iv) Approval from WSA's board and SCTB	Start date	
		11 MP	
		End date	
		2022	
<b>Appointment of contractor</b>	(i) Issuance of LOA to contractor	Start date	
		2021	
		End date	
		2022	
<b>Commencement of work or development</b> (including possession of site, rectification of defects if any, and preparation of final account)	(i) Issuance of CPC and CMGD	Start date	
		2021	
		End date	
		2026	
<b>MOU to monitor and facilitate via Project Monitoring Committee funded under State or Federal</b>	(i) Monthly project progress meeting and site inspections.	Start date	
		2022	
		End date	
		2030	
Project Owner	Implementing Agency	Other Stakeholders	
MOU	JBALB, KWB, SWB and LAKU	Industry players, all ministries and government agencies, local communities, private sectors, local YB's offices and RECODA	

## AIP Level 2 - Utilities sector

Sector : Utilities					
Initiative : 1. Sarawak Water Supply Grid					
Action step : 1.7 Distribution Network System (93 proposed new projects)					
Action step (s)	Output (s)	Timeline	Resources required		
<b>Planning Process</b> Project identification, funding approval)	(i) List of project identified (ii) Funding approved by State	Start date	Resources required: RM7.21 bil  Front end engineering required: RM71.15 mil		
		2020			
		End date			
<b>Pre-development process</b> (appointment of consultant, site investigation, design, wayleave application and EIA report)	(i) Issuance of LOA to consultant (ii) Siting approved by State Planning Authority (SPA) (iii) Detailed building plan approved by State Building Design Committee (SBTC) (iv) Crops compensated & Land acquired (v) Wayleave approval (vi) EIA report approval	Start date			
		2021			
		End date			
		2025			
		<b>Tender</b> Prepare tender document, issue tender, tender evaluation and submission to STCB		(i) Tender document (ii) Tender advertisement (iii) Tender evaluation report (iv) Approval from SCTB	Start date
					2021
End date					
<b>Appointment of contractor</b>	(i) Issuance of LOA to contractor	2025			
		Start date			
		2022			
<b>Commencement of work or development</b> (including possession of site, rectification of defects if any, and preparation of final account)	(i) Issuance of CPC and CMGD	End date			
		2022			
		2028			
<b>MOU to monitor and facilitate via Project Monitoring Committee funded under State or Federal</b>	(i) Monthly project progress meeting and site inspections.	Start date			
		2022			
		End date			
2030					
Project Owner	Implementing Agency	Other Stakeholders			
MOU	JBALB, KWB, SWB and LAKU	Industry players, all ministries and government agencies, local communities, private sectors, local YB's offices and RECODA			

## AIP Level 1 - Utilities sector

<b>Sector</b>	: Utilities		
<b>Strategy</b>	: <ol style="list-style-type: none"> <li>1. Collaboration between Government and relevant stakeholders to better manage and anticipate utility needs</li> <li>2. Explore potential PPP opportunities to attract private sector investment</li> <li>3. Supportive regulatory framework</li> </ol>		
<b>Initiative</b>	: 2. Sarawak Alternative Water Supply (SAWAS) Programme		
<b>Initiative</b>	<b>Desired Outcome(s)</b>		
<b>SAWAS Programme</b>	<p><b>Economic Prosperity</b></p> <ol style="list-style-type: none"> <li>1. Adequate water storage - One day treated water storage.</li> </ol> <p><b>Social Inclusivity</b></p> <ol style="list-style-type: none"> <li>1. Providing every rural household with safe water to improve their quality of life and raise their living standard. Providing water supply to Isolated Rural Community - about 1,000 kampungs (22,400 HH) will be served</li> </ol>		
<b>Timeline</b>		<b>Resources Required</b>	
<b>Start Date</b>	<b>End Date</b>		
2020	2030	<ul style="list-style-type: none"> <li>• RM2.97 bil</li> </ul>	
<b>Project Owner</b>	<b>Implementing Agency</b>	<b>Other Stakeholders</b>	
MOU	JBALB, KWB, SWB and LAKU	Industry players, all ministries and government agencies, local communities, private sectors, local YB's offices, RANDO and RECODA	

## AIP Level 2 - Utilities sector

<b>Sector</b>	: Utilities		
<b>Initiative</b>	: 2. Sarawak Alternative Water Supply (SAWAS) Programme		
<b>Action step</b>	: 2.1 SAWAS (1 Approved Project - KPLB)		
Action step (s)	Output (s)	Timeline	Resources required
<b>Tender</b> Prepare tender document, issue tender, tender evaluation and submission to WSA's board and STCB	(i) Tender document (ii) Tender advertisement (iii) Tender evaluation report	Start date	RM25 mil
		11 MP	
		End date	
<b>Commencement of work or development</b> (including possession of site, rectification of defects if any, and preparation of final account)	(i) Issuance of CPC and CMGD	Start date	
		11 MP	
		End date	
<b>MOU to monitor and facilitate via Project Monitoring Committee funded under State or Federal</b>	(i) Monthly project progress meeting and site inspections.	Start date	
		11 MP	
		End date	
2021			
Project Owner	Implementing Agency	Other Stakeholders	
MOU	JBALB	Industry players, all ministries and government agencies, local communities, private sectors, local YB's offices and RECODA	

## AIP Level 2 - Utilities sector

Sector		Utilities	
Initiative		2. SAWAS Programme	
Action step		2.2 SAWAS projects	
Action step (s)	Output (s)	Timeline	Resources required
<b>Planning Process</b> Project identification, funding approval, formulation of policy for PPP, NGO involvement or water foundation	(i) List of project identified (ii) Funding approved by State (iii) Establishment of policy	Start date	RM2.9 bil
		2020	
		End date	
	2025		
<b>Pre-development process</b> (appointment of consultant, site investigation, design, wayleave application and EIA report)	(i) Wayleave approval (from community)	Start date	
		2021	
		End date	
	2022		
<b>Tender</b> Prepare tender document, issue tender, tender evaluation and submission to STCB	(i) Tender document (ii) Tender advertisement (iii) Tender evaluation report (iv) Approval from SCTB	Start date	
		2022	
		End date	
	2022		
<b>Appointment of contractor</b>	(i) Issuance of LOA to contractor	Start date	
		2022	
		End date	
	2022		
<b>Commencement of work or development</b> (including possession of site, rectification of defects if any, and preparation of final account)	(i) Issuance of CPC and CMGD	Start date	
		2022	
		End date	
	2025		
<b>MOU to monitor and facilitate via Project Monitoring Committee funded under State or Federal</b>	(i) Monthly project progress meeting and site inspections.	Start date	
		2022	
		End date	
	2030		
Project Owner	Implementing Agency	Other Stakeholders	
MOU	JBALB, JKNS - BAKAS and JMG	All ministries and government agencies, local communities, private companies, local YB's offices, RANDO and RECODA	

## AIP Level 1 - Utilities sector

<b>Sector</b>	: Utilities		
<b>Strategy</b>	: <ol style="list-style-type: none"> <li>1. Collaboration between Government and relevant stakeholders to better manage and anticipate utility needs</li> <li>2. Explore potential PPP opportunities to attract private sector investment</li> <li>3. Supportive regulatory framework</li> </ol>		
<b>Initiative</b>	: 3. Non-Revenue Water (NRW) Reduction Programme		
<b>Initiative</b>		<b>Desired Outcome(s)</b>	
<b>NRW Reduction Programme</b>		<b>Economic Prosperity</b> <ol style="list-style-type: none"> <li>1. Reduced water loss by achieving 25% NRW by 2025</li> <li>2. Renewal of 780 km of aging pipes</li> </ol>	
<b>Timeline</b>		<b>Resources Required</b>	
<b>Start Date</b>	<b>End Date</b>	<ul style="list-style-type: none"> <li>• RM341 mil</li> </ul>	
2020	2030		
<b>Project Owner</b>	<b>Implementing Agency</b>	<b>Other Stakeholders</b>	
MOU	JBALB, KWB, SWB and LAKU	Industry players, all ministries and government agencies, local communities, private sectors and local YB's offices	

## AIP Level 2 - Utilities sector

Sector : Utilities			
Initiative : 3. Non-Revenue Water (NRW) Reduction Programme			
Action step : 3.1 NRW (4 Approved Projects)			
Action step (s)	Output (s)	Timeline	Resources required
<b>Planning Process</b> Project identification, funding approval	(i) List of project identified (ii) Funding approved by State	Start date	RM76 mil
		2021	
		End date	
<b>Pre-development process</b> Data Collection on existing NRW baseline / Status Carry out study on current distribution system, review of all data collected and analysis of data identification of project scope of works	(i) Ground data (ii) NRW balance and baseline (iii) project scope of work	Start date	
		2021	
		End date	
<b>Tender</b> Prepare tender document, issue tender, tender evaluation and submission to STCB	(i) Tender document (ii) Tender advertisement (iii) Tender evaluation report (iv) Approval from SCTB	Start date	
		2021	
		End date	
<b>Appointment of contractor</b>	(i) Issuance of LOA to contractor	Start date	
		2021	
		End date	
<b>Commencement of work or development</b> (i) SWB - 3 projects (ii) KWB - 1 project	(i) Issuance of CPC for each project	Start date	
		2022	
		End date	
<b>MOU to monitor and facilitate via Project Monitoring Committee funded under State or Federal</b>	(i) Monthly project progress meeting and site inspections.	Start date	
		2022	
		End date	
		2030	
Project Owner	Implementing Agency	Other Stakeholders	
MOU	JBALB, KWB, SWB and LAKU	Industry players, all ministries and government agencies, local communities, private companies and local YB's offices	

## AIP Level 2 - Utilities sector

Sector : Utilities			
Initiative : 3. Non-Revenue Water (NRW) Reduction Programme			
Action step : 3.2 NRW (3 Proposed New Projects)			
Action step (s)	Output (s)	Timeline	Resources required
<b>Planning Process</b> Project identification, funding approval	(i) List of project identified (ii) Funding approved by State	Start date	RM265 mil
		2021	
		End date	
		2021	
<b>Pre-development process</b> Data Collection on existing NRW baseline / Status Carry out study on current distribution system, review of all data collected and analysis of data identification of project scope of works	(i) Ground data (ii) NRW balance and baseline (iii) project scope of work	Start date	
		2021	
		End date	
		2021	
<b>Tender</b> Prepare tender document, issue tender, tender evaluation and submission to STCB	(i) Tender document (ii) Tender advertisement (iii) Tender evaluation report (iv) Approval from SCTB	Start date	
		2021	
		End date	
		2021	
<b>Appointment of contractor</b>	(i) Issuance of LOA to contractor	Start date	
		2021	
		End date	
		2021	
<b>Commencement of work or development</b> (i) SWB - 2 projects (ii) JBALB - 1 project	(i) Issuance of CPC for each project	Start date	
		2022	
		End date	
		2027	
<b>MOU to monitor and facilitate via Project Monitoring Committee funded under State or Federal</b>	(i) Monthly project progress meeting and site inspections.	Start date	
		2022	
		End date	
		2030	
<b>Project Owner</b>	<b>Implementing Agency</b>	<b>Other Stakeholders</b>	
MOU	JBALB, KWB, SWB and LAKU	Industry players, all ministries and government agencies, local communities, private companies and local YB's offices	

## AIP Level 1 - Utilities sector

<b>Sector</b>	: Utilities		
<b>Strategy</b>	: <ol style="list-style-type: none"> <li>1. Collaboration between Government and relevant stakeholders to better manage and anticipate utility needs</li> <li>2. Explore potential PPP opportunities to attract private sector investment</li> <li>3. Supportive regulatory framework</li> </ol>		
<b>Initiative</b>	: 4. Digitalisation and Modernisation		
<b>Initiative</b>	<b>Desired Outcome(s)</b>		
<b>Digital and modernisation</b>	<b>Economic Prosperity</b> <ol style="list-style-type: none"> <li>1. At least 75% of pipeline in Sarawak to be digitally mapped in 2025</li> <li>2. More than 50% of consumers' consumption can be digitally monitored and captured in 2025</li> <li>3. Restoration of water supply within 24 hours</li> <li>4. Resolution of complaints within 2 days</li> </ol>		
<b>Timeline</b>		<b>Resources Required</b>	
<b>Start Date</b>	<b>End Date</b>		
2021	2030	<ul style="list-style-type: none"> <li>• RM3 bil</li> </ul>	
<b>Project Owner</b>	<b>Implementing Agency</b>	<b>Other Stakeholders</b>	
MOU	JBALB, KWB, SWB and LAKU	Industry players, all ministries, SSMU, SMA, L&S Dept., UKAS other government agencies, local communities, private sectors and local YB's offices	

## AIP Level 2 - Utilities sector

Sector : Utilities			
Initiative : 4. Digitalisation and Modernisation			
Action step : Digitalisation and Modernisation			
Action step (s)	Output (s)	Timeline	Resources required
<b>Seek approval of funding from State / Federal</b>	Receiving project cost from State / Federal	Start date	Resources required: RM3 bil  Front end engineering: RM10 mil
		2022	
		End date	
<b>Project proposal and approval from Digital Government Committee (DGC)</b>	Approval project proposal from DGC – for digitalisation initiative	Start date	
		2023	
		End date	
<b>Appointment of consultant</b>	Approval from Jawatankuasa Perolehan (JKP) ICT (under SSMU) Letter of Acceptance (LOA) issue to consultant	Start date	
		2023	
		End date	
<b>Project Initiation &amp; Planning</b>	(i) Project initiation document (ii) Baseline project plan	Start date	
		2023	
		End date	
<b>Tender and award</b>	(i) JKP ICT approval for mode of procurement (work or supply) (ii) Issuance of Letter of Acceptance (LOA)	Start date	
		2024	
		End date	
<b>Project Execution and Control</b> System development Hardware Civil, M&E & IT works System integration	(i) Functional requirement documents (FRD) (ii) Complete installation or deployment	Start date	
		2025	
		End date	
<b>Project closing and monitoring</b>	(i) Issuance of CPC and CMGD (ii) Periodic project monitoring and update	Start date	
		2022	
		End date	
		2026	

## AIP Level 2 - Utilities sector

<b>Sector</b> : Utilities			
<b>Initiative</b> : 4. Digitalisation and Modernisation			
<b>Action step</b> : Digitalisation and Modernisation (cont'd)			
Action step (s)	Output (s)	Timeline	Resources required
<b>MOU to monitor and facilitate via Project Monitoring Committee funded under State or Federal</b>	(i) Monthly project progress meeting and site inspections (ii) Timely completion of project	<b>Start date</b>	
		2022	
		<b>End date</b>	
		2030	
Project Owner	Implementing Agency	Other Stakeholders	
MOU	JBALB, KWB, SWB and LAKU	Industry players, all ministries and government agencies, local communities, private companies and local YB's offices	

## AIP Level 1 - Utilities sector

<b>Sector</b>	: Utilities		
<b>Strategy</b>	: <ol style="list-style-type: none"> <li>1. Collaboration between Government and relevant stakeholders to better manage and anticipate utility needs</li> <li>2. Explore potential PPP opportunities to attract private sector investment</li> <li>3. Supportive regulatory framework</li> </ol>		
<b>Initiative</b>	: 5. Single Water Entity		
<b>Initiative</b>	<b>Desired Outcome(s)</b>		
<b>Single water entity</b>	<b>Economic Prosperity</b> <ol style="list-style-type: none"> <li>1. Single water supply entity to merge four existing water supply entities to provide effective and efficient water supply services</li> <li>2. A regulatory body corporate as the SWA to carry out the general control and supervision of all water supply authorities and the management of all water resources and water catchment areas in Sarawak through IWRM approach</li> <li>3. A uniformed way to ensure all water bodies are monitored and enforcement of any non-compliance is carried out</li> </ol>		
<b>Timeline</b>		<b>Resources Required</b>	
<b>Start Date</b>	<b>End Date</b>		
2020	2025	<ul style="list-style-type: none"> <li>• RM500 mil</li> </ul>	
<b>Project Owner</b>	<b>Implementing Agency</b>	<b>Other Stakeholders</b>	
MOU	JBALB, KWB, SWB and LAKU	EPU, industry players, all ministries and other government agencies, local communities, private sectors and local YB's offices	

## AIP Level 2 - Utilities sector

Sector		Utilities	
Initiative		5. Single Water Entity	
Action step		Single Water Entity and Body Corporate	
Action step (s)	Output (s)	Timeline	Resources required
<b>Complete study by end 2021</b>	(i) Final report	Start date	RM500 mil  Water Ordinance 1994 (WO 1994), Natural Resources and Environment Ordinance (NREO), Sarawak River Ordinance (SRO), Sarawak Forest Ordinance (SFO), Environmental Quality Act 1974
		2020	
		End date	
<b>Prepare legal changes</b> Prepare MMKN paper for amendment for the Single Water Entity and Body Corporate	(i) Approval by MMKN	Start date	
		2021	
		End date	
<b>Establish the one entity</b> Establish the organisation structure, present to SODC, seek MMKN approval	(i) Setting up or establishment of the entity (ii) Approval of MMKN and SODC	Start date	
		2022	
		End date	
<b>Establish the body corporate</b> Establish the organisation structure, present to SODC, seek MMKN approval	(i) Setting up or establishment of the entity (ii) Approval of MMKN and SODC	Start date	
		2022	
		End date	
<b>MOU to monitor, facilitate, review and validate Single One Entity and Body Corporate study</b>	Single One Entity and Body Corporate study reviewed and validated	Start date	
		2020	
		End date	
		2030	
Project Owner	Implementing Agency	Other Stakeholders	
MOU	MOU	EPU Sarawak, industry players, all ministries and government agency, local communities, private companies and local YB's offices	

## AIP Level 1 - Utilities sector

<b>Sector</b> : Utilities			
<b>Strategy</b> : <ol style="list-style-type: none"> <li>1. Collaboration between Government and relevant stakeholders to better manage and anticipate utility needs</li> <li>2. Explore potential PPP opportunities to attract private sector investment</li> <li>3. Supportive regulatory framework</li> </ol>			
<b>Initiative</b> : 6. Water Conservation			
<b>Initiative</b>		<b>Desired Outcome(s)</b>	
<b>Water conservation</b>		<p><b>Economic Prosperity</b></p> <ol style="list-style-type: none"> <li>1. Financial saving for the consumer and water operator by using and producing less water.</li> <li>2. Moderation of new infrastructure investment with deferment of infrastructure works.</li> </ol> <p><b>Environmental Sustainability</b></p> <ol style="list-style-type: none"> <li>1. Reduced domestic water consumption to 165 lcpd (liter per capita per day).</li> </ol>	
<b>Timeline</b>		<b>Resources Required</b>	
<b>Start Date</b>	<b>End Date</b>		
2022	2025	<ul style="list-style-type: none"> <li>• RM1.5 mil</li> </ul>	
<b>Project Owner</b>	<b>Implementing Agency</b>	<b>Other Stakeholders</b>	
MOU	MOU, water supply agencies and selected industrial customers	MINTRED, MUNDENR, NREB/ DOE, MLGH, sewerage department, industry players, certified engineer or technician for water services and local authorities	

## AIP Level 2 - Utilities sector

Sector : Utilities			
Initiative : 6. Water Conservation			
Action step : Water Conservation			
Action step (s)	Output (s)	Timeline	Resources required
<b>Implement water surcharge</b>	(i) For consumption more than 35,000 litres per month per household, the surcharge will be billed	Start date	RM799 mil  Water Ordinance 1994 (WO 1994), Natural Resources and Environment Ordinance (NREO), Sarawak River Ordinance (SRO), Sarawak Forest Ordinance (SFO), Environmental Quality Act 1974
		2022	
		End date	
<b>Implement Water Conservation Awareness</b> Engagement with the public through various programmes such as open day during world water day, short video awareness competition, infographic awareness competition, approach local influencers to make awareness video, spread the awareness through social medias/ radio/ tv	(ii) Domestic water consumption reduced to 165 lcpd (liter per capita per day)	Start date	
		2022	
		End date	
<b>Collaborate with the local councils to install water saving device and installation of rainwater harvesting device</b>	(iii) Installation of water saving device and rain water harvesting device in the new housing development	2030	
		Start date	
		2023	
<b>To appoint consultant to conduct a study on new regulatory framework, supportive policies on water recycling for industry</b>	(iv) Regulatory framework and supporting policy on water recycling (endorsed by State Government)	End date	
		2030	
		Start date	
		2022	
		End date	
		2025	
Project Owner	Implementing Agency	Other Stakeholders	
MOU	MOU, Water Supply Agencies and selected industrial customers	MINTRED, MUNDENR, NREB/ DOE, MLGH, sewerage Department, industry players, certified engineer or technician for water services and local authorities	

## AIP Level 1 - Utilities sector

<b>Sector</b>	: Utilities		
<b>Strategy</b>	: <ol style="list-style-type: none"> <li>1. Collaboration between Government and relevant stakeholders to better manage and anticipate utility needs</li> <li>2. Explore potential PPP opportunities to attract private sector investment</li> <li>3. Supportive regulatory framework</li> </ol>		
<b>Initiative</b>	: 7. Enhancing and sustaining electricity supply system		
<b>Initiative</b>		<b>Desired Outcome(s)</b>	
<b>Enhancing and sustaining electricity supply system</b>		<b>Economic Prosperity</b> <ol style="list-style-type: none"> <li>1. Achieving full coverage by 2025 by connecting estimated 16,200 households</li> <li>2. Achieving reliability in both rural and urban with performance level by meeting SAIDI (less than 60 min) and SAIFI (less than one time/year).</li> </ol>	
<b>Timeline</b>		<b>Resources Required</b>	
<b>Start Date</b>	<b>End Date</b>		
2022	2030	<ul style="list-style-type: none"> <li>• RM799 mil</li> </ul>	
<b>Project Owner</b>	<b>Implementing Agency</b>	<b>Other Stakeholders</b>	
MOU	SEB	EPU Sarawak, SFS, MIPD, RANDO, RECODA, MANRED, L & S, YBs, land owners, local communities, industry players and grid consumers	

## AIP Level 2 - Utilities sector

Sector		Utilities	
Initiative		7. Enhancing and sustaining electricity supply system	
Action step		7.1 Rural Electrification Scheme (RES)- To Grid Connect SARES/Hybrid Villages	
Action step (s)	Output (s)	Timeline	Resources required
<b>MOU as project owner and supervising agency to appoint SEB as Implementing Agency in compliance with Procurement Procedure</b>	MOU appoints SEB as an Implementing Agency	Start date	RM150 mil
		2022	
		End date	
		2022	
		Start date	
		2022	
<b>SEB appoints consultant to undertake technical feasibility study and supervision during project implementation</b>	Appointment of consultants for about 72 villages @ 3,957 households	End date	
		2025	
		Start date	
<b>SEB appoints contractor to implement project. MOU to monitor and facilitate the project.</b>	Appointment of contractors	2022	
		End date	
		2025	
<b>SEB to apply and process for individual, institutional, and communal wayleaves.</b>	(i) Approval or consent for wayleave from external parties.	Start date	
		2022	
		End date	
		2025	
		Start date	
		2022	
<b>SEB to apply and process for departmental wayleaves. MOU to monitor and facilitate.</b>	Approval for wayleave from government or government linked agencies.	End date	
		2025	
		Start date	
<b>MOU to monitor and facilitate via Power Supply Project Monitoring Committee</b>	(i) Monthly project progress meeting and site inspections. (ii) Timely completion of projects	2022	
		End date	
		2025	
Project Owner	Implementing Agency	Other Stakeholders	
MOU	SEB	EPU Sarawak, SFS, MIPD, RANDO, RECODA, MANRED, YBs and land owners	

## AIP Level 2 - Utilities sector

<b>Sector</b> :		Utilities	
<b>Initiative</b> :		7. Enhancing and sustaining electricity supply system	
<b>Action step</b> :		7.2 Replacement of Batteries & Key Components for Stand Alone Solar System	
Action step (s)	Output (s)	Timeline	Resources required
<b>MOU as project owner and supervising agency to appoint SEB as Implementing Agency in compliance with Procurement Procedure</b>	MOU appoints SEB as an Implementing Agency	Start date	RM150 mil
		2022	
		End date	
		2022	
<b>SEB appoints contractor to test the battery and other equipment assessment</b>	Appointment of testing contractors for about 277 villages @ 7,287 HH	Start date	
		2022	
		End date	
		2025	
<b>SEB appoints contractor to supply, transport, install and dispose of old battery</b>	Appointment of about 6 contractors to undertake works (i) Appointment of about 6 contractors to undertake works at 58 villagers or 1,388 HH (ii) Appointment of about 6 contractors to undertake works at 59 villagers or 1,604 HH (iii) Appointment of about 7 contractors to undertake works at 75 villagers or 1,968 HH (iv) Appointment of about 8 contractors to undertake works at 85 villagers or 3,027 HH	Start date	
		2022	
		End date	
		2025	
<b>MOU to monitor and facilitate via Power Supply Project Monitoring Committee</b>	(i) Monthly project progress meeting and site inspections. (ii) Timely completion of projects	Start date	
		2022	
		End date	
		2025	
Project Owner	Implementing Agency	Other Stakeholders	
MOU	SEB	EPU Sarawak, SFS, RANDO, communities	

## AIP Level 2 - Utilities sector

<b>Sector</b> : Utilities			
<b>Initiative</b> : 7. Enhancing and sustaining electricity supply system			
<b>Action step</b> : 7.3 Additional ALAF fund to supply to late/additional applicants			
Action step (s)	Output (s)	Timeline	Resources required
<b>MOU as project owner and supervising agency to appoint SEB as Implementing Agency in compliance with Procurement Procedure</b>	MOU appoints SEB as an Implementing Agency	Start date	RM200 mil
		2022	
		End date	
		2022	
<b>Application screening for eligibility and appointment of consultant by SEB to undertake ground survey, design and supervision of work</b>	Stage 1 - Application screening for eligibility and appointment of consultant by SEB to undertake ground survey, design and supervision work Appointment of about 22 consultants for 5,000 ALAF applicants state-wide July 2022 - December 2023  Stage 2 - Similar with above January 2024 - December 2025	Start date	
		2022	
		End date	
		2025	
<b>SEB Panel contractor undertaking of project through balloting process. Project will be monitored by MOU</b>	Appointment of contractors for 10,000 HH	Start date	
		2022	
		End date	
		2025	
<b>SEB to apply and process for individual, institutional, and communal wayleaves</b>	Approval or consent for wayleave from external parties.	Start date	
		2023	
		End date	
		2025	
<b>MOU to monitor and facilitate via Power Supply Project Monitoring Committee</b>	(i) Monthly project progress meeting and site inspections. (ii) Timely completion of projects	Start date	
		2022	
		End date	
		2025	
Project Owner	Implementing Agency	Other Stakeholders	
MOU	SEB	EPU Sarawak, SFS, MIPD, RANDO, YBs, communities	

## AIP Level 2 - Utilities sector

<b>Sector</b> :		Utilities	
<b>Initiative</b> :		7. Enhancing and sustaining electricity supply system	
<b>Action step</b> :		7.4 Rural Power Supply Scheme (RPSS) for Mulu - 33kV CC line (80km) from Marudi Substation	
Action step (s)	Output (s)	Timeline	Resources required
<b>MOU as project owner and supervising agency to appoint SEB as Implementing Agency in compliance with Procurement Procedure</b>	MOU appoints SEB as an Implementing Agency	Start date	RM40 mil
		2023	
		End date	
		2023	
		Start date	
		2023	
<b>SEB appoints consultant to conduct a detail feasibility study - line route, establish technical requirement, prepares contract specifications and supervision during project implementation.</b>	Appointment of a consultant	End date	
		2023	
		2023	
<b>SEB appoints contractor for project implementation. Project will be monitored by MOU</b>	Appointment of a contractor	Start date	
		2024	
		End date	
		2025	
		Start date	
		2023	
<b>SEB to apply and process for individual, institutional, and communal wayleaves. MOU to monitor and facilitate</b>	Approval or consent for wayleave from external parties. SEB to apply and process for departmental wayleaves. Coordination and cooperation with agencies for installation siting and timely resolving of issues. Approval for wayleave from government or government linked agencies.	End date	
		2025	
		Start date	
<b>MOU to monitor and facilitate via Power Supply Project Monitoring Committee</b>	(i) Monthly project progress meeting and site inspections. (ii) Timely completion of projects	2022	
		End date	
		2025	
Project Owner	Implementing Agency	Other Stakeholders	
MOU	SEB	EPU Sarawak, SFS, MIPD, RANDO, MANRED, RECODA, L&S, YBs and landowners	

## AIP Level 2 - Utilities sector

<b>Sector</b> : Utilities			
<b>Initiative</b> : 7. Enhancing and sustaining electricity supply system			
<b>Action step</b> : 7.5 Rural Power Supply Scheme (RPSS) for Bario - 33kV CC line (40km) from Bakelalan MV Substation			
Action step (s)	Output (s)	Timeline	Resources required
<b>MOU as project owner and supervising agency to appoint SEB as Implementing Agency in compliance with Procurement Procedure</b>	MOU appoints SEB as an Implementing Agency	Start date	RM20 mil
		2024	
		End date	
<b>SEB appoints consultant to conduct a detail feasibility study - line route, establish technical requirement, prepares contract specifications and supervision during project implementation.</b>	Appointment of a consultant	Start date	
		2025	
		End date	
<b>SEB appoints contractor for project implementation. Project will be monitored by MOU</b>	Appointment of a contractor	Start date	
		2025	
		End date	
<b>SEB to apply and process for individual, institutional, and communal wayleaves. MOU to monitor and facilitate</b>	Approval or consent for wayleave from external parties Approval or consent for wayleave from external parties. SEB to apply and process for departmental wayleaves. Coordination and cooperation with agencies for installation siting and timely resolving of issues. Approval for wayleave from government or government linked agencies.	Start date	
		2025	
		End date	
<b>MOU to monitor and facilitate via Power Supply Project Monitoring Committee</b>	(i) Monthly project progress meeting and site inspections. (ii) Timely completion of projects	Start date	
		2022	
		End date	
		2027	
Project Owner	Implementing Agency	Other Stakeholders	
MOU	SEB	EPU Sarawak, SFS, MIPD, RANDO, MANRED, RECODA, L&S, YBs and landowners	

## AIP Level 2 - Utilities sector

<b>Sector</b> : Utilities			
<b>Initiative</b> : 7. Enhancing and sustaining electricity supply system			
<b>Action step</b> : 7.6 Rural Power Supply Scheme (RPSS) for Nanga Merit - 33kV CC line (60km) from Kapit			
Action step (s)	Output (s)	Timeline	Resources required
<b>MOU as project owner and supervising agency to appoint SEB as Implementing Agency in compliance with Procurement Procedure</b>	MOU appoints SEB as an Implementing Agency	Start date	RM30 mil
		2022	
		End date	
<b>SEB appoints consultant to conduct a detail feasibility study - line route, establish technical requirement, prepares contract specifications and supervision during project implementation.</b>	Appointment of a consultant	Start date	
		2022	
		End date	
<b>SEB Panel contractor undertaking of project through balloting process. Project will be monitored by MOU</b>	Appointment of a contractor	Start date	
		2023	
		End date	
<b>SEB to apply and process for individual, institutional, and communal wayleaves. MOU to monitor and facilitate</b>	Approval or consent for wayleave from external parties Approval or consent for wayleave from external parties. SEB to apply and process for departmental wayleaves. Coordination and cooperation with agencies for installation siting and timely resolving of issues. Approval for wayleave from government or government linked agencies.	Start date	
		2022	
		End date	
<b>MOU to monitor and facilitate via Power Supply Project Monitoring Committee</b>	(i) Monthly project progress meeting and site inspections. (ii) Timely completion of projects	Start date	
		2022	
		End date	
2025			
Project Owner	Implementing Agency	Other Stakeholders	
MOU	SEB	EPU Sarawak, SFS, MIPD, RANDO, MANRED, RECODA, L&S, YBs and landowners	

## AIP Level 2 - Utilities sector

<b>Sector</b> : Utilities			
<b>Initiative</b> : 7. Enhancing and sustaining electricity supply system			
<b>Action step</b> : 7.7 Rural Power Supply Scheme (RPSS) for Mulu - 33kV Substation			
Action step (s)	Output (s)	Timeline	Resources required
<b>MOU as project owner and supervising agency to appoint SEB as Implementing Agency in compliance with Procurement Procedure</b>	MOU appoints SEB as an Implementing Agency	Start date	RM15 mil
		2022	
		End date	
<b>SEB appoints consultant to conduct a detail feasibility study - line route, establish technical requirement, prepares contract specifications and supervision during project implementation.</b>	Appointment of a consultant	Start date	
		2022	
		End date	
<b>SEB Panel contractor undertaking of project through balloting process. Project will be monitored by MOU</b>	Appointment of a contractor	Start date	
		2023	
		End date	
<b>SEB to apply and process for individual, institutional, and communal wayleaves. MOU to monitor and facilitate</b>	Approval or consent for wayleave from external parties Approval or consent for wayleave from external parties. SEB to apply and process for departmental wayleaves. Coordination and cooperation with agencies for installation siting and timely resolving of issues. Approval for wayleave from government or government linked agencies.	Start date	
		2022	
		End date	
<b>MOU to monitor and facilitate via Power Supply Project Monitoring Committee</b>	(i) Monthly project progress meeting and site inspections. (ii) Timely completion of projects	Start date	
		2022	
		End date	
2025			
Project Owner	Implementing Agency	Other Stakeholders	
MOU	SEB	EPU Sarawak, SFS, MIPD, RANDO, MANRED, RECODA, L&S, YBs and landowners	

## AIP Level 2 - Utilities sector

<b>Sector</b> : Utilities			
<b>Initiative</b> : 7. Enhancing and sustaining electricity supply system			
<b>Action step</b> : 7.8 Rural Power Supply Scheme (RPSS) for Tunoh -33kV CC line (50km) from Gaat 33kV Substation			
Action step (s)	Output (s)	Timeline	Resources required
<b>MOU as project owner and supervising agency to appoint SEB as Implementing Agency in compliance with Procurement Procedure</b>	MOU appoints SEB as an Implementing Agency	Start date	RM25 mil
		2023	
		End date	
<b>SEB appoints consultant to conduct a detail feasibility study - line route, establish technical requirement, prepares contract specifications and supervision during project implementation.</b>	Appointment of a consultant	Start date	
		2024	
		End date	
<b>SEB Panel contractor undertaking of project through balloting process. Project will be monitored by MOU</b>	Appointment of a contractor	Start date	
		2024	
		End date	
<b>SEB to apply and process for individual, institutional, and communal wayleaves. MOU to monitor and facilitate</b>	Approval or consent for wayleave from external parties Approval or consent for wayleave from external parties. SEB to apply and process for departmental wayleaves. Coordination and cooperation with agencies for installation siting and timely resolving of issues. Approval for wayleave from government or government linked agencies.	Start date	
		2024	
		End date	
<b>MOU to monitor and facilitate via Power Supply Project Monitoring Committee</b>	(i) Monthly project progress meeting and site inspections. (ii) Timely completion of projects	Start date	
		2022	
		End date	
		2025	
Project Owner	Implementing Agency	Other Stakeholders	
MOU	SEB	EPU Sarawak, SFS, MIPD, RANDO, MANRED, RECODA, L&S, YBs and landowners	

## AIP Level 2 - Utilities sector

<b>Sector</b> :		Utilities	
<b>Initiative</b> :		7. Enhancing and sustaining electricity supply system	
<b>Action step</b> :		7.9 Rural Power Supply Scheme (RPSS) for Tunoh - 33kV Substation	
Action step (s)	Output (s)	Timeline	Resources required
<b>MOU as project owner and supervising agency to appoint SEB as Implementing Agency in compliance with Procurement Procedure</b>	MOU appoints SEB as an Implementing Agency	Start date	RM15 mil
		2023	
		End date	
		2023	
<b>SEB appoints consultant to conduct a detail feasibility study - line route, establish technical requirement, prepares contract specifications and supervision during project implementation.</b>	Appointment of a consultant	Start date	
		2024	
		End date	
		2024	
<b>SEB Panel contractor undertaking of project through balloting process. Project will be monitored by MOU</b>	Appointment of a contractor	Start date	
		2025	
		End date	
		2026	
<b>SEB to apply and process for individual, institutional, and communal wayleaves. MOU to monitor and facilitate</b>	Approval or consent for wayleave from external parties Approval or consent for wayleave from external parties. SEB to apply and process for departmental wayleaves. Coordination and cooperation with agencies for installation siting and timely resolving of issues. Approval for wayleave from government or government linked agencies.	Start date	
		2025	
		End date	
		2026	
<b>MOU to monitor and facilitate via Power Supply Project Monitoring Committee</b>	(i) Monthly project progress meeting and site inspections. (ii) Timely completion of projects	Start date	
		2022	
		End date	
		2025	
Project Owner	Implementing Agency	Other Stakeholders	
MOU	SEB	EPU Sarawak, SFS, MIPD, RANDO, MANRED, RECODA, L&S, YBs and landowners	

## AIP Level 2 - Utilities sector

<b>Sector</b>	Utilities		
<b>Initiative</b>	7. Enhancing and sustaining electricity supply system		
<b>Action step</b>	7.10 Achieving reliability in both rural and urban with performance level by meeting SAIDI (less than 60 min) and SAIFI (less than one time/year)		
Action step (s)	Output (s)	Timeline	Resources required
<b>Distribution program: Temporary mobile Switchgear. Providing a temporary switchgear facility when upgrading/refurbishing/replacing existing switchgear in grid system</b>	Purchasing 4 switchgears: 2 in western region (Kuching, Samarahan & Sri Aman) 2 in central region (Sibu, Mukah, Sarikei & Kapit)	Start date	RM154 mil
		2022	
		End date	
		2022	
<b>Distribution program: Mobile Generator Sets. Providing temporary supply during schedule shutdown and during system breakdown.</b>	Tender document Procurement of assets: • 2 units 1MVA for Sibu and Miri. •1 unit 350kVA for Betong.	Start date	
		2022	
		End date	
		2022	
<b>Distribution program: Establish Momentary Average Interruption Frequency Index (MAIFI) measurement</b>	Determine current MAIFI for overall and localised performance of existing system Guideline for MAIFI implementation	Start date	
		2021	
		End date	
		2025	
<b>Distribution Automation and Monitoring</b> Study MAIFI as measure of distribution network system, Preparation of circular and Implementation of MAIFI measurement	(i) 24 hours continuous remote monitoring of SEB substations and assets. (ii) 100% completion of smart surveillance system and by 2025 (iii) 30% of 11/0.415kV Distribution substations equip with DRMS by 2025.	Start date	
		2022	
		End date	
		2025	
Project Owner	Implementing Agency	Other Stakeholders	
MOU	SEB	Industry players and grid consumers	

## AIP Level 2 - Utilities sector

<b>Sector</b> : Utilities			
<b>Initiative</b> : 7. Enhancing and sustaining electricity supply system			
<b>Action step</b> : 7.11 Electricity Supply Master plan incorporating Development Master plan from other agencies			
Action step (s)	Output (s)	Timeline	Resources required
<b>Engagement with relevant stakeholders (e.g. EPU Sarawak, Development Agencies - NRDA, HDA, URDA, SADA &amp; IRDA, MINTRED, MANRED, MTACS, MLGH and others)</b>	(i) Conduct annual workshop with relevant stakeholders (ii) Allow latest development to be incorporated into Electricity Supply Masterplan	Start date	RM1 mil
		2022	
		End date	
		2030	
<b>Review/update of SEB power supply masterplan to ensure coordination with development master plan from other agencies requiring supply (such as development growth areas , industrial sector, agricultural sector, housing development sector, tourism sector)</b>	(i) Revision of Electricity Supply Masterplan. (ii) Timely provision for financing and development of power infrastructure program (iii) Adequate electricity supply to meet demand of the stakeholders.	Start date	RM1 mil
		2022	
		End date	
		2030	
Project Owner	Implementing Agency	Other Stakeholders	
MOU	SEB	EPU Sarawak, relevant ministries and development agencies	

## AIP Level 1 - Utilities sector

<b>Sector</b>	: Utilities		
<b>Strategy</b>	: <ol style="list-style-type: none"> <li>1. Collaboration between Government and relevant stakeholders to better manage and anticipate utility needs</li> <li>2. Explore potential PPP opportunities to attract private sector investment</li> <li>3. Supportive regulatory framework</li> </ol>		
<b>Initiative</b>	: 8. Development of Gas Supply Network across Sarawak		
<b>Initiative</b>	<b>Desired Outcome(s)</b>		
<b>Development of Gas Supply Network across Sarawak</b>	<b>Economic Prosperity</b> <ol style="list-style-type: none"> <li>1. Domestic natural gas utilisation reach 20% by 2030.</li> <li>2. Attract new foreign and local investors for downstream expansion, targeting RM8 bil worth of investment</li> <li>3. Creation of more than 29,800 jobs (~3,800 direct, ~26,000 indirect) by 2030 to benefit the socio economic development of the people.</li> </ol>		
<b>Timeline</b>		<b>Resources Required</b>	
<b>Start Date</b>	<b>End Date</b>		
2021	2025	<ul style="list-style-type: none"> <li>• RM1.6 bil</li> </ul>	
<b>Project Owner</b>	<b>Implementing Agency</b>	<b>Other Stakeholders</b>	
MOU	PETROS	PETRONAS, EPU, MINTRED, MIPD, JKR, L&S, industry players and local communities	

## AIP Level 2 - Utilities sector

<b>Sector</b> : Utilities			
<b>Initiative</b> : 8. Development of Gas Supply Network across Sarawak			
<b>Action step</b> : 8.1 Stakeholder engagement			
Action step (s)	Output (s)	Timeline	Resources required
<b>Engage with relevant stakeholders such as EPU Sarawak, MINTRED and MIPD for alignment of initiative implementation</b>	(i) Conduct annual workshop with relevant stakeholders (ii) Understanding of the needs of each stakeholder and plan for potential collaboration.	Start date	RM20,000
		2021	
		End date	
		2025	
Project Owner	Implementing Agency	Other Stakeholders	
MOU	PETROS	PETRONAS, EPU, MINTRED, MIPD, JKR, L&S, industry players and local communities	

## AIP Level 2 - Utilities sector

<b>Sector</b> :		Utilities	
<b>Initiative</b> :		8. Development of Gas Supply Network across Sarawak	
<b>Action step</b> :		8.2 Bintulu-Samalaju Gas Pipeline (approximately 70km)	
Action step (s)	Output (s)	Timeline	Resources required
<b>Pre implementation stage</b> PETROS to mature project across all phases PETROS and EPU to identify potential investor and Secure source of funding	(i) Issuance of Letter of Acceptance to consultants to carry out work (ii) Secure domestic direct investment (DDI) and foreign direct investment (FDI) worth at least 50% of project CAPEX	Start date	RM599.98 mil
		2021	
End date	2022		
<b>Sarawak Government &amp; PETROS to negotiate with PETRONAS for access to natural gas for domestic use</b>	Secure long-term assess to natural gas for domestic usage from PETRONAS at a competitive price (<USD4/mmbtu)	Start date	
		2021	
End date	2022		
<b>Implementation stage</b> EPCIC tender issuance and evaluation Project commencement, completion and commissioning Land acquisition and right of way	(i) Issuance of LoA (ii) Issuance of CPC and CMGD (iii) Approval for wayleave	Start date	
		2022	
End date	2025		
<b>Promotion and management of natural gas</b> Advocating usage of natural gas, tariff review and policy formulation	(i) Updated gas tariff (ii) Establish policy and incentive to encourage usage and adoption of natural gas	Start date	
		2022	
End date	2025		
<b>MOU to monitor and facilitate via Gas Supply Project Monitoring Committee.</b>	(i) TOR for the project monitoring committee (ii) Establishment of the project monitoring procedure (iii) Monthly project progress meeting and site inspections. (iv) Timely completion of projects	Start date	
		2022	
End date	2025		
Project Owner	Implementing Agency	Other Stakeholders	
MOU	PETROS	PETRONAS, EPU, MINTRED, MIPD, JKR, L&S, industry players and local communities	

## AIP Level 2 - Utilities sector

Sector		Utilities	
Initiative		8. Development of Gas Supply Network across Sarawak	
Action step		8.3 Pan Sarawak Virtual Pipeline System	
Action step (s)	Output (s)	Timeline	Resources required
<b>Pre implementation stage</b> PETROS to mature project across all phases PETROS and EPU to identify potential investor and Secure source of funding	(i) Issuance of Letter of Acceptance to consultants to carry out work (ii) Secure domestic direct investment (DDI) and foreign direct investment (FDI) worth at least 50% of project CAPEX	Start date	RM1 bil
		2021	
		End date	
		2022	
<b>Sarawak Government &amp; PETROS to negotiate with PETRONAS for access to natural gas for domestic use</b> (to enter G2G agreement with Qatar/Australia Government should supply of domestic gas is insufficient)	Secure long-term assess to natural gas for domestic usage from PETRONAS at a competitive price (<USD4/mmbtu)	Start date	
		2021	
		End date	
		2022	
<b>Implementation stage</b> EPCIC tender issuance and evaluation Project commencement, completion and commissioning Land acquisition and right of way	(i) Issuance of LoA (ii) Issuance of CPC and CMGD (iii) Approval for wayleave	Start date	
		2022	
		End date	
		2025	
<b>Promotion and management of natural gas</b> Advocating usage of natural gas, tariff review and policy formulation	(i) Updated gas tariff (ii) Establish policy and incentive to encourage usage and adoption of natural gas	Start date	
		2022	
		End date	
		2025	
<b>MOU to monitor and facilitate via Gas Supply Project Monitoring Committee.</b>	(i) TOR for the project monitoring committee (ii) Establishment of the project monitoring procedure (iii) Monthly project progress meeting and site inspections. (iv) Timely completion of projects	Start date	
		2022	
		End date	
		2025	
<b>Project Owner</b>	<b>Implementing Agency</b>	<b>Other Stakeholders</b>	
MOU	PETROS	PETRONAS, EPU, MINTRED, MIPD, JKR, L&S, industry players and local communities	

## AIP Level 1 - Utilities sector

<b>Sector</b>	: Utilities		
<b>Strategy</b>	: <ol style="list-style-type: none"> <li>1. Collaboration between Government and relevant stakeholders to better manage and anticipate utility needs</li> <li>2. Explore potential PPP opportunities to attract private sector investment</li> <li>3. Supportive regulatory framework</li> </ol>		
<b>Initiative</b>	: 9. Utilities Corridor		
<b>Initiative</b>		<b>Desired Outcome(s)</b>	
<b>Utilities Corridor</b>		<b>Economic Prosperity</b> <ol style="list-style-type: none"> <li>1. Avoid future utilities relocations with potential savings of RM1.6 bil</li> <li>2. Improving the reliability of utilities' service level performance.</li> </ol>	
<b>Timeline</b>		<b>Resources Required</b>	
<b>Start Date</b>	<b>End Date</b>	<ul style="list-style-type: none"> <li>• RM1.15 mil</li> </ul>	
2022	2024		
<b>Project Owner</b>	<b>Implementing Agency</b>	<b>Other Stakeholders</b>	
MOU	MIPD, MLGH, local councils and JKR	Land & Survey Dept, MIPD, JKR Sarawak, JKR Malaysia, PETROS, SEB, water agencies, IT, TM, SMA, MCMC, sewerage, DID and SPA	

## AIP Level 2 - Utilities sector

Sector : Utilities			
Initiative : 9. Utilities Corridor			
Action step : Utilities Corridor			
Action step (s)	Output (s)	Timeline	Resources required
<b>Engage with relevant agencies such as L&amp;S, MIPD, JKR, DID, MLGH and councils to establish the roles, functions and responsibilities of the unit or agency for utility corridor</b>	(i) 1 lab session (ii) A clear defined functions and responsibilities for the utility corridor	Start date	RM2.3 mil
		2022	
		End date	
		2022	
<b>Establish policy, legal frameworks, guidelines, standards and practices for utility corridors</b>	A comprehensive requirements allowing operationalisation of either a dedicated unit in any existing agency or a separate department with the role to plan, coordinate, acquire and alienate for the corridor and to maintain and manage the corridor	Start date	
		2022	
		End date	
		2023	
<b>Submit MMKN paper on the utility corridor for operationalizing utility Corridor</b>	Formalisation of the structure for Utility Corridor	Start date	
		2023	
		End date	
		2023	
<b>Appoint consultant to study on land use for Utility Corridor with other land uses with continuous engagement and coordination with other agencies to establish the utility Corridor</b>	(i) A master plan of Utility Corridor coordinated with masterplan from agencies for other land uses. (ii) Formalised monitoring through Utility Corridor Monitoring COmmittee for implementation effectiveness	Start date	
		2023	
		End date	
		2024	
<b>Project Owner</b>	<b>Implementing Agency</b>	<b>Other Stakeholders</b>	
MOU	MIPD, MLGH, local councils and JKR	Land & Survey Dept, MIPD, JKR Sarawak, JKR Malaysia, PETROS, SEB, water agencies, IT, TM, SMA, MCMC, sewerage, DID and SPA	

## AIP Level 1 - Utilities sector

<b>Sector</b> : Utilities			
<b>Strategy</b> : <ol style="list-style-type: none"> <li>1. Collaboration between Government and relevant stakeholders to better manage and anticipate utility needs</li> <li>2. Explore potential PPP opportunities to attract private sector investment</li> <li>3. Supportive regulatory framework</li> </ol>			
<b>Initiative</b> : 10. Smart Meter System			
<b>Initiative</b>		<b>Desired Outcome(s)</b>	
<b>Smart Meter System</b>		<b>Economic Prosperity</b> <ol style="list-style-type: none"> <li>1. Digitalised 50% of water and electricity meters consumers' account by 2025             <ul style="list-style-type: none"> <li>○ Electricity:                 <ul style="list-style-type: none"> <li>■ Potential saving of RM10 mil annually through detection of electricity theft.</li> </ul> </li> <li>○ Water:                 <ul style="list-style-type: none"> <li>■ Potential saving NRW from (commercial loss (15MLD) &amp; physical loss(5MLD) = RM8 mil annually</li> </ul> </li> </ul> </li> <li>2. Smart meters for all new gas installation by 2025             <ul style="list-style-type: none"> <li>○ Increase efficiency in system monitoring and customer billing by 80%</li> <li>○ Promote energy saving, thereby reduces carbon emissions by 10%</li> </ul> </li> <li>3. Smart meters in solar renewable energy to carry out net metering (NEM). NEM uptake of 150 MW by 2030 from Domestic, Small Commercial and Small Industrial consumers.</li> </ol>	
<b>Timeline</b>		<b>Resources Required</b>	
<b>Start Date</b>	<b>End Date</b>		
2022	2029	<ul style="list-style-type: none"> <li>● RM425.5 mil</li> </ul>	
<b>Project Owner</b>	<b>Implementing Agency</b>	<b>Other Stakeholders</b>	
MOU	MOU, SEB, Water Supply Agencies, Gas Authorities and JKR	SMA, MCMC, MIPD, MLGH, RANDO, local councils, grid consumers, housing developer, MLGH, relevant ministries and government agency, private owners, small industry and SEB	

## AIP Level 2 - Utilities sector

Sector : Utilities			
Initiative : 10. Smart Meter System			
Action step : 10.1 Enhancing metering system in Electricity and Water			
Action step (s)	Output (s)	Timeline	Resources required
<b>Setup Advanced Metering Infrastructure (AMI) System</b>	Metering network provision for remote reading feature is established at targeted areas statewide	Start date	RM1.14 bil
		2022	
		End date	
		2029	
<b>Procure smart meters</b>	Smart meters that come with communication module to enable monitoring and/or analysis of load profile and meter reading remotely are procured	Start date	
		2022	
		End date	
		2029	
<b>Installation of Smart Meters</b>	Target 50% of total active customers are installed with smart meters by 2025	Start date	
		2022	
		End date	
		2029	
<b>Setup Meter Data Management System (MDMS)</b>	System that allows storage and integration of meter data for other business functions is ready	Start date	
		2023	
		End date	
		2024	
<b>Establish e-billing system</b>	Monthly reading shall be read remotely from Smart Meter & the data is integrated with SEB and Water Supply Authorities billing systems via MDMS for one bill, invoicing and directly e-mailed to customers. Timely & accurate bills to customers (targeted approx. 50% of total active customers by 2025).	Start date	
		2023	
		End date	
		2024	
<b>Project Owner</b>	<b>Implementing Agency</b>	<b>Other Stakeholders</b>	
MOU, SEB, JBALB, KWB, SWB and LAKU	MOU, SEB, JBALB, KWB, SWB and LAKU	SMA, MCMC	

## AIP Level 2 - Utilities sector

<b>Sector</b> :		Utilities	
<b>Initiative</b> :		10. Smart Meter System	
<b>Action step</b> :		10.2 Enhancing metering system in Gas	
Action step (s)	Output (s)	Timeline	Resources required
<b>Stakeholders engagement to identify gaps on gas metering system</b>	(i) 5 stakeholders' engagement (seminar/lab) (ii) Identified gaps on adoption of gas smart meter	Start date	RM78.65 mil
		2022	
		End date	
		2022	
<b>MOU / PETROS to appoint consultant to establish guidelines, policy and installation standards for Gas Smart Meter</b>	(i) Policy for gas smart metering (ii) Technical guidelines on gas smart meter specification and standard	Start date	
		2022	
		End date	
		2022	
<b>Conduct pilot project</b>	(i) 500 house installed with smart meter as pilot project (ii) Data collection on system reliability and liability for future enhancement	Start date	
		2023	
		End date	
		2023	
<b>Project implementation</b>	40,000 new and existing house are installed with Gas Smart Meter.	Start date	
		2024	
		End date	
		2025	
Project Owner	Implementing Agency	Other Stakeholders	
MOU and PETROS	Sarawak Gas Distribution Sdn. Bhd.	Housing developer, MLGH, relevant ministries and government agencies	

## AIP Level 2 - Utilities sector

<b>Sector</b>	: Utilities		
<b>Initiative</b>	: 10. Smart Meter System		
<b>Action step</b>	: 10.3 Net Energy Metering for small solar renewable energy source		
Action step (s)	Output (s)	Timeline	Resources required
<b>Establish technical guideline</b>	Technical Guideline for connection under NEM	Start date	RM6 mil
		2022	
		End date	
		2022	
<b>Develop and establish connection agreement</b> between NEM consumer and utility to cover commercial, tenure, maintenance responsibility, and billing.	NEM connection agreement between utility and consumer.	Start date	
		2022	
		End date	
		2022	
<b>Training</b> MOU to train qualified solar designer and installer	10 new qualified designers for PV solar scheme 40 new Chargeman L4 (Solar installer)	Start date	
		2023	
		End date	
		2023	
<b>Promotional activities to encourage NEM scheme to consumers</b>	3 seminars to be held (Southern, Central and Northern)	Start date	
		2022	
		End date	
		2025	
<b>Offer incentives to install solar rooftop with NEM connection</b>	800 (domestic, small commercial or industrial) consumers install with PV solar rooftop through NEM scheme	Start date	
		2022	
		End date	
		2025	
Project Owner	Implementing Agency	Other Stakeholders	
MOU	SEB	Private owners and small industries	

## AIP Level 2 - Utilities sector

Sector : Utilities			
Initiative : 10. Smart Meter System			
Action step : 10.4 Solar LED street lighting and smart pole			
Action step (s)	Output (s)	Timeline	Resources required
<b>Develop and establishes standards and practices for solar LED street lighting and smart pole and technical guideline</b>	Standards and practices for solar LED street lighting and smart pole and Technical Guideline for connection under NEM	Start date	RM2 mil
		2022	
		End date	
		2022	
<b>Develop and establish connection agreement between NEM consumer and utility to cover commercial, tenure, maintenance responsibility, and billing.</b>	NEM connection agreement between utility and consumer.	Start date	
		2022	
		End date	
		2022	
<b>Develop and establish new solar LED street lighting pricing mechanism for PPPs</b> undertaking solar street lighting installation, operation and maintenance	New electricity tariff for solar street lighting	Start date	
		2022	
		End date	
		2022	
<b>To train more solar installer (Chargeman L4)</b>	20 new Chargeman L4	Start date	
		2022	
		End date	
		2023	
<b>A policy for PPP to own, operate and manage solar street lightings with new pricing mechanism</b>	Establishment of policy for PPP	Start date	
		2023	
		End date	
		2024	
<b>Pilot projects implementation at smart city projects throughout Sarawak</b>	200 solar LED street light and smart pole	Start date	
		2024	
		End date	
		2025	
Project Owner	Implementing Agency	Other Stakeholders	
MOU	SEB, JKR and local authorities	MIPD, MLGH, Councils, SEB and grid consumers	

# 1.6 Transport

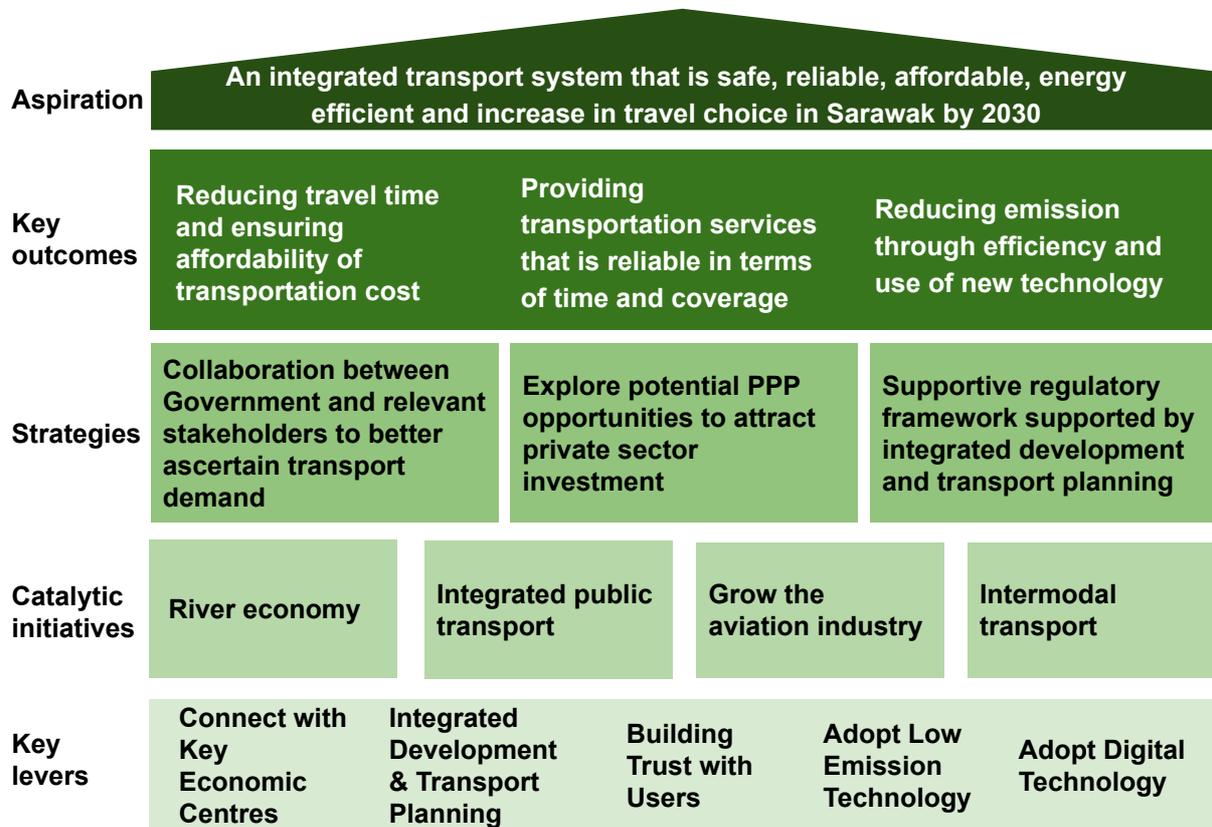
## Aspiration for Transport Sector

### Develop an integrated transport system for Sarawak

The transport sector aims to provide accessible and affordable transport methods to the people while adopting sustainable practices to reduce emissions aided by the utilisation of new technologies. Improvements to transport facilities and infrastructure will also provide seamless logistics services that support growth in the economic sectors.

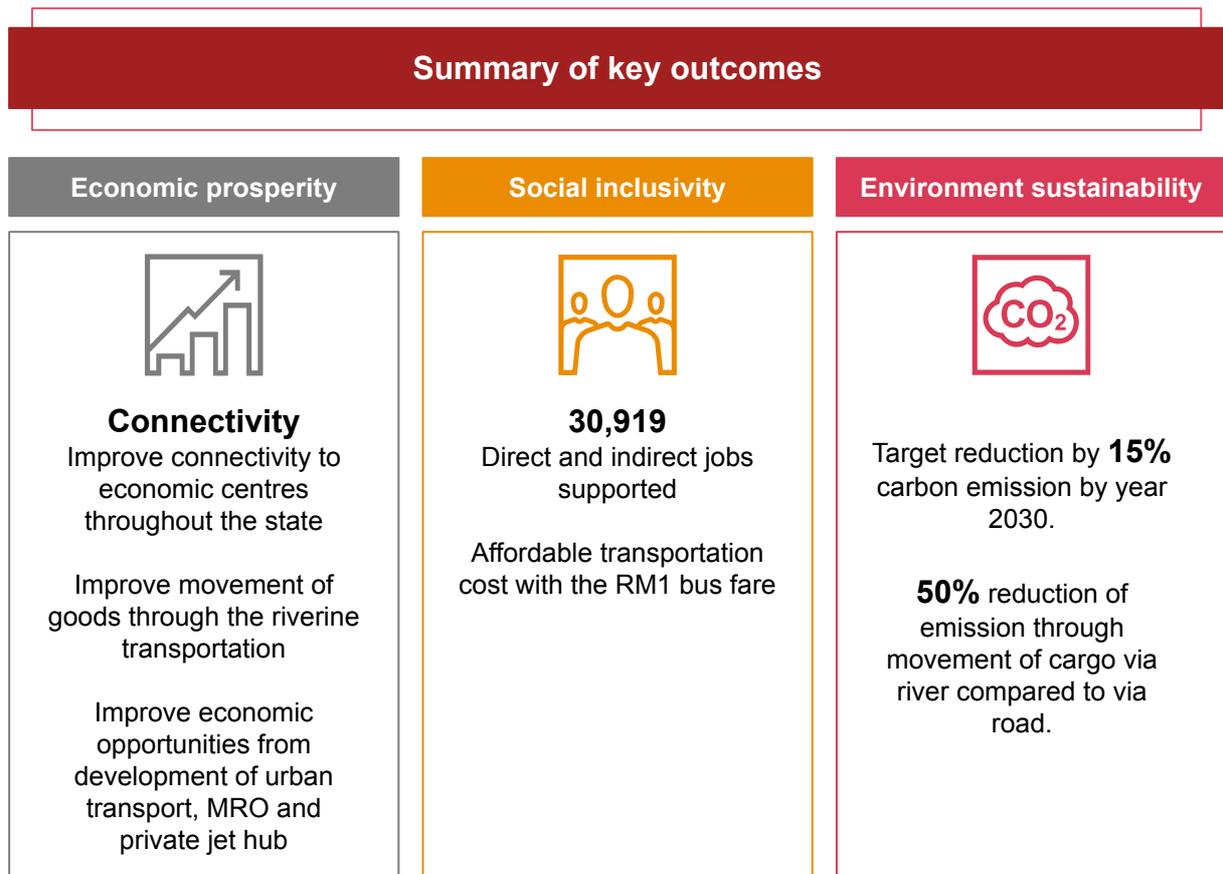
Through better mobility and transportation options, the sector helps increase productivity and open opportunities for Sarawakians to have access to quality jobs either directly from the sector or through spillover effects from the other economic sectors.

**Figure 1.6.1: Aspiration framework for transport sector**



The State will continue to provide transportation connections to key economic centres efficiently and effectively. Low emission technology and digital solutions will be adopted as part of the journey towards reliable and sustainable transport solutions. Finally, to encourage public participation, awareness and trust should be built between transport providers and users through campaigns and also providing reliable services.

**Figure 1.6.2: Summary of desired outcomes for transport sector**



## AIP Level 1 - Transport sector

<b>Sector</b>	: Transport		
<b>Strategy</b>	: Collaboration between Government and relevant stakeholders to better ascertain transport demand		
<b>Initiative</b>	: 1. Improve Safety of Navigation (Installation of Aids to Navigation (AtoN), Vessel Traffic management System (VTMS) and Hydrographic Survey in State rivers)		
<b>Initiative</b>	<b>Desired Outcome(s)</b>		
<b>Improve Safety of Navigation (Installation of Aids to Navigation (AtoN), Vessel Traffic management System (VTMS) and Hydrographic Survey in State rivers)</b>	<b>Economic Prosperity</b>		
	<ol style="list-style-type: none"> <li>1. Ensure safely and enable 24/7 activities through increase in river usage to approximately 500,000 vessel movement a year with estimated revenue of RM4 million per annum</li> <li>2. Safe navigation channel approximately 295 km of upstream waterways with reduction in the number of riverine accidents per annum.</li> </ol>		
	<b>Environmental Sustainability</b>		
	<ol style="list-style-type: none"> <li>1. Comprehensive evidence-based planning and management of resources in the river and reduce environmental damage especially to the riverbank.</li> <li>2. Reduction of emission through efficiency and use of new technology</li> </ol>		
<b>Timeline</b>		<b>Resources Required</b>	
<b>Start Date</b>	<b>End Date</b>		
2022	2025	<ul style="list-style-type: none"> <li>• RM12.28 mil</li> </ul>	
<b>Project Owner</b>	<b>Implementing Agency</b>	<b>Other Stakeholders</b>	
MOTS	SRB	JLWS, STB, MOTSAC, port authorities and shipping companies	

## AIP Level 2 - Transport sector

<b>Sector</b>	: Transport		
<b>Initiative</b>	: Improve Safety of Navigation (Installation of Aids to Navigation (AtoN), Vessel Traffic management System (VTMS) and Hydrographic Survey in State rivers) (1/4)		
<b>Action step</b>	: Installation of AtoN and VTMS at Sungai Sarawak, Kuching Division, Sarawak		
Action step (s)	Output (s)	Timeline	Resources required
<b>1.1 Site Survey, Inspection and specification / documentation</b>	Identified navigation hazard, impediments and site for the installation of Aids to Navigation (AtoN) and surveillance system, specification, design, cost estimate and Tender Document.	Start date	
		2021	
		End date	
		2021	
<b>1.2 Tender</b>	Procurement, Tender evaluation and appointment of Contractor.	Start date	
		2022	
		End date	
		2022	
<b>1.3 Project implementation and monitoring</b>	Ten (10) units Riverine Traffic Signage at sharp bend and blind corners. Four (4) units Light Beacon at shallow patches and blind corners. One (1) unit VTMS tower.	Start date	RM10 mil
		2022	
		End date	
		2023	
<b>1.4 Testing and commissioning, and issue Certificate of Practical Completion (CPC)</b>	Completed Project and issuance of Certificate of Practical Completion (CPC). Implementation of the functional of a system and navigational aids to facilitate the enforcement activities and monitoring of riverine traffic for safety of navigation in the river 24/7.	Start date	
		2022	
		End date	
		2023	
<b>1.5 Enforcement and maintenance of the system and navigational aids</b>	Functioning system of navigational aids from time to time / by schedule. Data for MOTS every month.	Start date	
		2023	
		End date	
		onwards	
Project Owner	Implementing Agency	Other Stakeholders	
MOTS	SRB	JLWS, STB, MOTSAC, port authorities and shipping companies	

## AIP Level 2 - Transport sector

<b>Sector</b>	: Transport		
<b>Initiative</b>	: Improve Safety of Navigation (Installation of Aids to Navigation (AtoN), Vessel Traffic management System (VTMS) and Hydrographic Survey in State rivers) (2/4)		
<b>Action step</b>	: Hydrographic survey of uncharted rivers at Upper Rajang (Nanga Balleh to Belaga – Approx. 170KM)		
Action step (s)	Output (s)	Timeline	Resources required
<b>1.1 Site Survey, Inspection and specification / documentation</b>	Identified active navigational route for the proposed hydrographic survey along the stretch from Nanga Batang Balleh to Belaga.	Start date	
		2021	
		End date	
		2021	
<b>1.2 Tender</b>	Procurement, Tender evaluation and appointment of Contractor.	Start date	
		2022	
		End date	
		2022	
<b>1.3 Project implementation and monitoring</b>	Hydrographic survey along the stretch from Nanga Batang Balleh to Belaga (Approx. 170KM)	Start date	RM1.3 mil
		2022	
		End date	
		2022	
<b>1.4 Testing and commissioning, and issue Certificate of Practical Completion (CPC)</b>	Completed Project and issuance of Certificate of Practical Completion (CPC)	Start date	
		2023	
		End date	
		2023	
<b>1.5 Selling and maintenance of the navigational chart</b>	Revenue by selling SAR Chart / Navigational Chart as a reference for mariners and river users to navigate the river at upstream (e.g. RM60.00 per SAR Chart) SAR Chart / Navigational Chart for updating every 5 years.	Start date	
		2023	
		End date	
		onwards	
Project Owner	Implementing Agency	Other Stakeholders	
MOTS	SRB	JLWS, STB, MOTSAC, port authorities and shipping companies	

## AIP Level 2 - Transport sector

<b>Sector</b>	: Transport		
<b>Initiative</b>	: Improve Safety of Navigation (Installation of Aids to Navigation (AtoN), Vessel Traffic management System (VTMS) and Hydrographic Survey in State rivers) (3/4)		
<b>Action step</b>	: Hydrographic survey of uncharted rivers of upstream Batang Tatau from Kuala Tatau Bridge to Pekan Tatau (Approx. 35KM)		
Action step (s)	Output (s)	Timeline	Resources required
<b>1.1 Site Survey, Inspection and specification / documentation</b>	Identified active navigational route for the proposed hydrographic survey along the stretch from Nanga Batang Balleh to Belaga.	Start date	
		2021	
		End date	
		2021	
<b>1.2 Tender</b>	Procurement, Tender evaluation and appointment of Contractor.	Start date	
		2022	
		End date	
		2022	
<b>1.3 Project implementation and monitoring</b>	Hydrographic surveyed stretch from Kuala Tatau Bridge to Pekan Tatau (Approx. 35KM).	Start date	RM0.28 mil
		2022	
		End date	
		2022	
<b>1.4 Testing and commissioning, and issue Certificate of Practical Completion (CPC)</b>	Completed Project and issuance of Certificate of Practical Completion (CPC)	Start date	
		2023	
		End date	
		2023	
<b>1.5 Selling and maintenance of the navigational chart</b>	Revenue by selling SAR Chart / Navigational Chart as a reference for mariners and river users to navigate the river at upstream (e.g. RM60.00 per SAR Chart) SAR Chart / Navigational Chart for updating every 5 years.	Start date	
		2023	
		End date	
		onwards	
Project Owner	Implementing Agency	Other Stakeholders	
MOTS	SRB	JLWS, STB, MOTSAC, port authorities and shipping companies	

## AIP Level 2 - Transport sector

<b>Sector</b>	: Transport sector		
<b>Initiative</b>	: Improve Safety of Navigation (Installation of Aids to Navigation (AtoN), Vessel Traffic management System (VTMS) and Hydrographic Survey in State rivers) (4/4)		
<b>Action step</b>	: Hydrographic survey of uncharted rivers of Batang Lupar, Sri Aman from river mouth to Bandar Sri Aman until Nanga Batang Undup (Approx. 90KM)		
Action step (s)	Output (s)	Timeline	Resources required
<b>1.1 Site Survey, Inspection and specification / documentation</b>	Identified active navigational route for the proposed hydrographic survey along the stretch from Nanga Batang Balleh to Belaga.	Start date	
		2021	
		End date	
		2021	
<b>1.2 Tender</b>	Procurement, Tender evaluation and appointment of Contractor.	Start date	
		2022	
		End date	
		2022	
<b>1.3 Project implementation and monitoring</b>	Hydrographic surveyed stretch from Batang Lupar, Sri Aman from river mouth to Bandar Sri Aman until Nanga Batang Undup (Approx. 90KM)	Start date	RM0.7 mil
		2022	
		End date	
		2022	
<b>1.4 Testing and commissioning, and issue Certificate of Practical Completion (CPC)</b>	Completed Project and issuance of Certificate of Practical Completion (CPC)	Start date	
		2023	
		End date	
		2023	
<b>1.5 Selling and maintenance of the navigational chart</b>	Revenue by selling SAR Chart / Navigational Chart as a reference for mariners and river users to navigate the river at upstream (e.g. RM60.00 per SAR Chart) SAR Chart / Navigational Chart for updating every 5 years.	Start date	
		2023	
		End date	
		onwards	
Project Owner	Implementing Agency	Other Stakeholders	
MOTS	SRB	JLWS, STB, MOTSAC, port authorities and shipping companies	

## AIP Level 1 - Transport sector

<b>Sector</b>	: Transport		
<b>Strategy</b>	: Collaboration between Government and relevant stakeholders to better ascertain transport demand		
<b>Initiative</b>	: 2. River economy		
<b>Initiative</b>	<b>Desired Outcome(s)</b>		
<b>River economy</b>	<p><b>Economic Prosperity</b></p> <ol style="list-style-type: none"> <li>1. Movement of estimated 3.2 mil tonnes of bulk goods in vessels enables reduction on transport cost, therefore increase in product cost competitiveness. Road damage maintenance cost is also estimated to reduce by RM300 mil per year.</li> <li>2. Mooring facilities for over 300 cargo vessels movement plying along the river daily.</li> </ol> <p><b>Social Inclusivity</b></p> <ol style="list-style-type: none"> <li>1. Enable immediate deployment of boats for all purposes in time of critical need such as medical response, search and rescue operation and others.</li> </ol> <p><b>Environmental Sustainability</b></p> <ol style="list-style-type: none"> <li>1. Movement of cargo via river can reduce emission of harmful gases by 50% compared to via road.</li> </ol>		
<b>Timeline</b>		<b>Resources Required</b>	
<b>Start Date</b>	<b>End Date</b>		
2022	2024	<ul style="list-style-type: none"> <li>• RM33 mil</li> </ul>	
<b>Project Owner</b>	<b>Implementing Agency</b>	<b>Other Stakeholders</b>	
MOTS	SRB	STB, MOTSAC, L&S, NREB, JKR, riverine transport industry	

## AIP Level 2 - Transport sector

<b>Sector</b> :		Transport	
<b>Initiative</b> :		River economy (1/5)	
<b>Action step</b> :		Replacement of Existing 11 units RC Pontoon	
Action step (s)	Output (s)	Timeline	Resources required
<b>1.1 Siting application</b>	SPA Site Approval	Start date	RM10 mil
		2021	
		End date	
<b>1.2 Appointment of consultant and design</b>	Specification and design, cost estimation and Tender Document	Start date	
		2022	
		End date	
<b>1.3 Tender (Advertisement, Evaluation &amp; Letter of Acceptance Issuance)</b>	Appointment of contractor	Start date	
		2022	
		End date	
<b>1.4 Project implementation</b>	R.C. pontoon, Guide Pile and Gangways	Start date	
		2022	
		End date	
<b>1.5 Issuance of CPC</b>	Certificate of Practical Completion	Start date	
		2024	
		End date	
2024			
<b>Project Owner</b>	<b>Implementing Agency</b>	<b>Other Stakeholders</b>	
MOTS	SRB	STB, L&S, MTAC and local authorities	

## AIP Level 2 - Transport sector

<b>Sector</b> :		Transport	
<b>Initiative</b> :		River economy (2/5)	
<b>Action step</b> :		Construction of Six (6) nos. of Mooring Dolphin in Sibul	
Action step (s)	Output (s)	Timeline	Resources required
<b>1.1 Siting investigation and siting application</b>	SPA Site Approval	Start date	RM8 mil
		2021	
		End date	
		2021	
<b>1.2 Appointment of consultant and design</b>	Specification and design, cost estimation and Tender Document	Start date	
		2022	
		End date	
		2022	
<b>1.3 Tender (Advertisement, Evaluation &amp; Letter of Acceptance Issuance)</b>	Appointment of contractor	Start date	
		2022	
		End date	
		2022	
<b>1.4 Project implementation</b>	Six (6) nos. of mooring dolphin	Start date	
		2022	
		End date	
		2024	
<b>1.5 Issuance of CPC</b>	Certificate of Practical Completion	Start date	
		2024	
		End date	
		2024	
Project Owner	Implementing Agency	Other Stakeholders	
MOTS	SRB	SPA, L&S, JKR, DID and riverine transport industry	

## AIP Level 2 - Transport sector

<b>Sector</b> :		Transport	
<b>Initiative</b> :		River economy (3/5)	
<b>Action step</b> :		Construction of Four (4) nos. of Mooring Dolphin in Kapit	
Action step (s)	Output (s)	Timeline	Resources required
<b>1.1 Siting investigation and siting application</b>	SPA Site Approval	Start date	RM5 mil
		2021	
		End date	
<b>1.2 Appointment of consultant and design</b>	Specification and design, cost estimation and Tender Document	Start date	
		2022	
		End date	
<b>1.3 Tender (Advertisement, Evaluation &amp; Letter of Acceptance Issuance)</b>	Appointment of contractor	Start date	
		2022	
		End date	
<b>1.4 Project implementation</b>	Four (4) nos. of mooring dolphin	Start date	
		2022	
		End date	
<b>1.5 Issuance of CPC</b>	Certificate of Practical Completion	Start date	
		2024	
		End date	
2024			
Project Owner	Implementing Agency	Other Stakeholders	
MOTS	SRB	SPA, L&S, JKR, DID and riverine transport industry	

## AIP Level 2 - Transport sector

<b>Sector</b> :		Transport	
<b>Initiative</b> :		River economy (4/5)	
<b>Action step</b> :		Construction, Completion and Delivery to Site of Floating Boatshed for Wilayah I, II and III	
Action step (s)	Output (s)	Timeline	Resources required
<b>1.1 Siting investigation and siting application</b>	SPA Site Approval	Start date	RM10 mil
		2021	
		End date	
<b>1.2 Appointment of consultant and design</b>	Specification and design, cost estimation and Tender Document	Start date	
		2022	
		End date	
<b>1.3 Tender (Advertisement, Evaluation &amp; Letter of Acceptance Issuance)</b>	Appointment of contractor	Start date	
		2022	
		End date	
<b>1.4 Project implementation</b>	Completion of boat sheds and boat lifts	Start date	
		2022	
		End date	
<b>1.5 Issuance of CPC</b>	Certificate of Practical Completion	Start date	
		2024	
		End date	
2024			
Project Owner	Implementing Agency	Other Stakeholders	
MOTS	SRB	SPA, L&S, JKR, DID and riverine transport industry	

## AIP Level 2 - Transport sector

Sector : Transport			
Initiative : River economy (5/5)			
Action step : Review of Regulation on Riverine Fees			
Action step (s)	Output (s)	Timeline	Resources required
1.1 Formation of Internal Committee	Committee formed	Start date	
		2021	
		End date	
1.2 Discussion and identify the policy objective(s)	Terms of Reference on the policy revision of riverine fees	2021	
		Start date	
		2022	
1.3 Conduct impact analysis	Drafted Bill for the revision of policy on riverine fees	End date	
		2022	
		Start date	
1.4 Stakeholders engagement	Presentation and feedback on the drafted Bill for the revision of policy on riverine fees	2022	
		End date	
		2022	
1.5 Present conclusion and recommendation	2nd draft Bill for the revision of policy on riverine fees	Start date	
		2022	
		End date	
1.6 Implementation and review proposed policy	3rd draft Bill for the revision of policy on riverine fees	2022	
		Start date	
		2022	
1.7 Submit draft proposal (Regulatory Impact Statement (RIS)) to UPPN	Evaluated and endorsed GRP	End date	
		2022	
		Refer to GRP	
1.8 GRP Technical Committee notifies JPTPANS	Draft Bill agreed by JPTPANS to be tabled to MMKN	Start date	
		2022	
		End date	
1.9 Prepare MMKN Paper for the Draft Bill	Draft Bill approved by MMKN to be tabled in Dewan for decision	2022	
		Start date	
		2022	
End date			
2022			
Project Owner	Implementing Agency	Other Stakeholders	
MOTS	SRB	SRB, SAG and riverine transport industry	

## AIP Level 1 - Transport sector

<b>Sector</b>	: Transport	
<b>Strategy</b>	: Collaboration between Government and relevant stakeholders to better ascertain transport demand	
<b>Initiative</b>	: 3. Urban Land Public Transport	
<b>Initiative</b>	<b>Desired Outcome(s)</b>	
<b>Urban land public transport</b>	<p><b>Economic Prosperity</b></p> <ol style="list-style-type: none"> <li>1. Increase modal share for urban public transport to 20%</li> <li>2. Increase public bus transport ridership from 2% to 15% in urban areas</li> <li>3. Reduce travel time by 25% from 60 minutes at approx. 15km</li> </ol> <p><b>Social Inclusivity</b></p> <ol style="list-style-type: none"> <li>1. Reduce mean household expenditure on transport from 13.5% to 8%</li> </ol>	
<b>Timeline</b>		<b>Resources Required</b>
<b>Start Date</b>	<b>End Date</b>	
2022	2024	<ul style="list-style-type: none"> <li>• RM30.5 mil</li> </ul>
<b>Project Owner</b>	<b>Implementing Agency</b>	<b>Other Stakeholders</b>
MOTS	MOTS	SFS, JKR, SAGC, bus companies, industry players

## AIP Level 2 - Transport sector

<b>Sector</b> : Transport			
<b>Initiative</b> : Urban Land Public Transport (1/2)			
<b>Action step</b> : Miri Urban Transport Action Plan			
Action step (s)	Output (s)	Timeline	Resources required
<b>1.1 Develop Miri Urban Transport Action Plan</b>	Completion of Miri Urban Transport Action Plan	Start date	
		2022	
		End date	
		2024	
<b>1.2 Background studies and preparation of TOR</b>	Completion of TOR	Start date	
		2022	
		End date	
		2022	
<b>1.3 Appointment of Consultant</b> (i.e. shortlisting, tender, evaluation / assessment)	Appointed Consultant based on SFS Approval	Start date	
		2022	
		End date	
		2022	
<b>1.4 Commencement of study</b> (i.e formation of technical and steering committee, stakeholders engagement, technical and steering committee meeting)	Completion of the final report	Start date	RM3 mil
		2023	
		End date	
		2024	
Project Owner	Implementing Agency	Other Stakeholders	
MOTS	MOTS	EPU Sarawak, MIPD, MLGH, Ministry of Tourism, MUDeNR, MINTRED, MANRED, L&S, DOE, NREB, Immigration Dept., DID, JKR, SACOFA, industry players and SME	

## AIP Level 2 - Transport sector

<b>Sector</b> : Transport			
<b>Initiative</b> : Urban Land Public Transport (2/2)			
<b>Action step</b> : Contemporary Survey on Public Transport Usage			
Action step (s)	Output (s)	Timeline	Resources required
<b>1.1 Background studies and preparation of TOR</b>	Completion of TOR	Start date	
		2022	
<b>1.2 Appointment of Consultant</b> (i.e. shortlisting, tender, evaluation / assessment)	Appointed Consultant based on SFS Approval	End date	
		2022	
<b>1.3 Commencement of study</b> (i.e. formation of technical and steering committee, stakeholders engagement, technical and steering committee meeting)	Completion of the final report	Start date	
		2022	
		End date	
		2023	
<b>Project Owner</b>	<b>Implementing Agency</b>	<b>Other Stakeholders</b>	
MOTS	MOTS	SAG, EPU Sarawak, SFS, MLGH, L&S, MBKS, DBKU, PMC, SMC, MCC, BDA, and MMC	

## AIP Level 2 - Transport sector

<b>Sector</b> : Transport			
<b>Initiative</b> : Urban Land Public Transport (1/2)			
<b>Action step</b> : Procurement of New Smart buses (Miri)			
Action step (s)	Output (s)	Timeline	Resources required
<b>1.1 Procurement Tender</b> (in accordance to State Government Procurement Procedure)	Finalisation of Procurement Method ( Identify the terms, scope, Market study, Cost estimation and Identify procurement method)	Start date	RM10 mil
		2021	
		End date	
		2021	
<b>1.2 Preparation of Tender Document for Supply/Services</b>	Tender document (Instruction to Tenderers; Form of Tender; Summary of Tender, Schedule of Prices; Standard/General Specifications)	Start date	
		2022	
		End date	
		2022	
<b>1.3 Preparation of Cost Estimates not exceeding approved allocation</b>	Estimated cost	Start date	
		2022	
		End date	
		2022	
<b>1.4 Tender</b>	Tender evaluation report	Start date	
		2022	
		End date	
		2023	
<b>1.5 Award of contract</b>	Signing of formal contract	Start date	
		2023	
		End date	
		2023	
<b>1.6 Contract Monitoring until Completion / Contract End</b>	Delivery and operation of new smart buses	Start date	
		2023	
		End date	
		2024	
<b>Project Owner</b>	<b>Implementing Agency</b>	<b>Other Stakeholders</b>	
MOTS	MOTS	SFS and industry players	

## AIP Level 2 - Transport sector

<b>Sector</b> : Transport			
<b>Initiative</b> : Urban Land Public Transport (2/2)			
<b>Action step</b> : RM1.00 Flat Rate Bus Fare Subsidy Program			
Action step (s)	Output (s)	Timeline	Resources required
1.1 Invite bus companies to participate in the programme	Participation Agreement	Start date	RM10 mil
		2022	
		End date	
1.2 Acceptance to participate in RM1 Programme	Monthly Reporting Format	Start date	
		2022	
		End date	
1.3 Submission of Monthly Report to MOTS for subsidy	Completed Monthly Report	Start date	
		2022	
		End date	
1.4 MOTS monthly Payment Committee Meeting to approve drop/reject minutes of meeting	Decision of payment and minutes of meeting	Start date	
		2022	
		End date	
1.5 Minute to Warrant Holder (Permanent Secretary) for Payment as per agreed by Payment Committee for disbursement	Minute to Warrant Holder	Start date	
		2022	
		End date	
1.6 Payment Process by Account Section for disbursement of Subsidy to participating bus companies	Payment made	Start date	
		2022	
		End date	
		2022	
Project Owner	Implementing Agency	Other Stakeholders	
MOTS	MOTS	SAG, and all participating stage bus companies	

## AIP Level 1 - Transport sector

<b>Sector</b>	: Transport	
<b>Strategy</b>	: 1. Collaboration between Government and relevant stakeholders to better ascertain transport demand 2. Explore potential PPP opportunities to attract private sector investment	
<b>Initiative</b>	: 4. Integrated Public Transport – Development of Kuching Urban Transport System (KUTS)	
<b>Initiative</b>	<b>Desired Outcome(s)</b>	
<b>Integrated Public Transport – Development of KUTS:</b> <ul style="list-style-type: none"> <li>Automated Rapid Transit (ART) System</li> <li>Feeder Bus</li> <li>TOD</li> </ul>	<b>Economic Prosperity</b> <ol style="list-style-type: none"> <li>Reduce travel time and ensuring affordability of transportation cost <ul style="list-style-type: none"> <li>Improved connectivity, accessibility and productivity for communities and businesses.</li> <li>Estimated daily time savings of 18,000 hrs for each line.</li> <li>Estimated gross savings of RM70 mil spent on vehicle operating cost per annum.</li> </ul> </li> <li>Provide transportation services that is reliable in terms of time and coverage - Subdue the existing trend of traffic growth of 2% per annum with a congestion-free dedicated right of way transit.</li> </ol> <b>Environmental Sustainability</b> <ol style="list-style-type: none"> <li>Reducing emission through efficiency and use of new technology - Environmental sustainability: Adoption of hydrogen technology will reduce significant amount of CO<sub>2</sub> emissions/footprints hence promote the usage of renewable energy. Target reduction by 15% carbon emission by year 2030.</li> </ol>	
<b>Timeline</b>		<b>Resources Required</b>
<b>Start Date</b>	<b>End Date</b>	
2020	2027	<ul style="list-style-type: none"> <li>RM6.5 bil</li> </ul>
<b>Project Owner</b>	<b>Implementing Agency</b>	<b>Other Stakeholders</b>
MOTS (to be decided under tripartite agreement)	Sarawak Metro Sdn Bhd (SMSB)	MOTS, LPKP, JPJ, DOE, NREB, DOSH, BOMBA, MCMC, SMA, SEDC, MIPD, PUSPAKOM, MUNDENR, JWN, JMS, SRB, Land and Survey Office, State Planning Authority, MLGH, MSD, DCA, EPU Sarawak, SFS, MPKS, DBKU, MBKS, MPP, SEB, SEDC E, Telekom, SACOFA, KWB, JBALB and DID.

## AIP Level 2 - Transport sector

<b>Sector</b>	: Transport		
<b>Initiative</b>	: Integrated Public Transport – Development of Kuching Urban Transport System (KUTS) (1/2)		
<b>Action step</b>	: Development of the Phase 1 of Kuching Urban Transport System (KUTS) Project: Automated Rapid Transit (ART) System - Samarahan Line & Serian Line		
Action step (s)	Output (s)	Timeline	Resources required
<b>1.1 Pre-Implementation:</b> <ul style="list-style-type: none"> <li>Procurement Exercise</li> <li>Environment, Social and Heritage Impact Assessments</li> <li>Stakeholder Engagements (Enablers &amp; Public)</li> </ul>	Award of contracts to four (4) major consultancy services and eight (8) major work package contractors by Q4 2023 Approval of Environmental Impact Assessment (EIA) Report by Q4 2021 Complete introductory sessions with relevant stakeholders of KUTS Project by Q4 2022	Start date	RM6 bil
		2020	
		End date	
		2023	
<b>1.2 Implementation:</b> <ul style="list-style-type: none"> <li>Scheme Design, Infrastructure Detailed Design and System Pre &amp; Final Design.</li> <li>Land Acquisition.</li> <li>Infrastructure Construction (Depots, Stations &amp; Alignment), System Installation and Testing &amp; Commissioning.</li> </ul>	Pilot Run of ART vehicle (rolling stock) by Q4 2023. Service Opening of Samarahan Line Stage 1 (Rembus to Stutong) by Q4 2025. Service Opening of Samarahan Line Stage 2 (Stutong to Hikmah) by Q4 2026. Service Opening of Serian Line Stage 1 (Batu 12 to Simpang 3) by Q4 2026. Service Opening of Serian Line Stage 2 (Simpang 3 to Isthmus) by Q2 2027	Start date	
		2020	
		End date	
		2027	
Project Owner	Implementing Agency	Other Stakeholders	
MOTS (To be decided under the Tripartite agreement)	Sarawak Metro Sdn Bhd (SMSB)	MOTS, LPKP, JPJ, DOE, NREB, DOSH, BOMBA, MCMC, SMA, SEDC, MIPD, PUSPAKOM, MUNDENR, JWN, JMS, SRB, Land and Survey Office, State Planning Authority, DCA, EPU Sarawak, SFS, MPKS, DBKU, MBKS, MPP, SEB, SEDC-E, Telekom SACOFA, KWB, JBALB and DID.	

## AIP Level 2 - Transport sector

<b>Sector</b>	: Transport		
<b>Initiative</b>	: Integrated Public Transport – Development of Kuching Urban Transport System (KUTS) (2/2)		
<b>Action step</b>	: Development of the Phase 1 of Kuching Urban Transport System (KUTS) Project: Hydrogen Feeder Bus		
Action step (s)	Output (s)	Timeline	Resources required
<b>1.1 Pre-implementation:</b> <ul style="list-style-type: none"> <li>• Proposal of 'First &amp; Last Mile' alternative solutions.</li> <li>• Procurement Exercise.</li> </ul>	Finalisation of 'First & Last Mile' alternative solution by Q2 2022. Award of contracts to one (1) major consultancy service and four (4) major work package contractors including Bus Original Equipment Manufacturer (OEM) by Q3 2024	Start date	RM500 mil
		2022	
		End date	
		2023	
<b>1.2 Implementation</b> <ul style="list-style-type: none"> <li>• Design and Manufacturing of H2 Feeder Bus.</li> <li>• Depot Equipment and Bus Integrated System (BIS).</li> <li>• Design of Infrastructure (Depot &amp; Bus Stops).</li> <li>• Construction of Depot and Bus Infrastructure.</li> </ul>	Readiness of Feeder Bus services as first and last mile connectivity for Samarahan Line Stage 1 (Rembus to Stutong) by Q4 2025. Samarahan Line Stage 2 (Stutong to Hikmah) by Q4 2026. Serian Line Stage 1 (Batu 12 to Simpang 3) by Q4 2026. Serian Line Stage 2 (Simpang 3 to Isthmus) by Q2 2027.	Start date	
		2022	
		End date	
		2027	
Project Owner	Implementing Agency	Other Stakeholders	
MOTS (To be decided under the Tripartite agreement)	Sarawak Metro Sdn Bhd (SMSB)	MOTS, LPKP, JPJ, DOE, NREB, DOSH, BOMBA, PUSPAKOM, MIPD, MUNDENR, Land and Survey Office, State Planning Authority, EPU Sarawak, SFS, MPKS, DBKU, MBKS, MPP, SEDC-E and SEB.	

## AIP Level 1 - Transport sector

<b>Sector</b>	: Transport		
<b>Strategy</b>	: Explore potential PPP opportunities to attract private sector investment		
<b>Initiative</b>	: 5. MRO Centre facilities in Sarawak		
<b>Initiative</b>	<b>Desired Outcome(s)</b>		
<b>Establish MRO Centre facilities in Sarawak (feasibility study)</b>	<b>Economic Prosperity</b> <ol style="list-style-type: none"> <li>1. Accessibility to MRO facilities in BIMP-EAGA region at competitive rates to serve over 480 aircrafts</li> <li>2. Projected to bring in private investment of RM1 billion and 10,000 direct/indirect jobs</li> </ol>		
<b>Timeline</b>		<b>Resources Required</b>	
<b>Start Date</b>	<b>End Date</b>		
2025	2026	<ul style="list-style-type: none"> <li>• RM1.5 mil</li> </ul>	
<b>Project Owner</b>	<b>Implementing Agency</b>	<b>Other Stakeholders</b>	
MOTS	MOTS	EPU Sarawak, SAG, SFS, JKR, MTAC, MESTR, SEB, NREB, CAAM, MAVCOM, and industry players	

## AIP Level 2 - Transport sector

<b>Sector</b>	: Transport		
<b>Initiative</b>	: MRO Centre facilities in Sarawak		
<b>Action step</b>	: Feasibility study on MRO centre facilities in Sarawak		
Action step (s)	Output (s)	Timeline	Resources required
<b>1.1 Background studies and preparation of TOR</b>	Completion of TOR	End date	RM1.5 mil
		2025	
<b>1.2 Appointment of Consultant</b> (i.e. shortlisting, tender, evaluation / assessment)	Appointed Consultant based on SFS Approval	Start date	
		2025	
<b>1.3 Commencement of study</b> (i.e. formation of technical and steering committee, stakeholders engagement, technical and steering committee meeting)	Completion of the final report	End date	
		2025	
		Start date	
		2026	
Project Owner	Implementing Agency	Other Stakeholders	
MOTS	MOTS	EPU Sarawak, SAG, SFS, JKR, MTAC, MESTR, SEB, NREB, CAAM, MAVCOM and industry players	

## AIP Level 1 - Transport sector

<b>Sector</b>	: Transport		
<b>Strategy</b>	: Explore potential PPP opportunities to attract private sector investment		
<b>Initiative</b>	: 6. Private Jet Hub in Sarawak		
<b>Initiative</b>	<b>Desired Outcome(s)</b>		
<b>Private Jet Hub in Sarawak (feasibility study)</b>	<b>Economic Prosperity</b> <ol style="list-style-type: none"> <li>1. Projected to bring in private investment of RM500 million and 1,000 direct/indirect jobs</li> <li>2. Accessibility to private jet facilities to meet the growing demand for such facilities in this region</li> </ol>		
<b>Timeline</b>		<b>Resources Required</b>	
<b>Start Date</b>	<b>End Date</b>		
2025	2026	<ul style="list-style-type: none"> <li>• RM1.5 mil</li> </ul>	
<b>Project Owner</b>	<b>Implementing Agency</b>	<b>Other Stakeholders</b>	
MOTS	MOTS	EPU Sarawak, SAG, SFS, JKR, MTAC, MESTR, SEB, NREB, CAAM, MAVCOM, and industry players	

## AIP Level 2 - Transport sector

<b>Sector</b>	: Transport		
<b>Initiative</b>	: MRO Centre facilities in Sarawak		
<b>Action step</b>	: Feasibility study on Private Jet hub in Sarawak		
Action step (s)	Output (s)	Timeline	Resources required
<b>1.1 Background studies and preparation of TOR</b>	Completion of TOR	End date	RM1.5 mil
		2025	
<b>1.2 Appointment of Consultant</b> (i.e. shortlisting, tender, evaluation / assessment)	Appointed Consultant based on SFS Approval	Start date	
		2025	
<b>1.3 Commencement of study</b> (i.e. formation of technical and steering committee, stakeholders engagement, technical and steering committee meeting)	Completion of the final report	End date	
		2025	
		Start date	
		2026	
Project Owner	Implementing Agency	Other Stakeholders	
MOTS	MOTS	EPU Sarawak, SAG, SFS, JKR, MTAC, MESTR, SEB, NREB, CAAM, MAVCOM and industry players	

## AIP Level 1 - Transport sector

<b>Sector</b>	: Transport		
<b>Strategy</b>	: 1. Collaboration between Government and relevant stakeholders to better ascertain transport demand 2. Supportive regulatory framework supported by integrated development and transport planning		
<b>Initiative</b>	: 7. Establishment of Sarawak Land Transport Authority (SLTA)		
<b>Initiative</b>	<b>Desired Outcome(s)</b>		
<b>Establishment of SLTA</b>	<b>Economic Prosperity</b> <ol style="list-style-type: none"> <li>1. Authority to formulate policy on land transport activities and public transport</li> <li>2. Authority to plan, develop and coordinate the development of land transport</li> <li>3. Collection of revenue from licensing and permit of 1.925 mil vehicles in the State</li> <li>4. A system of hypothecation from revenue collected from road tax averaging RM96.4 mil annually</li> </ol>		
<b>Timeline</b>		<b>Resources Required</b>	
<b>Start Date</b>	<b>End Date</b>		
2021	2025	<ul style="list-style-type: none"> <li>• RM7.5 mil</li> </ul>	
<b>Project Owner</b>	<b>Implementing Agency</b>	<b>Other Stakeholders</b>	
MOTS	MOTS	EPU Sarawak, SAG, MIPD, MUDeNR, SHRU, NREB, L&S and JKR	

## AIP Level 2 - Transport sector

<b>Sector</b>	: Transport		
<b>Initiative</b>	: Establishment of Sarawak Land Transport Authority (SLTA) (1/2)		
<b>Action step</b>	: Establishment of SLTA		
Action step (s)	Output (s)	Timeline	Resources required
<b>1.1 Establish SLTA and Formation of SLTA Task Force Committee</b>	Establishment of Sarawak Land Transport Authority armed with legal powers to implement transport plans, policies and regulate on road safety, health hazards, transport and traffic activities SLTA Task Force Committee formed	Start date	RM2.5 mil
		2021	
		End date	
		2022	
<b>1.2 Discussion and preparation of Terms of Reference and roles of SLTA</b>	Terms of Reference for the formation of SLTA	Start date	
		2021	
		End date	
		2021	
<b>1.3 SLTA Committee study and draft the Bill for the establishment of SLTA</b>	Drafted Bill for the Establishment of SLTA	Start date	
		2021	
		End date	
		2021	
<b>1.4 Stakeholders engagement</b>	Presentation and feedback on the drafted Bill for the Establishment of SLTA	Start date	
		2021	
		End date	
		2021	
<b>1.5 SLTA Committee discussion based on the feedbacks obtained</b>	2nd draft Bill for the establishment of SLTA	Start date	
		2021	
		End date	
		2021	
<b>1.6 Stakeholders engagement</b> Lab on 2nd draft Bill Submission of 3rd draft Bill for GRP notification	3rd draft Bill for the establishment of SLTA Evaluated and endorsed GRP	Start date	
		2021	
		End date	
		2021	
<b>1.7 GRP Technical Committee notifies JPTPANS</b>	Draft Bill agreed by JPTPANS to be tabled to MMKN	Start date	
		2021	
		End date	
		2022	
<b>1.8 Prepare MMKN Paper for the Draft Bill</b>	Draft Bill approved by MMKN to be tabled in Dewan for decision	Start date	
		2022	
		End date	
		2022	
<b>Project Owner</b>	<b>Implementing Agency</b>	<b>Other Stakeholders</b>	
MOTS	SRB	EPU Sarawak, SAG, MIPD, MUDeNR, MLGH, NREB, L&S, JKR, UPPN, CVLB, JPJ, relevant local authorities	

## AIP Level 2 - Transport sector

<b>Sector</b>	: Transport		
<b>Initiative</b>	: Establishment of Sarawak Land Transport Authority (SLTA) (2/2)		
<b>Action step</b>	: Conduct Study to Formulate the Sarawak Integrated Transport Master Plan		
Action step (s)	Output (s)	Timeline	Resources required
<b>1.1 Background studies and preparation of TOR</b>	Completion of TOR	End date	RM5 mil
		2021	
<b>1.2 Appointment of Consultant</b> (i.e. shortlisting, tender, evaluation / assessment)	Appointed Consultant based on SFS Approval	Start date	
		2021	
<b>1.3 Commencement of study</b> (i.e. formation of technical and steering committee, stakeholders engagement, technical and steering committee meeting)	Completion of the final report	Start date	
		2022	
		End date	
		2023	
Project Owner	Implementing Agency	Other Stakeholders	
MOTS	MOTS	SAG, EPU Sarawak, MUDeNR, MIPD, MLGH, MOU, MOTSAC, L&S, JKR, local authorities and industry players	

# 1.7 Renewable Energy

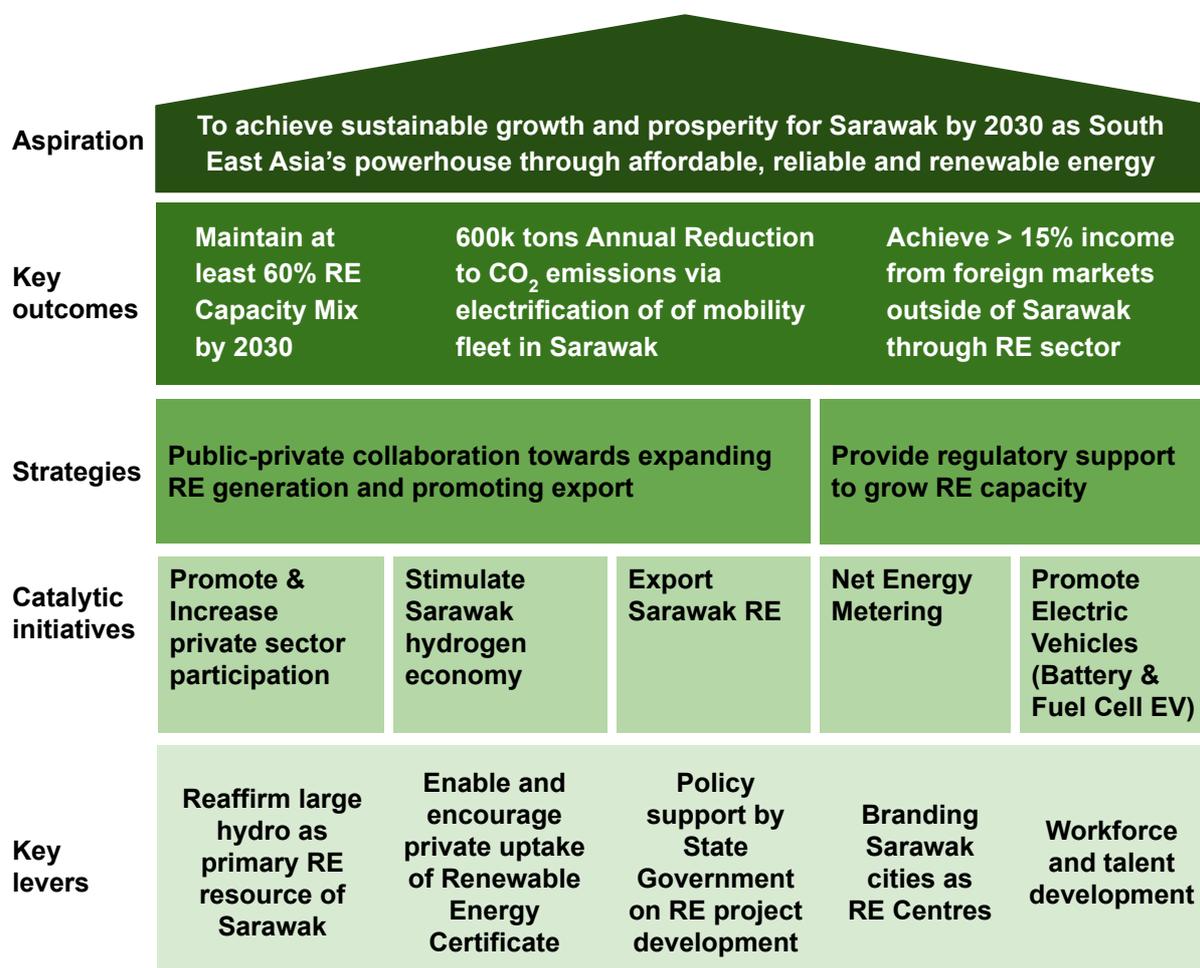
## Aspiration for Renewable Energy Sector

Sarawak aspires to become a regional powerhouse through affordable, reliable and RE, contributing to sustainable growth and prosperity. To achieve this, Sarawak aims to maintain at least 60% of its generation capacity mix from renewable sources. Also, the State is targeting 15% of RE sector income to be generated from foreign markets to be able to be acknowledged as a regional player.

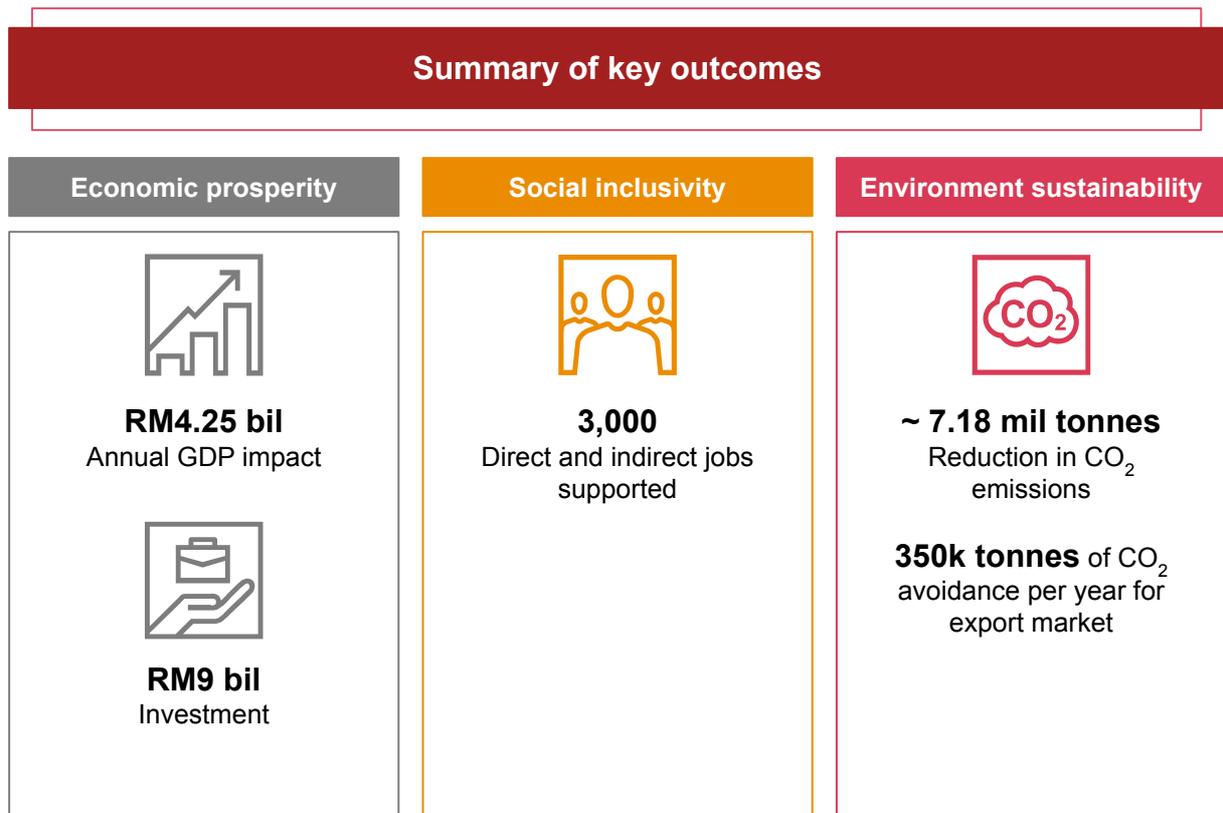
Two broad strategies underpin this aspiration moving forward i.e. further develop public-private collaboration towards expanding RE generation and promote exports of RE and related services. A comprehensive policy on the use of sustainable energy will anchor the expansion of non-fossil fuel energy from various sources such as solar, biomass and hydrogen, on top of large hydropower.

Regulatory and policy changes will support the growth of the RE sector. Identified initiatives focus on increasing RE generation from other sources (e.g. domestic, commercial, industrial) and increasing RE demand from transport sectors. This includes interventions to expand renewable energy utilisation and promote private sector participation such as through floating solar energy expansion, green building policy, electric vehicle promotion and solar expansion for government buildings. The government will also support the development of a hydrogen economy and intensity exports of renewable energy outside of Sarawak.

**Figure 1.7.1: Aspiration framework for renewable energy sector**



**Figure 1.7.2: Summary of desired outcomes for renewable energy sector**



## AIP Level 1 - Renewable Energy sector

<b>Sector</b>	: Renewable Energy		
<b>Strategy</b>	: Promote & increase private sector participation in renewable energy		
<b>Initiative</b>	: 1. Pilot Batang Ai floating solar project 2. Establish large scale solar (LLS) IPPs		
<b>Initiative</b>	<b>Desired Outcome(s)</b>		
<b>1. Pilot Batang Ai floating solar project</b>  <b>2. Establish large scale solar (LLS) IPPs</b>	<b>Economic Prosperity</b> <ol style="list-style-type: none"> <li>Grow Sarawak solar generation to 300MW</li> <li>Solar farm estimated CAPEX is approximately RM4 million /MW. The target capacity will contribute approximately RM1.2 billion investment or RM120 million GDP/year for Sarawak with a multiplier effect of 1.5 times (i.e. RM180 million/year)</li> </ol> <b>Social Inclusivity</b> <ol style="list-style-type: none"> <li>For every MW installed, 10 jobs are created: 5 for upstream (manufacturing, assembly) and 5 for downstream (system installation, construction) totalling 3,000 jobs</li> </ol> <b>Environmental Sustainability</b> <ol style="list-style-type: none"> <li>Reducing CO<sub>2</sub> footprint by displacing ≈ 400k tonnes of CO<sub>2</sub>/year</li> </ol>		
<b>Timeline</b>		<b>Resources Required</b>	
<b>Start Date</b>	<b>End Date</b>		
2021	2030	<ul style="list-style-type: none"> <li>Private (i.e. local/foreign) investment from established solar developers for IPP models</li> </ul>	
<b>Project Owner</b>	<b>Implementing Agency</b>	<b>Other Stakeholders</b>	
SEB, IPP, MOU	SEB, IPP, MOU	EIU, NREB, EPU Sarawak, Land & Survey, MIDA, MITI	

## AIP Level 2 - Renewable Energy sector

<b>Sector</b>	: Renewable Energy		
<b>Initiative</b>	: 1. Pilot Batang Ai floating solar project 2. Establish large scale solar (LLS) IPPs		
<b>Action step</b>	: 1.1 - 1.3		
Action step (s)	Output (s)	Timeline	Resources required
<b>1.1 Establish Public-Private Partnership model</b>  Attract global leader in floating solar and foreign direct investment into Sarawak through the piloting of Batang Ai Floating Solar farm (50MWa.c.)	Completion of scope of works with reputable global IPP  Delivering 50MW solar energy to the grid for 30 years	Start date	Private (i.e. local/foreign) investment from established solar developers for IPP models
		2021	
		End date	
		2023	
<b>1.2 Enable long term Variable Renewable Energy (VRE) penetration</b>  Assess and model Sarawak grid system, followed by reinforcement work to the grid	Completion of scope of works	Start date	Funding for reinforcement and expertise works
		2021	
		End date	
		2030	
<b>1.3 Rollout of Floating Solar Auction for private participation (50MW/year from 2025 – 2030)</b>	300MW floating solar energy contribute to the grid	Start date	Private (i.e. local/foreign) investment from established solar developers for IPP models
		2025	
		End date	
		2030	
Project Owner	Implementing Agency	Other Stakeholders	
SEB, IPP, MOU	SEB, IPP, MOU	EIU, NREB, EPU Sarawak, Land & Survey, MIDA, MITI	

## AIP Level 1 - Renewable Energy sector

<b>Sector</b>	: Renewable Energy		
<b>Strategy</b>	: Promote & increase private sector participation in renewable energy		
<b>Initiative</b>	: 3. Encourage and incentivize oil palm mills to turn biomass waste to energy		
<b>Initiative</b>	<b>Desired Outcome(s)</b>		
<b>3. Encourage and incentivize oil palm mills to turn biomass waste to energy</b>	<p><b>Economic Prosperity</b></p> <ol style="list-style-type: none"> <li>1. Achieve approximately 150MW of biomass waste to energy</li> <li>2. Contribution of RM2 billion investment and RM250 million GDP/year for Sarawak with a multiplier effect of 1.5 times (RM375 million/year).</li> </ol> <p><b>Social Inclusivity</b></p> <ol style="list-style-type: none"> <li>1. Increase job employment by 600 (i.e. direct &amp; indirect).</li> <li>2. 4 job opportunities per MW created (i.e. 25% highly-skilled workforce and 75% low-skilled workforce).</li> </ol> <p><b>Environmental Sustainability</b></p> <ol style="list-style-type: none"> <li>1. Reducing CO<sub>2</sub> footprint by displacing ≈ 2 million tonnes of CO<sub>2</sub>/year</li> </ol>		
<b>Timeline</b>		<b>Resources Required</b>	
<b>Start Date</b>	<b>End Date</b>		
2021	2030	<ul style="list-style-type: none"> <li>• Palm mill industry &amp; private sector</li> <li>• Government enforcement / incentive (RM15sen/KWh) on EFB tipping fee</li> <li>• SEB offtake of RM21sen/KWh</li> </ul>	
<b>Project Owner</b>	<b>Implementing Agency</b>	<b>Other Stakeholders</b>	
SEB, IPP, MOU	SEB, IPP, MOU	EIU, NREB, EPU Sarawak, Land & Survey, MIDA, MITI	

## AIP Level 1 - Renewable Energy sector

<b>Sector</b>	: Renewable Energy
<b>Strategy</b>	: Stimulate Sarawak hydrogen economy
<b>Initiative</b>	: 4. Attract investments for large scale hydrogen production 5. Establish H2 refuelling station network 6. Feasibility study and pilot development of Automated Rapid Transit 7. Encourage private sector participation in Sarawak H2 value chain development 8. Update & integrate Sarawak long term hydrogen blueprint into the hydrogen agenda
Initiative	Desired Outcome(s)
<p><b>4. Attract investments for large scale hydrogen production to meet regional green hydrogen demand for export</b></p> <p><b>5. Establish H2 refuelling station network to support operation of FC buses and long-haul transportation</b></p> <p><b>6. Feasibility study and pilot development of Automated Rapid Transit powered by hydrogen</b></p> <p><b>7. Encourage private sector participation in Sarawak H2 value chain development</b></p> <p><b>8. Update &amp; Integrate Sarawak Long Term Hydrogen Blueprint into the Hydrogen Agenda established through Sarawak Energy in 2019.</b></p>	<p><b>Economic Prosperity</b></p> <ol style="list-style-type: none"> <li>1. Hydrogen production of 40,000 MT/year</li> <li>2. Support growth of 300MW RE generation for green hydrogen production</li> <li>3. Contribute RM4 billion investment and RM500 million GDP/year for Sarawak with a multiplier effect of 1.5 times (RM750 million/year)</li> </ol> <p><b>Social Inclusivity</b></p> <ol style="list-style-type: none"> <li>1. Increasing job employment by 1,000 (i.e. direct &amp; indirect).</li> <li>2. 3 job opportunities per MW created (i.e. 60% highly-skilled workforce and 40% low-skilled workforce)</li> </ol> <p><b>Environmental Sustainability</b></p> <ol style="list-style-type: none"> <li>1. 350k tonnes of CO<sub>2</sub> avoidance/year for export market</li> </ol>

## AIP Level 1 - Renewable Energy sector

<b>Sector</b>	: Renewable Energy		
<b>Strategy</b>	: Stimulate Sarawak hydrogen economy		
<b>Initiative</b>	: 4. Attract investments for large scale hydrogen production 5. Establish H2 refuelling station network 6. Feasibility study and pilot development of Automated Rapid Transit 7. Encourage private sector participation in Sarawak H2 value chain development 8. Update & integrate Sarawak long term hydrogen blueprint into the hydrogen agenda		
<b>Timeline</b>		<b>Resources Required</b>	
<b>Start Date</b>	<b>End Date</b>		
2021	2030	<ul style="list-style-type: none"> <li>• Private Funding</li> <li>• Hydrogen value chain technology</li> <li>• Market (i.e. offtaker)</li> </ul>	
<b>Project Owner</b>	<b>Implementing Agency</b>	<b>Other Stakeholders</b>	
SEB, SEDC, Sarawak Metro	SEB, SEDC, Sarawak Metro	MUDeNR, MINTRED, EPU Sarawak, MOU, MOTS and relevant government agencies (i.e. MIDA, MITI)	

## AIP Level 2 - Renewable Energy sector

<b>Sector</b>	: Renewable Energy		
<b>Initiative</b>	: 4. Attract investments for large scale hydrogen production 5. Establish H2 refuelling station network 6. Feasibility study and pilot development of Automated Rapid Transit 7. Encourage private sector participation in Sarawak H2 value chain development 8. Update & integrate Sarawak long term hydrogen blueprint into the hydrogen agenda		
<b>Action step</b>	: 4.1-4.2		
Action step (s)	Output (s)	Timeline	Resources required
<b>4.1 Establish strategic hydrogen partnership with technology providers (i.e. Chiyoda, Mitsubishi &amp; Sumitomo) and potential hydrogen partners (i.e. Shell MDS, Petronas)</b>	Completion of Front-End-Engineering & Design (FEED) of Green Hydrogen Plant followed by development of the hydrogen plant	Start date	Private funding, hydrogen value chain technology, market (i.e. offtaker)
		2021	
		End date	
		2023	
<b>4.2 Partnership with hydrogen end market</b>  Establish commercial deal to enable profit making hydrogen development in Sarawak	Firm off-take commitment from downstream end market with viable export volume target (20~30 tpa hydrogen export) at competitive pricing terms	Start date	Private funding, hydrogen value chain technology, market (i.e. offtaker)
		2021	
		End date	
		2030	
Project Owner	Implementing Agency	Other Stakeholders	
SEB, SEDC, Sarawak Metro	SEB, SEDC, Sarawak Metro	MUDeNR, MINTRED, EPU Sarawak, MOU, MOTS, Land & Survey, port authorities, LAKU and relevant government agencies (i.e. MIDA, MITI)	

## AIP Level 2 - Renewable Energy sector

<b>Sector</b>	: Renewable Energy		
<b>Initiative</b>	: 4. Attract investments for large scale hydrogen production 5. Establish H2 refuelling station network 6. Feasibility study and pilot development of Automated Rapid Transit 7. Encourage private sector participation in Sarawak H2 value chain development 8. Update & integrate Sarawak long term hydrogen blueprint into the hydrogen agenda		
<b>Action step</b>	: 4.3-4.4		
Action step (s)	Output (s)	Timeline	Resources required
<b>4.3 Infrastructure readiness</b>  a) Siting of land application through BDA & MUDeNR b) Water facility requirement established with LAKU c) Port facility prerequisite agreed with Samalaju Port Authority d) Power connection from SEB e) Stakeholder engagement & endorsement from RECODA & MINTRED	Infrastructure ready for hydrogen plant construction	Start date	Private funding, hydrogen value chain technology, market (i.e. offtaker)
		2021	
		End date	
		2030	
<b>4.4 Development of Phase I of Kuching Urban Transport System Project and Automated Rapid Transit (ART)</b>	ART Pilot Test  Phase I: 50-kilometre route that consists of two lines and 27 stations: <ul style="list-style-type: none"> <li>• Samarahan Line (27km, 14 stations)</li> <li>• Serian Line (23km, 13 stations)</li> <li>• Fleet of Hydrogen vehicles (~60 busses) &amp; depots</li> </ul>	Start date	Funding, hydrogen value chain technology
		2021	
		End date	
		2026	
Project Owner	Implementing Agency	Other Stakeholders	
SEDC, Sarawak Metro	SEDC, Sarawak Metro	MOTS and relevant government agencies	

## AIP Level 2 - Renewable Energy sector

<b>Sector</b>	: Renewable Energy		
<b>Initiative</b>	: 4. Attract investments for large scale hydrogen production 5. Establish H2 refuelling station network 6. Feasibility study and pilot development of Automated Rapid Transit 7. Encourage private sector participation in Sarawak H2 value chain development 8. Update & integrate Sarawak long term hydrogen blueprint into the hydrogen agenda		
<b>Action step</b>	: 4.5-4.6		
Action step (s)	Output (s)	Timeline	Resources required
<b>4.5 Integrated refueling stations</b>	Build network of 100 Integrated Refueling Stations with 25% of these stations with hydrogen refueling capabilities & 100% with electric charging capability	Start date	Funding, hydrogen value chain technology
		2021	
		End date	
		2030	
<b>4.6 Establish a fuel cell &amp; hydrogen related technology centre of excellence which includes manufacturing/assembly and testing capabilities</b>	Phase 1 - Assembly of fuel cell stacks & buses, including R&D facility  Phase 2 - Assembly of other fuel cell vehicles/equipment & test lab for aviation fuel cell technologies  Phase 3 - Manufacturing of fuel cells and related components	Start date	Funding, hydrogen value chain technology
		2022	
		End date	
		20230	
Project Owner	Implementing Agency	Other Stakeholders	
SEDC	SEDC	MOTS and relevant government agencies	

## AIP Level 1 - Renewable Energy sector

<b>Sector</b>	: Renewable Energy	
<b>Strategy</b>	: Promote Net energy Metering (NEM) for domestic, commercial and industrial RE generation	
<b>Initiative</b>	: 9. Provide transparent framework to further promote NEM uptake in Sarawak 10. Incentivize domestic customers with solar PV installation 11. Explore and support key NEM projects	
<b>Initiative</b>	<b>Desired Outcome(s)</b>	
<p><b>9. Provide transparent framework to further promote NEM uptake in Sarawak</b></p> <p><b>10. Incentivize first 500 domestic customers with solar PV installation for the first 3kWp (50% Capex)</b></p> <p><b>11. Explore and support key NEM projects on 3 key areas:</b>            a) Public            b) Commercial            c) Industry</p>	<p><b>Economic Prosperity</b></p> <ol style="list-style-type: none"> <li>1. Grow Sarawak NEM via rooftop solar by 150MW</li> <li>2. Rooftop solar estimated CAPEX is approximately RM4 million /MW. The target capacity will contribute approximately RM0.6 billion investment or RM60 million GDP/year for Sarawak with a multiplier effect of 1.5 times (RM90 million/year)</li> </ol> <p><b>Social Inclusivity</b></p> <ol style="list-style-type: none"> <li>1. For every MW installed, 12 jobs are created: 6 for upstream (i.e. manufacturing, assembly) and 6 for downstream (i.e. system installation, construction) totalling 1,800 jobs</li> </ol> <p><b>Environmental Sustainability</b></p> <ol style="list-style-type: none"> <li>1. Reduce CO<sub>2</sub> footprint by displacing ≈ 180k Tonnes of CO<sub>2</sub>/year</li> </ol>	
<b>Timeline</b>		<b>Resources Required</b>
<b>Start Date</b>	<b>End Date</b>	
2021	2030	<ul style="list-style-type: none"> <li>• Expertise and manpower</li> <li>• Funding from RMK 12 to incentivize domestic rooftop NEM uptake</li> <li>• Private investment (i.e. building owner) for commercial and industrial rooftop solar</li> </ul>
<b>Project Owner</b>	<b>Implementing Agency</b>	<b>Other Stakeholders</b>
EIU, SEB, MOU	EIU, SEB, MOU	Local councils and government agencies

## AIP Level 2 - Renewable Energy sector

<b>Sector</b>	: Renewable Energy		
<b>Initiative</b>	: 9. Provide transparent framework to further promote NEM uptake in Sarawak 10. Incentivize domestic customers with solar PV installation 11. Explore and support key NEM projects		
<b>Action step</b>	: 9.1-9.3		
Action step (s)	Output (s)	Timeline	Resources required
<b>9.1 Rollout and complete 500 domestic household through the 50% CAPEX subsidy grant from RMK12</b>	Completed 500 domestic household with rooftop solar	Start date	Funding from RMK 12 to incentivize domestic rooftop NEM uptake
		2021	
		End date	
		2025	
<b>9.2 Explore and engage with government related bodies to implement NEM on public buildings</b>	Completed installation of 53MW rooftop solar on government owned buildings	Start date	Funding from RMK 12 to incentivize domestic rooftop NEM uptake
		2021	
		End date	
		2030	
<b>9.3 Work closely with commercial and industrial sector on rooftop solar NEM projects</b>	Completed installation of 110MW rooftop solar on commercial and industrial buildings	Start date	Private investment (i.e. building owner) for commercial and industrial rooftop solar
		2021	
		End date	
		2030	
Project Owner	Implementing Agency	Other Stakeholders	
SEB, MOU, relevant government agencies/bodies, commercial and industrial customers	SEB, MOU, relevant government agencies/bodies, commercial and industrial customers	Local councils and relevant government agencies	

## AIP Level 1 - Renewable Energy sector

<b>Sector</b> : Renewable Energy		
<b>Strategy</b> : Export of Renewable Energy		
<b>Initiative</b> : 12. Export Sarawak RE		
Initiative	Desired Outcome(s)	
<b>12. Export Sarawak RE</b>	<p><b>Economic Prosperity</b></p> <ol style="list-style-type: none"> <li>Deploy HVDC undersea interconnection between Sarawak and Singapore / West Malaysia: <ul style="list-style-type: none"> <li>Grow Sarawak generation by 1,200MW</li> <li>Contribute RM3 billion GDP/year for Sarawak to achieve the 15% export income with multiplier effect of 1.5 (approximately RM4.5 billion / year)</li> </ul> </li> </ol> <p><b>Social Inclusivity</b></p> <ol style="list-style-type: none"> <li>Increase job employment by 8,000 (i.e. direct &amp; indirect): <ul style="list-style-type: none"> <li>2,600 direct <ul style="list-style-type: none"> <li>New Power Generation, construction (i.e. local contractors) and procurement</li> </ul> </li> <li>5,400 Indirect <ul style="list-style-type: none"> <li>Due to economy spin off of RM3 billion GDP increase</li> </ul> </li> </ul> </li> </ol> <p><b>Environmental Sustainability</b></p> <ol style="list-style-type: none"> <li>Reduce CO<sub>2</sub> footprint by displacing approximately 4 million tonnes of CO<sub>2</sub>/ year</li> <li>Induce RE investment in Sarawak to tap on local renewable resources for export. Link to Initiative 1, the interconnection may induce RM1.2 billion of solar investment and RM120 million GDP/year for Sarawak</li> </ol>	
Timeline		Resources Required
Start Date	End Date	
2021	2027	<ul style="list-style-type: none"> <li>Private funding</li> <li>Equity partner</li> <li>Regulatory support</li> </ul>
Project Owner	Implementing Agency	Other Stakeholders
-	SEB, MOU	MUDeNR, MINTRED, EPU Sarawak and government agencies (i.e. MITI, NSC, economic council)

## AIP Level 2 - Renewable Energy sector

<b>Sector</b> :		Renewable Energy	
<b>Initiative</b> :		12. Export Sarawak RE	
<b>Action step</b> :		12.1-12.3	
Action step (s)	Output (s)	Timeline	Resources required
<b>12.1 Formation of JV company with Singapore partner to execute development studies on RE export to Singapore via a High Voltage Direct Current (HVDC) undersea interconnection</b>	Completion of scope of works	Start date	Private funding, equity partners, G2G and regulatory support, expertise
		2021	
		End date	
		2022	
<b>12.2 Mapping of regulatory approval processes in Malaysia, Singapore and Indonesia for the interconnection</b>	Obtain in-principle approvals from relevant authorities in Malaysia, Singapore and Indonesia	Start date	Private funding, equity partners, G2G and regulatory support, expertise
		2021	
		End date	
		2022	
<b>12.3 Conduct detailed subsea survey to confirm submarine cable route and installation methodology</b>	Completion of scope of works	Start date	Private funding, equity partners, G2G and regulatory support, expertise
		2022	
		End date	
		2022	
Project Owner	Implementing Agency	Other Stakeholders	
Private funding, equity partners, G2G and regulatory support, expertise	Private funding, equity partners, G2G and regulatory support, expertise	MUDeNR, MINTRED, EPU Sarawak and government agencies (i.e. MITI, NSC, economic council)	

## AIP Level 2 - Renewable Energy sector

<b>Sector</b> :		Renewable Energy	
<b>Initiative</b> :		12. Export Sarawak RE	
<b>Action step</b> :		12.4-12.5	
Action step (s)	Output (s)	Timeline	Resources required
<b>12.4 Develop project tender specification and execute tender bid for HVDC EPCC (i.e. Prysmians, Nexans, ABB, Siemens, etc.)</b>	Completion of interconnection and starts RE export	Start date	Private funding, equity partners, G2G and regulatory support, expertise
		2022	
		End date	
		2027	
<b>12.5 Development of more RE generation in Sarawak (i.e. floating solar, Bakun Unit 9, etc.) once RE export market is committed</b>	Completion of new RE generation facilities to meet RE export market demand	Start date	Private funding, equity partners, G2G and regulatory support, expertise
		2023	
		End date	
		2030	
Project Owner	Implementing Agency	Other Stakeholders	
Private funding, equity partners, G2G and regulatory support, expertise	Private funding, equity partners, G2G and regulatory support, expertise	MUDeNR, MINTRED, EPU Sarawak and government agencies (i.e. MITI, NSC, economic council)	

## AIP Level 1 - Renewable Energy sector

<b>Sector</b>	: Renewable Energy		
<b>Strategy</b>	: Promote electric vehicles (i.e. battery & fuel cell EV)		
<b>Initiative</b>	: 13. CO <sub>2</sub> emission reduction via mobility electrification 14. Develop infrastructure to support EVs 15. Attract & establish EV value chain in Sarawak 16. Introduce EVs for high utilisation fleet and incentives for purchase of EV		
<b>Initiative</b>	<b>Desired Outcome(s)</b>		
<b>13. CO<sub>2</sub> emission reduction via mobility electrification</b>  <b>14. Develop infrastructure to support EVs</b>  <b>15. Attract &amp; establish EV value chain in Sarawak</b>  <b>16. Introduce EVs for high utilisation fleet and incentives for purchase of EV</b>	<b>Economic Prosperity</b> <ol style="list-style-type: none"> <li>EV penetration target: <ul style="list-style-type: none"> <li>20% electric cars (200k – 250k)</li> <li>50% E-Bikes (300k – 400k)</li> </ul> </li> <li>Support growth of 100MW RE generation for mobility electrification</li> <li>Contribute RM200 million GDP/year for Sarawak with a multiplier effect of 2 times (RM400 million/year).</li> </ol> <b>Social Inclusivity</b> <ol style="list-style-type: none"> <li>Increase job employment by 5,000 (i.e. direct &amp; indirect). 100 job opportunities created per 1k EV sold annually: 50% highly-skilled workforce and 50% low-skilled workforce</li> </ol> <b>Environmental Sustainability</b> <ol style="list-style-type: none"> <li>Reduce CO<sub>2</sub> footprint by displacing approximately 0.6 million tonnes of CO<sub>2</sub>/ year</li> <li>Induce RE investment in Sarawak to tap on local renewable resources for export. Link to Initiative 1, the interconnection may induce RM1.2 billion of solar investment and RM120 million GDP/year for Sarawak</li> </ol>		
<b>Timeline</b>		<b>Resources Required</b>	
<b>Start Date</b>	<b>End Date</b>		
2021	2030	<ul style="list-style-type: none"> <li>Foreign direct investment from established EV value chain players</li> </ul>	
<b>Project Owner</b>	<b>Implementing Agency</b>	<b>Other Stakeholders</b>	
-	MOTS, SEB, Sarawak Metro, SEDC, PETROS	MUDeNR, MINTRED, EPU Sarawak, MOU, local councils and government agencies (i.e. MITI, MOTS, MIDA)	

## AIP Level 2 - Renewable Energy sector

<b>Sector</b>	: Renewable Energy		
<b>Initiative</b>	: 13. CO <sub>2</sub> emission reduction via mobility electrification 14. Develop infrastructure to support EVs 15. Attract & establish EV value chain in Sarawak 16. Introduce EVs for high utilisation fleet and incentives for purchase of EV		
<b>Action step</b>	: 13.1-13.2		
Action step (s)	Output (s)	Timeline	Resources required
<b>13.1 EV charging infrastructure piloting</b>  Installation of charging stations at malls and hotels	Completion of scope of works	Start date	Foreign direct investment from established EV value chain players, government incentives (i.e. grants, subsidies, import & excise duties exemptions)
		2021	
End date			
2021			
<b>13.2 Gradual transition to EVs for meter readers, food delivery services, company fleet and government fleets</b>	100% E-bike adoption for SEB meter readers	Start date	Foreign direct investment from established EV value chain players, government incentives (i.e. grants, subsidies, import & excise duties exemptions)
	Achieving 10% EV adoption for government fleets	2021	
End date			
2025			
Project Owner	Implementing Agency	Other Stakeholders	
MOTS, SEB, Sarawak Metro, SEDC, PETROS	MOTS, SEB, Sarawak Metro, SEDC, PETROS	MUDeNR, MINTRED, EPU Sarawak, MOU, local councils and government agencies (i.e. MITI, MOTS, MIDA)	

## AIP Level 2 - Renewable Energy sector

<b>Sector</b>	: Renewable Energy		
<b>Initiative</b>	: 13. CO <sub>2</sub> emission reduction via mobility electrification 14. Develop infrastructure to support EVs 15. Attract & establish EV value chain in Sarawak 16. Introduce EVs for high utilisation fleet and incentives for purchase of EV		
<b>Action step</b>	: 13.3-13.4		
Action step (s)	Output (s)	Timeline	Resources required
<b>13.3 Working with regulators and industry leaders to accelerate enablers for establishment of EV value chain and policies (i.e. exemption of excise &amp; import duties, introduce grants and subsidies for EV industry and provider)</b>	Reduction of overall EV cost of ownership and increase EV adoption in Sarawak	Start date	Foreign direct investment from established EV value chain players, government incentives (i.e. grants, subsidies, import & excise duties exemptions)
		2021	
End date			
2030			
<b>13.4 Identify potential EV partners to establish EV assembly plants in Sarawak</b>	Lower EV cost of ownership with local CBU units produced in Sarawak	Start date	Foreign direct investment from established EV value chain players, government incentives (i.e. grants, subsidies, import & excise duties exemptions)
		2021	
End date			
2030			
Project Owner	Implementing Agency	Other Stakeholders	
MOTS, SEB, Sarawak Metro, SEDC, PETROS	MOTS, SEB, Sarawak Metro, SEDC, PETROS	MUDeNR, MINTRED, EPU Sarawak, MOU, local councils and government agencies (i.e. MITI, MOTS, MIDA)	

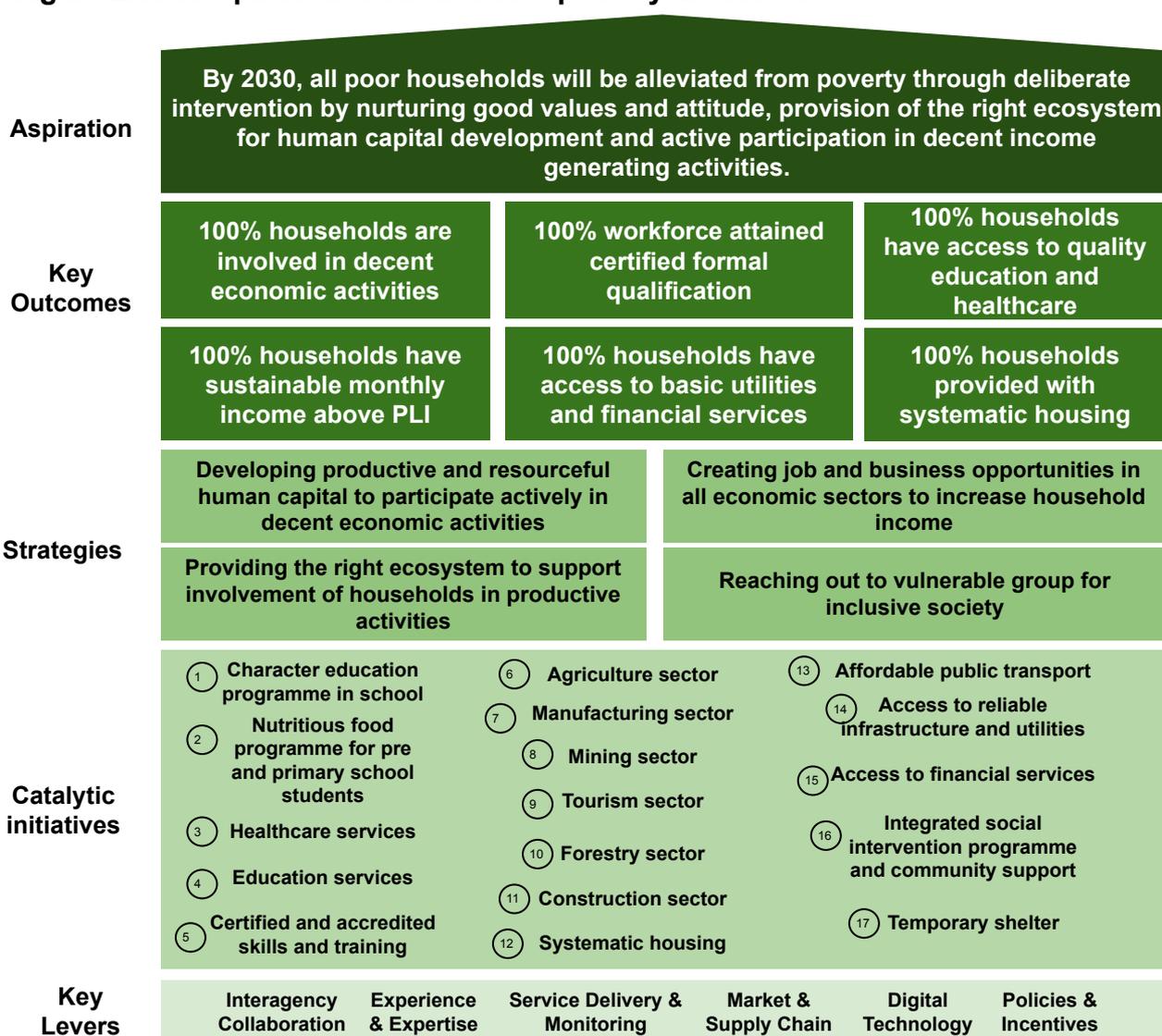
## 2. Poverty Alleviation

## Aspiration for Poverty Alleviation

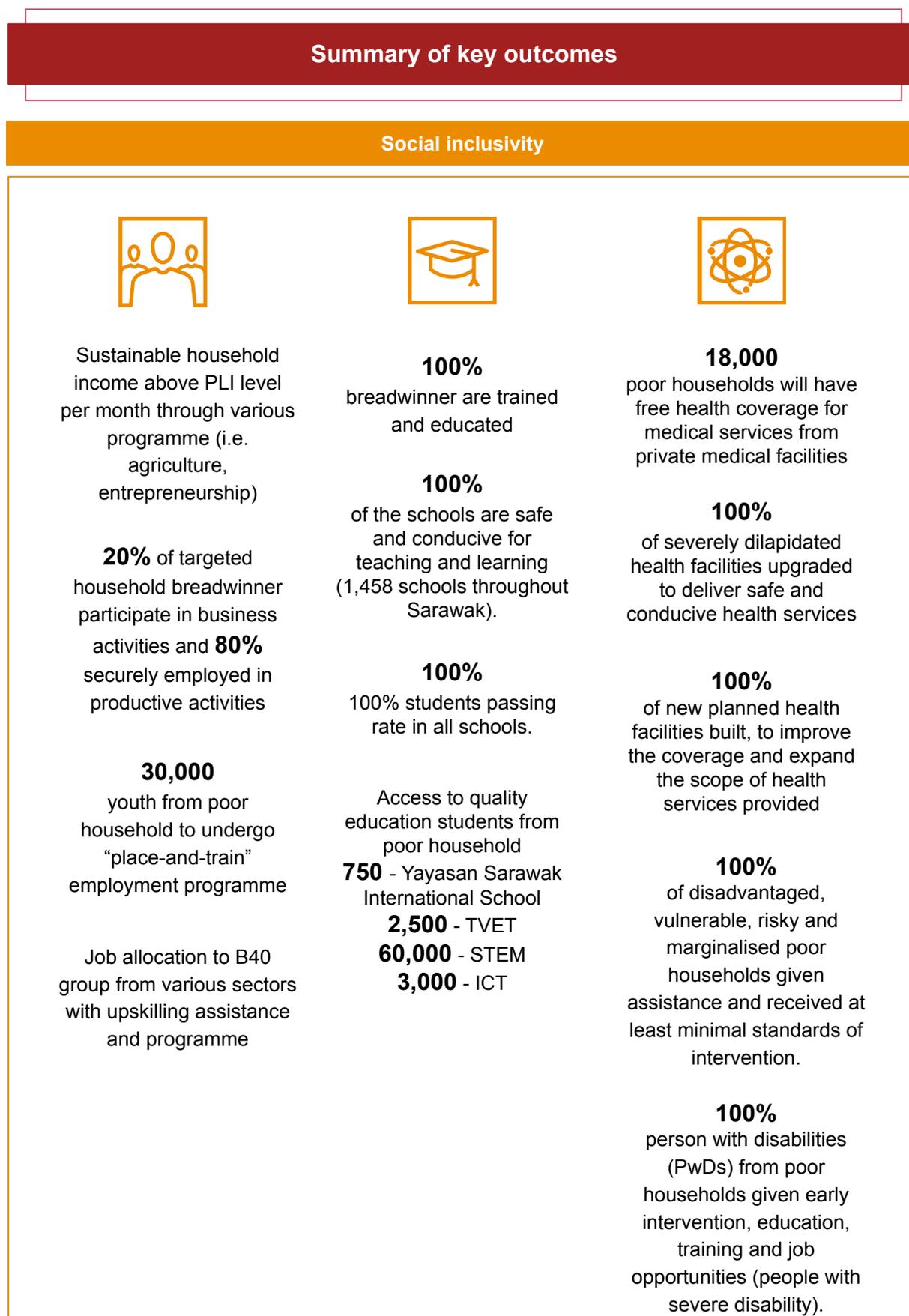
The State's aspiration is to ensure that by 2030, all poor households in Sarawak will be alleviated from poverty through deliberate intervention by nurturing good values and attitude, provision of the right ecosystem for human capital development and active participation in decent income generating activities. To achieve this, EPU Sarawak will take up the leading role and coordinate the implementation with various ministries and agencies. EPU Sarawak will also monitor the progress of the initiatives closely to ensure successful implementation and achievement of outcomes with periodic reviews that will be detailed Volume II of this Report.

The strategies and catalytic initiatives proposed were recommended to mitigate poverty through multidimensional approaches which will address the need for capacity building and active involvement in economic activities, access to essential needs such as quality education, healthcare services, systematic housing, efficient transportation system and financial services. These elements are significant in ensuring the livelihood and well-being of Sarawakians.

**Figure 2.1.1: Aspiration framework for poverty alleviation**



**Figure 2.1.2: Summary of desired outcomes for poverty alleviation**



Note: Outcomes are not exhaustive and are to be verified further with sectors

## AIP Level 1 - Poverty alleviation

<b>Sector</b> :		Poverty alleviation	
<b>Strategy</b> :		Developing Productive & Resourceful Human Capital to Participate Actively in Decent Economic Activities	
<b>Initiative</b> :		1. Character Education Programme in School	
Initiatives		Desired Outcome(s)	
<b>1. Character Education Programme in School</b>  Objective: a) To nurture good attitude and values  a) To develop self-esteem and character-building		<b>Economic Prosperity</b> 1. 100% students from poor households involved in this programme will excel in education (academic and skill development) and be employed to increase their household income above PLI by 2030.  <b>Social Inclusivity</b> 1. Improve Sarawak Youth Index (12 domains, 50 indicators) score from moderate (70.6) to above High (80)) by 2030.	
Timeline		Resources Required	
Start Date	End Date	<ul style="list-style-type: none"> <li>RM120 million for 8 years</li> </ul>	
2022	2030		
Project Owner	Implementing Agency	Other Stakeholders	
KWKPK (Pre-school), MESTR (Primary & Secondary School), MYSS	Education Department, R&DO, Schools	Education Department, PDRM, AADK, R&DO, PIBG, NGOs	

## AIP Level 2 - Poverty alleviation

<b>Sector</b> :		Poverty alleviation	
<b>Initiative</b> :		1. Character Education Programme in School	
<b>Action step</b> :		1.1 - 1.4	
Action step (s)	Output (s)	Timeline	Resources required
<b>1.1 Development of Education Character Education Programme and evaluation instruments.</b>	a) Character Education Curriculum, Modules, training kits and evaluation instruments.	Start date	RM10 mil
		2022	
		End date	
		2023	
		Start date	RM20 mil
		2023	
End date			
		2024	
		Start date	RM150 mil
		2024	
End date			
		2030	
		Start date	RM10 mil
		2027	
End date			
		2031	
Project Owner	Implementing Agency	Other Stakeholders	
KWKPK (Pre-school), MESTR (Primary & Secondary Schools), MYSS	Education Department, R&DO, Schools	Education Department, PDRM, AADK, R&DO, PIBG, NGOs	

## AIP Level 1 - Poverty alleviation

<b>Sector</b>		: Poverty alleviation	
<b>Strategy</b>		: Developing Productive & Resourceful Human Capital to Participate Actively in Decent Economic Activities	
<b>Initiative</b>		: 2. Nutritious food programme for pre and primary school students	
Initiatives		Desired Outcome(s)	
<b>2. Nutritious food programme for pre and primary school students</b>		<b>Social Inclusivity</b> <ol style="list-style-type: none"> <li>Target for improvement by 2030: 4% reduction of thinness and no increase in obesity among pre and primary school students.</li> </ol> <p>Baseline: Prevalence of BMI for age status based on WHO among children (aged &lt;18 years old) in Sarawak: Thinness = 6.3% Obese=13.4%</p> <ol style="list-style-type: none"> <li>All vulnerable segments of pre and primary school students achieve 3M literacy to pursue higher education and get good jobs.</li> </ol>	
Timeline		Resources Required	
Start Date	End Date	<ul style="list-style-type: none"> <li>RM880 million for 8 years</li> </ul>	
2022	2030		
Project Owner	Implementing Agency	Other Stakeholders	
MESTR (Primary School), KWPK (Pre-school)	MESTR, KWPK, Education Department, R&DO, Yayasan Sarawak, Schools	Petronas, Shell, Petros, Other MNG, PIBG	

## AIP Level 2 - Poverty alleviation

<b>Sector</b>	: Poverty alleviation		
<b>Initiative</b>	: 2. Nutritious food programme for pre and primary school students		
<b>Action step</b>	: 2.1 - 2.4		
Action step (s)	Output (s)	Timeline	Resources required
<b>2.1 Preparation of standard menu and costing for Nutritious Food Programme (NFP) for pre and primary schools</b>	a) Standard menu and cost for NFP pre and primary school students	Start date	RM0.5mil
		2020	
<b>2.2 Develop implementation mechanism</b>	a) implementation plan	End date	RM0.5mil
		2023	
<b>2.3 Implementation of NFP</b>	a) All vulnerable students in pre and primary schools participate in NFP.	Start date	RM480 mil
		2023	
<b>2.4 Monitoring and evaluation of NFP</b>	a) Monitoring and evaluation report for NFP	End date	RM5 mil
		2030	
Project Owner	Implementing Agency	Other Stakeholders	
MESTR (Primary school), KWPK (Pre- school)	MESTR, KWPK, Education Department, R&DO, Yayasan Sarawak, Schools	Petronas, Shell, Petros, Other MNG, PIBG	

## AIP Level 1 - Poverty alleviation

<b>Sector</b>	: Poverty alleviation	
<b>Strategy</b>	: Developing Productive & Resourceful Human Capital to Participate Actively in Decent Economic Activities	
<b>Initiative</b>	: 3.1 Construction of new/upgrade/repair of hospitals and clinics, and access to basic utilities	
<b>Initiatives</b>	<b>Desired Outcome(s)</b>	
<b>3. Access to Healthcare Services</b>  <b>3.1 Construction of new/upgrade/repair of hospitals and clinics, and access to basic utilities</b>	<b>Social Inclusivity</b> <ol style="list-style-type: none"> <li>1. 100% of severely dilapidated health facilities upgraded to deliver safe and conducive health services.</li> <li>2. 100% of new planned health facilities built, to improve the coverage and expand the scope of health services provided (primary care, dental care, pharmacy, emergency care).</li> <li>3. 90% of population have access to health care services.</li> </ol>	
<b>Timeline</b>		<b>Resources Required</b>
<b>Start Date</b>	<b>End Date</b>	
2021	2030	<ul style="list-style-type: none"> <li>• RM2.75 bil</li> <li>• Manpower</li> </ul>
<b>Project Owner</b>	<b>Implementing Agency</b>	<b>Other Stakeholders</b>
MLGH	JKNS	KMKK, Jabatan Kesihatan, Private General Practitioners



## AIP Level 2 - Poverty alleviation

<b>Sector</b>	: Poverty alleviation		
<b>Initiative</b>	: 3.1 Construction of new/upgrade/repair of hospitals and clinics, and access to basic utilities		
<b>Action step</b>	: 3.1.2 - 3.1.5		
Action step (s)	Output (s)	Timeline	Resources required
<b>3.1.2 Prepare project proposals for approval and funding from the Federal Government.</b>	a) Approved projects in Sarawak.	Start date	
		2021	
<b>3.1.3 Pre implementation activities.</b>	a) Approved site, design and procurement procedure	End date	
		2030	
<b>3.1.4 Implementation, coordination and monitoring approved project.</b>	a) Progress report	Start date	
		2022	
<b>3.1.5 Completion, testing and commissioning.</b>	a) Completed and operational of health facilities.	End date	
		2030	
Project Owner	Implementing Agency	Other Stakeholders	
MLGH	JKNS	KMKK, Jabatan Kesihatan, Private General Practitioners	

## AIP Level 1 - Poverty alleviation

<b>Sector</b>		: Poverty alleviation	
<b>Strategy</b>		: Developing Productive & Resourceful Human Capital to Participate Actively in Decent Economic Activities	
<b>Initiative</b>		: 3.2 Sarawak Care State Insurance	
<b>Initiatives</b>		<b>Desired Outcome(s)</b>	
<b>3 Access to Healthcare Services</b>  <b>3.2 Sarawak Care State Insurance</b>		<b>Social Inclusivity</b> 1. 18,000 poor households will have free health coverage for medical services from private medical facilities.	
<b>Timeline</b>		<b>Resources Required</b>	
<b>Start Date</b>	<b>End Date</b>		
2022	2030	<ul style="list-style-type: none"> <li>• RM330 mil</li> </ul>	
<b>Project Owner</b>	<b>Implementing Agency</b>	<b>Other Stakeholders</b>	
KWKPK	JKMNS	RANDO, KMKK, Jabatan Kesihatan, Private General Practitioners	

## AIP Level 2 - Poverty alleviation

<b>Sector</b> : Poverty alleviation			
<b>Initiative</b> : 3.2 Sarawak Care State Insurance			
<b>Action step</b> : 3.2.1			
Action step (s)	Output (s)	Timeline	Resources required
<b>3.2.1 Preparation of TOR and to establish the guidelines/SOP for the scheme</b>	a) Formulation of implementation guidelines/SOP for the scheme	Start date	<ul style="list-style-type: none"> <li>• RM500 mil</li> <li>• (RM50 mil yearly)</li> <li>• 2021 Budget - RM5 mil</li> <li>• Manpower: 10 new staff to handle on this</li> <li>• MMKN Paper - RM5 mil yearly allocation starting 2022, hence actual budget required (RM5 mil X 8 years = RM40 mil)</li> </ul>
		2022	
		End date	
		2030	
Project Owner	Implementing Agency	Other Stakeholders	
KWKPK	JKMNS	RANDO, KMKK, Jabatan Kesihatan, Private General Practitioners	

## AIP Level 2 - Poverty alleviation

<b>Sector</b> : Poverty alleviation			
<b>Initiative</b> : 3.2 Sarawak Care State Insurance			
<b>Action step</b> : 3.2.2 - 3.2.5			
Action step (s)	Output (s)	Timeline	Resources required
<b>3.2.2 Engagement and collaboration with relevant agencies:</b> a)Jabatan Kebajikan Masyarakat - will be our implementing agency b)Jabatan Kesihatan Negeri Sarawak - to be overall coordinator of this medical insurance scheme along with provision of medical services c)KMKK - to verify the names of B40 families d)Resident and District offices - to be the front liners to the rakyat when they have any queries e)Private General Practitioners -provide medical services to the rakyat	a) Inclusive and equal healthcare access for children of the B40 households under the age of 18 years which are not covered under mySalam; and	Start date	
		2022	
<b>3.2.3 To obtain approval from YB Minister of Welfare, Community WellBeing, Women, Family and Childhood Development for the implementation and publicise the programme</b>	a) Mitigate financial stress arising from significant out-of-pocket healthcare expenses.	End date	
		2030	
<b>3.2.4 Advertisement of the programme</b>	a) Programs advertised through various channels (E.g. Mass Media, Banners, Social Media)		
<b>3.2.5 Identify potential recipients as advised by Jabatan Kebajikan Masyarakat Sarawak for the programme and inform them accordingly of the scheme</b>	a) List of potential recipients.		
Project Owner	Implementing Agency	Other Stakeholders	
KWKPK	JKMNS	RANDO,KMKK, Jabatan Kesihatan, Private General Practitioners	

## AIP Level 2 - Poverty alleviation

<b>Sector</b> :		Poverty alleviation	
<b>Initiative</b> :		3.2 Sarawak Care State Insurance	
<b>Action step</b> :		3.2.6 - 3.2.8	
Action step (s)	Output (s)	Timeline	Resources required
<b>3.2.6 Disbursement of claims made by recipients ie claimants</b>	a) IPayment of claims to the recipients.	Start date	
		2022	
<b>3.2.7 Monitoring and enhancement of the scheme</b>	a) Progress report.		
<b>3.2.8 Digitalisation: Adopt technology advancements via online application forms and processing of claims.The claims submitted and processed will be based on Integrated database and system that interlink with iSarawakCare and Jabatan Kebajikan Masyarakat Sarawak platforms</b>	a) System in operation.	End date	
		2030	
Project Owner	Implementing Agency	Other Stakeholders	
KWKPK	JKMNS	RANDO,KMKK, Jabatan Kesihatan, Private General Practitioners	

## AIP Level 1 - Poverty alleviation

<b>Sector</b> :		Poverty alleviation
<b>Strategy</b> :		Developing Productive & Resourceful Human Capital to Participate Actively in Decent Economic Activities
<b>Initiative</b> :		3.3 Telemedicine
<b>Initiatives</b>		<b>Desired Outcome(s)</b>
<b>3 Access to Healthcare Services</b>  <b>3.3 Telemedicine</b>  - Telecommunication infrastructure/ services to the rural clinics to perform telemedicine.  (89 health clinics using VSAT)		<b>Social Inclusivity</b> 1. 80% improve connectivity infrastructure of health clinics in Sarawak to enable increase accessibility and improve level of health services in rural and remote Sarawak
<b>Timeline</b>		<b>Resources Required</b>
<b>Start Date</b>	<b>End Date</b>	
2022	2030	<ul style="list-style-type: none"> <li>Fund and upgrading for infrastructure &amp; technologies used depend on MAMPU approval</li> </ul>
<b>Project Owner</b>	<b>Implementing Agency</b>	<b>Other Stakeholders</b>
JKNS	Telecommunication providers	Jabatan Kesihatan, telecommunication providers

## AIP Level 2 - Poverty alleviation

<b>Sector</b> : Poverty alleviation			
<b>Initiative</b> : 3.3 Telemedicine			
<b>Action step</b> : 3.3.1 - 3.3.4			
Action step (s)	Output (s)	Timeline	Resources required
<b>3.3.1 Identify rural clinics that their internet connectivity can be upgraded from VSAT to Mobile Technology (89 health clinics in Sarawak using VSAT)</b>	a) List of rural clinics that their internet connectivity can be upgraded from VSAT to Mobile Technology.(depends on availability of telecommunication towers)	Start date	<ul style="list-style-type: none"> <li>Depends on availability of Telecommunication Towers</li> <li>Funding - Fund and upgrading for infrastructure &amp; technologies used depend on MAMPU approval</li> </ul>
		2022	
<b>3.3.2 Approved projects and funding from the Federal Government</b>	a) Approved projects in Sarawak.	End date	
<b>3.3.3 Implementation, coordination and monitoring approved project</b>	a) Progress report	2030	
<b>3.3.4 Completion, testing and commissioning.</b>	a) Completed and operational of health facilities.		
Project Owner	Implementing Agency	Other Stakeholders	
JKNS	Telecommunication providers	Jabatan Kesihatan, telecommunication providers	

## AIP Level 1 - Poverty alleviation

<b>Sector</b>	: Poverty alleviation	
<b>Strategy</b>	: Developing Productive & Resourceful Human Capital to Participate Actively in Decent Economic Activities	
<b>Initiative</b>	: 4.1 Upgrade/ repairs of schools and access to basic utilities	
<b>Initiatives</b>	<b>Desired Outcome(s)</b>	
<p><b>4. Education Services</b></p> <p><b>4.1 Upgrade/ repairs of schools and access to basic utilities</b></p> <p>Most of the poor conditioned schools are located in the rural areas of which the majority are from B40 group. 316 schools (20K students) are located in the rural areas.</p>	<p><b>Social Inclusivity</b></p> <ol style="list-style-type: none"> <li>100% of the schools are safe and conducive for teaching and learning (1,458 schools throughout Sarawak).</li> <li>100% students passing rate in all schools.</li> </ol>	
<b>Timeline</b>		<b>Resources Required</b>
<b>Start Date</b>	<b>End Date</b>	
2021	2030	<ul style="list-style-type: none"> <li>Funding required: RM500 million</li> <li>Capacity of implementing agencies</li> <li>Capacity of contractors</li> </ul>
<b>Project Owner</b>	<b>Implementing Agency</b>	<b>Other Stakeholders</b>
MESTR	JKR Sarawak, RECODA	JPNS

## AIP Level 2 - Poverty alleviation

<b>Sector</b> : Poverty alleviation			
<b>Initiative</b> : 4.1 Upgrade/ repairs of schools and access to basic utilities			
<b>Action step</b> : 4.1.1 - 4.1.3			
Action step (s)	Output (s)	Timeline	Resources required
<b>4.1.1 Identify and assess condition of dilapidated schools and prepare technical report, recommendation and costing.</b>	a) Technical report on the condition of dilapidated schools and recommendation for improvement and costing.	Start date	<ul style="list-style-type: none"> <li>• Funding required: RM500 million</li> <li>• Capacity of implementing agencies</li> <li>• Capacity of contractors</li> </ul>
		2021	
<b>4.1.2 Prepare implementation plan and budget to implement the project.</b>	a) Approved projects in Sarawak.	End date	
		2022	
<b>4.1.3 Implementation and monitoring of the project implementation plan.</b>	a) Progress report	Start date	• RM5 bil
		2022	
		End date	
		2030	
Project Owner	Implementing Agency	Other Stakeholders	
MESTR	JKR Sarawak, RECODA	JPNS	

## AIP Level 1 - Poverty alleviation

<b>Sector</b>	: Poverty alleviation	
<b>Strategy</b>	: Developing Productive & Resourceful Human Capital to Participate Actively in Decent Economic Activities	
<b>Initiative</b>	: 4.2 Establishment of Yayasan Sarawak International Schools	
<b>Initiatives</b>	<b>Desired Outcome(s)</b>	
<b>4. Education Services</b>  <b>4.2 Establishment of Yayasan Sarawak International Schools (5)</b>  Majority (60%) of the students come from B40 group	<b>Social Inclusivity</b> 1. 750 students from poor households will have access to quality education through Yayasan Sarawak International School Sarawak (YSISS)	
<b>Timeline</b>		<b>Resources Required</b>
<b>Start Date</b>	<b>End Date</b>	
2022	2030	<ul style="list-style-type: none"> <li>• Fund required: RM300 mil (construction only), RM75 mil/ year (operation )</li> <li>• Manpower: at least 300 full time teachers and 2,500 students (full capacity)</li> </ul>
<b>Project Owner</b>	<b>Implementing Agency</b>	<b>Other Stakeholders</b>
MESTR	YSIE SB/Yayasan Sarawak	JPNS/SFS

## AIP Level 2 - Poverty alleviation

<b>Sector</b> :		Poverty alleviation		
<b>Initiative</b> :		4.2 Establishment of Yayasan Sarawak International Schools		
<b>Action step</b> :		4.2.1 - 4.2.4		
Action step (s)	Output (s)	Timeline		Resources required
4.2.1 Formulate business and operational model for Yayasan Sarawak International Schools (YSIS).	a) Business and operation model for YSIS	Start date		• RM2 mil
		2021		
		End date		
2022				
4.2.2 Develop five (5) YSIS based on priority and readiness.	a) YSIS Petra Jaya (2022) b) YSIS Semenggoh (2023)	Start date		• RM1.5 bil
		2021		
		End date		
2030				
4.2.3 Recruitment of staff and student enrollment.	a) YSIS Petra Jaya in operation by 2022 and Semenggoh in 2023	Start date		• RM75 mil per annum/school
		2022		
4.2.4 Operation of YSIS	a) YSIS in operation	End date		
		2030		
Project Owner	Implementing Agency	Other Stakeholders		
MESTR	YSIE SB/ Yayasan Sarawak	JPNS/SFS		

## AIP Level 1 - Poverty alleviation

<b>Sector</b> :		Poverty alleviation
<b>Strategy</b> :		Developing Productive & Resourceful Human Capital to Participate Actively in Decent Economic Activities
<b>Initiative</b> :		4.3 Sarawak TVET Scholarship Fund
<b>Initiatives</b>		<b>Desired Outcome(s)</b>
<b>4. Education Services</b>  <b>4.3 Sarawak TVET Scholarship Fund</b>  50% of sponsored students' are from the B40 / rural families		<b>Social Inclusivity</b> 1. 2,500 students from poor households will have access to Technical Vocational Education and Training (TVET) and able to be employed in jobs with monthly income above PLI.
<b>Timeline</b>		<b>Resources Required</b>
<b>Start Date</b>	<b>End Date</b>	
2022	2030	<ul style="list-style-type: none"> <li>• Funding Required: RM90 million</li> <li>• Target allocation for:                             <ul style="list-style-type: none"> <li>i. 2022-2023 RM27,000,000</li> <li>ii. 2024-2027 RM36,000,000</li> <li>iii. 2028-2030: RM27,000, 000</li> </ul> </li> </ul>
<b>Project Owner</b>	<b>Implementing Agency</b>	<b>Other Stakeholders</b>
MESTR	Yayasan Sarawak	TVET & IHL Institutions in Sarawak

## AIP Level 2 - Poverty alleviation

<b>Sector</b>	: Poverty alleviation		
<b>Initiative</b>	: 4.3 Sarawak TVET Scholarship Fund		
<b>Action step</b>	: 4.3.1 - 4.3.2		
Action step (s)	Output (s)	Timeline	Resources required
4.3.1 Identification and selection of eligible students.	a) List of eligible students to be given scholarship.	Start date	• RM1 mil
		2021	
		End date	
4.3.2 Implementation, monitoring and auditing	a) All eligible students receive their scholarship to pursue their studies in TVET.	Start date	• RM90 mil
		2022	
		End date	
2030			
Project Owner	Implementing Agency	Other Stakeholders	
MESTR	Yayasan Sarawak	TVET & IHL Institutions in Sarawak	

## AIP Level 1 - Poverty alleviation

<b>Sector</b>		: Poverty alleviation	
<b>Strategy</b>		: Developing Productive & Resourceful Human Capital to Participate Actively in Decent Economic Activities	
<b>Initiative</b>		: 4.4 Establishment of STEM labs in every Pejabat Pendidikan Daerah (PPD) in Sarawak	
<b>Initiatives</b>		<b>Desired Outcome(s)</b>	
<b>4. Education Services</b>  <b>4.4 Establishment of STEM labs in every Pejabat Pendidikan Daerah (PPD) in Sarawak</b>		<b>Social Inclusivity</b> 1. 60,000 students from poor households will have access to STEM education and able to be employed in STEM related jobs or businesses with monthly income above PLI.	
<b>Timeline</b>		<b>Resources Required</b>	
<b>Start Date</b>	<b>End Date</b>		
2022	2030	<ul style="list-style-type: none"> <li>• Funding Required: RM10 mil</li> <li>• Space/venue for the lab at each PPD</li> <li>• STEM Lab Manager</li> </ul>	
<b>Project Owner</b>	<b>Implementing Agency</b>	<b>Other Stakeholders</b>	
MESTR	MESTR	TVET & IHL Institutions in Sarawak	

## AIP Level 2 - Poverty alleviation

<b>Sector</b>	: Poverty alleviation		
<b>Initiative</b>	: 4.4 Establishment of STEM labs in every Pejabat Pendidikan Daerah (PPD) in Sarawak		
<b>Action step</b>	: 4.4.1 - 4.4.5		
Action step (s)	Output (s)	Timeline	Resources required
<b>4.4.1 Prepare space design/room for STEM labs requirement in all 30 PPD.</b>	a) Standard STEM lab design.	Start date	● RM1 mil
		2022	
<b>4.4.2 Develop operational model for STEM labs.</b>	a) Standard STEM lab operational model.	End date	● RM1 mil
		2030	
<b>4.4.3 Recruitment of manpower to manage the STEM labs.</b>	a) Competent manpower to manage STEM labs.	Start date	● RM4 mil per annum
		2022	
		End date	
		2030	
<b>4.4.4 Construction labs and procurement of equipment for STEM labs.</b>	a) Well developed and fully equipped STEM labs.	Start date	● RM300 mil
		2022	
<b>4.4.5 Implementation, monitoring and evaluation of STEM labs operation.</b>	a) Well trained students with STEM education.	End date	● RM1 mil
		2030	
Project Owner	Implementing Agency	Other Stakeholders	
MESTR	MESTR	JPNS, UNIMAS	

## AIP Level 1 - Poverty alleviation

<b>Sector</b> : Poverty alleviation		
<b>Strategy</b> : Developing Productive & Resourceful Human Capital to Participate Actively in Decent Economic Activities		
<b>Initiative</b> : 4.5 Community STEM Outreach Programme		
Initiatives		Desired Outcome(s)
<b>4. Education Services</b>  <b>4.5 Community STEM Outreach Programme</b>		<b>Social Inclusivity</b> 1. 50% of 60,000 students from poor households enrol and graduated in STEM related education and employed as skilled workers that enable to increase their household income above PLI by 2030.
Timeline		Resources Required
Start Date	End Date	
2022	2030	<ul style="list-style-type: none"> <li>• Fund required: RM10 mil</li> <li>• Communicators/Researchers</li> <li>• Props and materials</li> <li>• Logistic and transportation</li> </ul>
Project Owner	Implementing Agency	Other Stakeholders
MESTR	MESTR, Science Centre	Sarawak Government, Communities

## AIP Level 2 - Poverty alleviation

<b>Sector</b> :		Poverty alleviation	
<b>Initiative</b> :		4.5 Community STEM Outreach Programme	
<b>Action step</b> :		4.5.1 - 4.5.4	
Action step (s)	Output (s)	Timeline	Resources required
<b>4.5.1 Develop module and toolkits for outreach programme</b>	a) Module and toolkits for outreach programme.	Start date	● RM2 mil
		2021	
<b>4.5.2 Identify, prioritise and develop community Outreach Programme schedule.</b>	a) Community Outreach Programme schedule.	End date	
		2022	
<b>4.5.3 Implementation, Monitoring and auditing STEM Outreach Programme.</b>	a) Implementation, Monitoring and auditing report for STEM Outreach Programme.	Start date	● RM80 mil
		2022	
		End date	
		2030	
<b>4.5.4 Evaluation of STEM Outreach Programme.</b>	a) Evaluation report for STEM Outreach Programme.	Start date	● RM5 mil
		2025	
		End date	
		2030	
Project Owner	Implementing Agency	Other Stakeholders	
MESTR	MESTR, Science Centre	Sarawak Government, Communities	

## AIP Level 1 - Poverty alleviation

<b>Sector</b>		: Poverty alleviation	
<b>Strategy</b>		: Developing Productive & Resourceful Human Capital to Participate Actively in Decent Economic Activities	
<b>Initiative</b>		: 4.6 Cultivating ICT/ Digital Skills amongst teachers and students	
Initiatives		Desired Outcome(s)	
<b>4. Education Services</b>  <b>4.6 Cultivating ICT/ Digital Skills amongst teachers and students</b>		<b>Social Inclusivity</b> 1. 30,000 primary school students from poor households will have access to ICT/Digital skills and knowledge.	
Timeline		Resources Required	
Start Date	End Date	<ul style="list-style-type: none"> <li>• Fund required: RM10 mil</li> <li>• ICT teachers</li> <li>• Computer facilities</li> <li>• Teaching and learning materials</li> <li>• Computer room in each school</li> </ul>	
2022	2030		
Project Owner	Implementing Agency	Other Stakeholders	
MESTR	4.6 MESTR, JPNS	Sarawak Government, JPNS, Parents	

## AIP Level 2 - Poverty alleviation

<b>Sector</b>	: Poverty alleviation		
<b>Initiative</b>	: 4.6 Cultivating ICT/ Digital Skills amongst teachers and students		
<b>Action step</b>	: 4.6.1 - 4.6.4		
Action step (s)	Output (s)	Timeline	Resources required
<b>4.6.1 Develop module and toolkits for ICT programme in schools.</b>	a) Module and toolkits for ICT programme in schools	Start date	• RM2 mil
		2021	
<b>4.6.2 Identify, prioritise and develop ICT programme schedule.</b>	a) ICT programme schedule.	End date	
		2022	
<b>4.6.3 Implementation, Monitoring and auditing ICT programme in schools.</b>	a) Implementation, Monitoring and auditing report for ICT programme in schools.	Start date	• RM80 mil
		2022	
		End date	
		2030	
<b>4.6.4 Evaluation of ICT programme in schools.</b>	a) Evaluation report for ICT programme in schools.	Start date	• RM5 mil
		2025	
		End date	
		2030	
Project Owner	Implementing Agency	Other Stakeholders	
MESTR	MESTR, JPNS	Sarawak Government, JPNS, Parents	

## AIP Level 1 - Poverty alleviation

<b>Sector</b>	: Poverty alleviation	
<b>Strategy</b>	: Developing Productive & Resourceful Human Capital to Participate Actively in Decent Economic Activities	
<b>Initiative</b>	: 5.1 Increase industry involvement in workforce development 5.2 Capacity building of the poor households in the construction sector	
<b>Initiatives</b>		<b>Desired Outcome(s)</b>
<b>5.0 Certified and accredited skills training</b>  <b>5.1 Increase industry involvement in workforce development</b>		<b>Social Inclusivity</b> 1. 30,000 youth from poor households especially those in rural areas will gained skills and be employed through “place-and-train” approach. employed based on industry requirement and income that commensurate with their qualification and skills.
<b>Timeline</b>		<b>Resources Required</b>
<b>Start Date</b>	<b>End Date</b>	
2022	2025	<ul style="list-style-type: none"> <li>Funding Required: RM12,750,000</li> <li>Regulatory framework for industry cooperation</li> </ul>
<b>Project Owner</b>	<b>Implementing Agency</b>	<b>Other Stakeholders</b>
MESTR	All SHRC Sectorial Committees	Industry/Trade Associations & Companies
<b>Initiatives</b>		<b>Desired Outcome(s)</b>
<b>5.2 Capacity building of the poor households in the construction sector</b>		<b>Social Inclusivity</b> 1. To train 560 youth via Programme Belia (Peranstisan) and Programme Belia (Usahawan) under CIDB. 2. To increase competency for 480 general construction workers under B40 category. 3. To certify 1,040 construction workers under CIDB’s programmes
<b>Timeline</b>		<b>Resources Required</b>
<b>Start Date</b>	<b>End Date</b>	
2022	2025	<ul style="list-style-type: none"> <li>Fund required: RM14.7 mil</li> </ul>
<b>Project Owner</b>	<b>Implementing Agency</b>	<b>Other Stakeholders</b>
MIPD	CIDB	MESTR, MOU, JKR, DID, Sewerage Dept., Construction Industry

## AIP Level 2 - Poverty alleviation

<b>Sector</b>	: Poverty alleviation		
<b>Initiative</b>	: 5.1 Increase industry involvement in workforce development		
<b>Action step</b>	: 5.1.1 - 5.2.3		
Action step (s)	Output (s)	Timeline	Resources required
<b>5.1.1 Establishment of Advanced Automotive Training Centre</b>	a) As set out by PPKS/Sarawak Skills	Start date	RM12.75 mil Regulatory framework for industry cooperation
<b>5.1.2 Establishment of TVET ToT Centre</b>	a) As set out by UCTS	2022	
<b>5.1.3 Employment through "Place-and-Train" Programme</b>	a) 1,000 locals hired (average @330 per year) at Technician/Sel Skilled level and above	End date	
<b>5.1.4 Enhancing teaching staff industry experience.</b>	a) 100 lecturers/teaching staff send for industrial attachment or industrial certifications (average of 33 per year)	2025	
Project Owner	Implementing Agency	Other Stakeholders	
MESTR	MESTR, JPNS	Sarawak Government, JPNS, Parents	
Action step (s)	Output (s)	Timeline	Resources required
<b>5.2.1 Identify the relevant courses to increase competency of manpower in construction industry and youth from poor households.</b>	a) Courses identification	Start date	RM14 mil (RM3.5 mil/year)
<b>5.2.2 Advertisement of courses available/offered under CIDB</b>	a) Number of participants from poor households joining the courses/programmes	End date	
<b>5.2.3 Certification of participants</b>	a) Number of participants passed the courses/programmes	2025	
Project Owner	Implementing Agency	Other Stakeholders	
MIPD	MIPD	MESTR, MOU, JKR, DID, Sewerage Dept., Construction Industry	

## AIP Level 1 - Poverty alleviation

<b>Sector</b>	: Poverty alleviation	
<b>Strategy</b>	: Creating Job and Business Opportunities in All Economic Sectors to Increase Household Income	
<b>Initiative</b>	: 6.1 Commodity & Food Crops Production Development Programme for Smallholders: Oil Palm, Rubber Pepper, Sago, Nipah, Coconut, Coffee, Fruits Crops - Agriculture Diversified Development Programme	
<b>Initiatives</b>	<b>Desired Outcome(s)</b>	
<b>6.1 Commodity &amp; Food Crops Production Development Programme for Smallholders: Oil Palm, Rubber Pepper, Sago, Nipah, Coconut, Coffee, Fruits Crops - Agriculture Diversified Development Programme</b>	<p><b>Social Inclusivity / Economic Prosperity</b></p> <ol style="list-style-type: none"> <li>1,500 poor households actively participate in Agriculture Diversified Development programme will earn monthly income above PLI.</li> </ol> <p><b>Environment Sustainability</b></p> <ol style="list-style-type: none"> <li>100% application of Good Agriculture Practices (GAP), MyOrganic, Halal &amp; MSPO compliance.</li> </ol>	
<b>Timeline</b>		<b>Resources Required</b>
<b>Start Date</b>	<b>End Date</b>	
2022	2025	<ul style="list-style-type: none"> <li>State - RM9.0 million</li> <li>Federal (MAFI) - RM36.75 million</li> <li>Federal (KPLB) - RM33.2 million</li> </ul>
<b>Project Owner</b>	<b>Implementing Agency</b>	<b>Other Stakeholders</b>
DOA	DOA	MANRED, DID, L&S, Anchor Company

## AIP Level 2 - Poverty alleviation

<b>Sector</b>	: Poverty alleviation		
<b>Initiative</b>	: 6.1 Commodity & Food Crops Production Development Programme for Smallholders: Oil Palm, Rubber Pepper, Sago, Nipah, Coconut, Coffee, Fruits Crops - Agriculture Diversified Development Programme		
<b>Action step</b>	: 6.1.1 - 6.1.4 (2022-2025)		
Action step (s)	Output (s)	Timeline	Resources required
<b>6.1.1 Management of farmers' applications for agriculture assistance.</b>	a) List of applications.	Start date	2022 <ul style="list-style-type: none"> <li>• State - RM9.0 million</li> <li>• Federal (MAFI) - RM36.75 million</li> <li>• Federal (KPLB) - RM33.2 million</li> </ul>
		Jan 2021-2024	
		End date	
<b>6.1.2 Notification of allocation for Divisions by DOA (HQ Office).</b>	a) List of approved allocation by Divisions.	Start date	
		Oct 2021-2024	
		End date	
<b>6.1.3 Coordination of approved projects based on allocation to respective Divisions.</b>	a) List of approved projects by Divisions	Start date	
		Nov 2021-2024	
		End date	
<b>6.1.4 Management of annual tendering process.</b>	a) Annual tender for supply of inputs and equipments.	Start date	
		Nov 2021-2024	
		End date	
Jan 2022-2025			
Project Owner	Implementing Agency	Other Stakeholders	
DOA	DOA	MANRED, DID, L&S, Anchor Company	

## AIP Level 2 - Poverty alleviation

<b>Sector</b>	: Poverty alleviation			
<b>Initiative</b>	: 6.1 Commodity & Food Crops Production Development Programme for Smallholders: Oil Palm, Rubber Pepper, Sago, Nipah, Coconut, Coffee, Fruits Crops - Agriculture Diversified Development Programme			
<b>Action step</b>	: 6.1.5 - 6.1.9 (2022-2025)			
Action step (s)	Output (s)	Timeline	Resources required	
<b>6.1.5 Warrant to DOA (Divisional Offices) from HQ Office.</b>	a) Warrant to 12 DOA Divisional Offices.	Start date		
		Jan 2022-2025		
		End date		
		Mar 2022-2025		
		Start date		
		Feb 2022-2025		
<b>6.1.6 Management of quotations and procurement process.</b>	a) Quotations for agriculture inputs and equipments and services from suppliers through tender process.	End date		
		Apr 2022-2025		
		Start date		
<b>6.1.7 Project implementation.</b>	a) Supply of inputs and services to ±3,000 lower-income farming households (under State and Federal funding).	Apr 2022-2025		
		End date		
		Oct 2022-2025		
<b>6.1.8 Payment process.</b>	a) Verification of work completion and preparation of documents for payment process.	Start date		
		May 2022-2025		
		End date		
		Oct 2022-2025		
		Start date		
		Jan 2022-2025		
<b>6.1.9 Monitoring and reporting.</b>	a) Monthly financial progress report.	End date		
		Dec 2022-2025		
		Start date		
<b>Project Owner</b>	<b>Implementing Agency</b>	<b>Other Stakeholders</b>		
		DOA		DOA

## AIP Level 1 - Poverty alleviation

<b>Sector</b>	: Poverty alleviation	
<b>Strategy</b>	: Creating Job and Business Opportunities in All Economic Sectors to Increase Household Income	
<b>Initiative</b>	: 6.2 Commodity & Food Crops Production Development Programme for Smallholders: Agriculture Development Programme in Resettlement Areas	
<b>Initiatives</b>	<b>Desired Outcome(s)</b>	
<b>6.2 Commodity &amp; Food Crops Production Development Programme for Smallholders: Agriculture Development Programme in Resettlement Areas</b>	<p><b>Social Inclusivity / Economic Prosperity</b></p> <ol style="list-style-type: none"> <li>100 poor households actively participate in Agriculture Development Programme will earn monthly income above PLI.</li> </ol> <p><b>Environment Sustainability</b></p> <ol style="list-style-type: none"> <li>100% application of Good Agriculture Practices (GAP), MyOrganic.</li> </ol>	
<b>Timeline</b>		<b>Resources Required</b>
<b>Start Date</b>	<b>End Date</b>	
2022	2025	<ul style="list-style-type: none"> <li>State - RM1.0 million</li> </ul>
<b>Project Owner</b>	<b>Implementing Agency</b>	<b>Other Stakeholders</b>
DOA	DOA	MANRED, DID, L&S, R&DO

## AIP Level 2 - Poverty alleviation

<b>Sector</b> :		Poverty alleviation	
<b>Initiative</b> :		6.2 Commodity & Food Crops Production Development Programme for Smallholders: Agriculture Development Programme in Resettlement Areas	
<b>Action step</b> :		6.2.1 - 6.2.5 (2022-2025)	
Action step (s)	Output (s)	Timeline	Resources required
<b>6.2.1 Management of farmers' applications for agriculture assistance.</b>	a) List of applications.	Start date	2022: State - RM1.0 million
		Jan 2021-2024	
		End date	
		Oct 2021-2024	
<b>6.2.2 Notification of allocation for Divisions by DOA (HQ Office).</b>	a) List of approved allocation by Divisions.	Start date	
		Oct 2021-2024	
		End date	
		Dec 2021-2024	
<b>6.2.3 Coordination of approved projects based on allocation to respective Divisions.</b>	a) List of approved projects by Divisions	Start date	
		Nov 2021-2024	
		End date	
		Dec 2021-2024	
<b>6.2.4 Management of annual tendering process.</b>	a) Annual tender for supply of inputs and equipments.	Start date	
		Nov 2021-2024	
		End date	
		Jan 2022-2025	
<b>6.2.5 Warrant to DOA (Divisional Offices) from HQ Office.</b>	a) Warrant to 12 DOA Divisional Offices.	Start date	
		Jan 2022-2025	
		End date	
		Mar 2022-2025	
Project Owner	Implementing Agency	Other Stakeholders	
DOA	DOA		

## AIP Level 2 - Poverty alleviation

<b>Sector</b>	: Poverty alleviation		
<b>Initiative</b>	: 6.2 Commodity & Food Crops Production Development Programme for Smallholders: Agriculture Development Programme in Resettlement Areas		
<b>Action step</b>	: 6.2.6 - 6.2.9 (2022-2025)		
Action step (s)	Output (s)	Timeline	Resources required
<b>6.2.6 Management of quotations and procurement process.</b>	a) Management of quotations and procurement process.	Start date	
		Feb 2022-2025	
		End date	
Apr 2022-2025			
<b>6.2.7 Project implementation.</b>	a) Supply of inputs and services to ±180 farming households (under State and Federal funding).	Start date	
		Apr 2022-2025	
		End date	
Oct 2022-2025			
<b>6.2.8 Payment process.</b>	a) Verification of work completion and preparation of documents for payment process.	Start date	
		May 2022-2025	
		End date	
Oct 2022-2025			
<b>6.2.9 Monitoring and reporting.</b>	a) Monthly financial progress report.	Start date	
		Jan 2022-2025	
		End date	
Dec 2022-2025			
Project Owner	Implementing Agency	Other Stakeholders	
DOA	DOA		

## AIP Level 1 - Poverty alleviation

<b>Sector</b>	: Poverty alleviation	
<b>Strategy</b>	: Creating Job and Business Opportunities in All Economic Sectors to Increase Household Income	
<b>Initiative</b>	: 6.3 Commodity & Food Crops Production Development Programme for Smallholders: Paddy and Rice Industry Development Programme	
<b>Initiatives</b>	<b>Desired Outcome(s)</b>	
<b>6.3 Commodity &amp; Food Crops Production Development Programme for Smallholders: Paddy and Rice Industry Development Programme</b>	<p><b>Social Inclusivity / Economic Prosperity</b></p> <ol style="list-style-type: none"> <li>1,000 poor households actively participate in Paddy and Rice Industry Development Programme will earn monthly income above PLI.</li> </ol> <p><b>Environment Sustainability</b></p> <ol style="list-style-type: none"> <li>100% application of Good Agricultural Practices (GAP), MyOrganic.</li> </ol>	
<b>Timeline</b>		<b>Resources Required</b>
<b>Start Date</b>	<b>End Date</b>	
2022	2025	<ul style="list-style-type: none"> <li>State - RM3.0 million</li> <li>Federal (MAFI) - RM15.0 million</li> </ul>
<b>Project Owner</b>	<b>Implementing Agency</b>	<b>Other Stakeholders</b>
DOA	DOA	MANRED, DID, L&S, PPNS, PPK, MAFI, IADA Btg. Lupar, BERNAS, MARDI, Anchor Company

## AIP Level 2 - Poverty alleviation

<b>Sector</b> : Poverty alleviation			
<b>Initiative</b> : 6.3 Commodity & Food Crops Production Development Programme for Smallholders:Paddy and Rice Industry Development Programme			
<b>Action step</b> : 6.3.1 - 6.3.5 (2022-2025)			
Action step (s)	Output (s)	Timeline	Resources required
<b>6.3.1 Site identification and site visit</b>	a) Potential sites identified.	<b>Start date</b>	2022: State - RM3.0 million Federal (MAFI) - RM15.0 million
		Apr 2021-2024	
		<b>End date</b>	
		May 2021-2024	
<b>6.3.2 Divisional Technical Committee Meeting for evaluation of area suitability</b>	a) Selection of suitable sites.	<b>Start date</b>	
		May 2021-2024	
		<b>End date</b>	
		Jun 2021-2024	
<b>6.3.3 Site survey and mapping works</b>	a) Technical details and map on the surveyed areas produced.	<b>Start date</b>	
		Jun 2021-2024	
		<b>End date</b>	
		Aug 2021-2024	
<b>6.3.4 Steering Committee Meeting</b>	a) Approval of identified potential projects.	<b>Start date</b>	
		Aug 2021-2024	
		<b>End date</b>	
		Aug 2021-2024	
<b>6.3.5 Request for allocation from DOA (HQ Office)</b>	a) Fund allocated to respective Divisions based on approved project.	<b>Start date</b>	
		Aug 2021-2024	
		<b>End date</b>	
		Sep 2021-2024	
Project Owner	Implementing Agency	Other Stakeholders	
DOA	DOA	MANRED, DID, L&S, PPNS, PPK, MAFI, IADA Btg. Lupar, BERNAS, MARDI, Anchor Company	

## AIP Level 2 - Poverty alleviation

<b>Sector</b> :		Poverty alleviation	
<b>Initiative</b> :		6.3 Commodity & Food Crops Production Development Programme for Smallholders:Paddy and Rice Industry Development Programme	
<b>Action step</b> :		6.3.6 - 6.3.9 (2022-2025)	
Action step (s)	Output (s)	Timeline	Resources required
<b>6.3.6 Preparation of specification documents</b>	a) Documents prepared by DOA (HQ).	Start date	
		Sep 2021-2024	
		End date	
		Dec 2021-2024	
		End date	
		Dec 2021-2024	
<b>6.3.7 Procurement processes</b>	a) Preparation of documents for procurement process.	Start date	
		Dec 2021-2024	
		End date	
		Dec 2021-2024	
		End date	
		Dec 2021-2024	
<b>6.3.8 Warrant to DOA (Divisional Offices) from HQ Office.</b>	a) Allocation to respective Divisional Offices.	Start date	
		Feb 2022-2025	
		End date	
		Feb 2022-2025	
		End date	
		Feb 2022-2025	
<b>6.3.9 Award to contractor and site handover.</b>	a) Production of quality paddy seeds - 45 mt b) 2) Mechanisation and automation services - 45 lower income farming households c) Land development - 30 lower income farming households	Start date	
		Feb 2022-2025	
		End date	
		Feb 2022-2025	
		End date	
		Feb 2022-2025	
Project Owner	Implementing Agency	Other Stakeholders	
DOA	DOA	MANRED,DID, L&S, PPNS, PPK, MAFI, IADA Btg. Lupar, BERNAS, MARDI, Anchor Company	

## AIP Level 2 - Poverty alleviation

<b>Sector</b>	: Poverty alleviation		
<b>Initiative</b>	: 6.3 Commodity & Food Crops Production Development Programme for Smallholders:Paddy and Rice Industry Development Programme		
<b>Action step</b>	: 6.3.10 - 6.3.13 (2022-2025)		
Action step (s)	Output (s)	Timeline	Resources required
<b>6.3.10 Supply and service delivery works.</b>	a) Supply of inputs and services to about 75 lower income households.	Start date	
		Feb 2022-2025	
		End date	
		Oct 2022-2025	
<b>6.3.11 Progress monitoring and reporting.</b>	a) Monthly financial progress report.	Start date	
		Feb 2022-2025	
		End date	
		Oct 2022-2025	
<b>6.3.12 Verification of work completion.</b>	a) On-site verification by DOA.	Start date	
		Oct 2022-2025	
		End date	
		Nov 2022-2025	
<b>6.3.13 Payment process.</b>	a) Preparation of documents for payment.	Start date	
		Dec 2022-2025	
		End date	
		Dec 2022-2025	
Project Owner	Implementing Agency	Other Stakeholders	
DOA	DOA		

## AIP Level 1 - Poverty alleviation

<b>Sector</b>	: Poverty alleviation	
<b>Strategy</b>	: Creating Job and Business Opportunities in All Economic Sectors to Increase Household Income	
<b>Initiative</b>	: 6.4 Inland Fishermen Development Programme for Smallholders: Aquaculture Development and Inland Fisheries Conservation Programme	
<b>Initiatives</b>	<b>Desired Outcome(s)</b>	
<b>6.4 Inland Fishermen Development Programme for Smallholders: Aquaculture Development and Inland Fisheries Conservation Programme</b>	<p><b>Social Inclusivity / Economic Prosperity</b></p> <ol style="list-style-type: none"> <li>200 poor households actively participate in Aquaculture Development and Inland Fisheries Conservation Programme will earn monthly income above PLI.</li> </ol> <p><b>Environment Sustainability</b></p> <ol style="list-style-type: none"> <li>100% adoption of environmentally fishing practices.</li> </ol>	
<b>Timeline</b>		<b>Resources Required</b>
<b>Start Date</b>	<b>End Date</b>	
2022	2025	<ul style="list-style-type: none"> <li>State - RM1.0 million</li> <li>Federal (MAFI) - RM20.0 million</li> </ul>
<b>Project Owner</b>	<b>Implementing Agency</b>	<b>Other Stakeholders</b>
DOA	DOA	MANRED, MOU, NREB, LKIM, JPLS, R&DO, River Board, Pusat Khidmat YB, L&S

## AIP Level 2 - Poverty alleviation

<b>Sector</b>	: Poverty alleviation		
<b>Initiative</b>	: 6.4 Inland Fishermen Development Programme for Smallholders: Aquaculture Development and Inland Fisheries Conservation Programme		
<b>Action step</b>	: 6.4.1 - 6.4.4 (2022-2025)		
Action step (s)	Output (s)	Timeline	Resources required
<b>6.4.1 Allocation of funding to respective Divisions.</b>	a) Allocation of warrant to 12 Divisional Offices.	<b>Start date</b>	2022: State - RM1.0 mil Federal (MAFI) - RM20.0 million
		Apr 2022-2024	
		<b>End date</b>	
Dec 2022-2024			
<b>6.4.2 Site verification.</b>	a) Sites verified based on applications.	<b>Start date</b>	
		Jan 2022-2024	
		<b>End date</b>	
Feb 2022-2024			
<b>6.4.3 Management of applications for assistance.</b>	a) List of applications.	<b>Start date</b>	
		Jan 2021-2024	
		<b>End date</b>	
June 2021-2024			
<b>6.4.4 Recommendation from Divisional Project Development Committee Meeting (Divisional Office).</b>	a) Recommendation upon verification and fulfillment of requirements and criteria.	<b>Start date</b>	
		Jan 2022-2024	
		<b>End date</b>	
Feb 2022-2024			
Project Owner	Implementing Agency	Other Stakeholders	
DOA	DOA	MANRED, MOU, NREB, LKIM, JPLS, R&DO, River Board, Pusat Khidmat YB, L&S	

## AIP Level 2 - Poverty alleviation

<b>Sector</b>	: Poverty alleviation		
<b>Initiative</b>	: 6.4 Inland Fishermen Development Programme for Smallholders: Aquaculture Development and Inland Fisheries Conservation Programme		
<b>Action step</b>	: 6.4.5 - 6.4.9 (2022-2025)		
Action step (s)	Output (s)	Timeline	Resources required
<b>6.4.5 Approval from DOA (HQ Office) in Departmental Project Development Committee Meeting.</b>	a) Approval of projects upon recommendation by Divisional Offices.	Start date	
		Jul 2021-2024	
		End date	
		Sep 2021-2024	
<b>6.4.6 Letter of offer to participants.</b>	a) 75 lower-income households participate in the programme.	Start date	
		Sep 2021-2024	
		End date	
		Oct 2021-2024	
<b>6.4.7 Procurement process for supply of inputs/ service delivery works.</b>	a) Quotations for agriculture inputs and equipments and services from suppliers through tender process.	Start date	
		Jan 2022-2025	
		End date	
		Feb 2022-2025	
<b>6.4.8 Supply of inputs / service delivery works and payment process.</b>	a) Supply of Inputs and Services to ±75 lower-income farming households (under State and Federal funding).	Start date	
		Feb 2022-2025	
		End date	
		Mar 2022-2025	
<b>6.4.9 Project monitoring.</b>	a) Monthly financial progress report.	Start date	
		Mar 2022-2025	
		End date	
		Apr 2022-2025	
Project Owner	Implementing Agency	Other Stakeholders	
DOA	DOA		

## AIP Level 2 - Poverty alleviation

<b>Sector</b>	: Poverty alleviation		
<b>Initiative</b>	: 6.4 Inland Fishermen Development Programme for Smallholders: Aquaculture Development and Inland Fisheries Conservation Programme		
<b>Action step</b>	: 6.4.9 - 6.4.10 (2022-2025)		
Action step (s)	Output (s)	Timeline	Resources required
<b>6.4.9 Project monitoring.</b>	a) Monthly financial progress report.	Start date	
		Mar 2022-2025	
		End date	
<b>6.4.10 Project evaluation and handover.</b>	a) Project evaluated and handed over to participants.	Start date	
		Apr 2022-2025	
		End date	
Dec 2022-2025			
Project Owner	Implementing Agency	Other Stakeholders	
DOA	DOA		

## AIP Level 1 - Poverty alleviation

<b>Sector</b>	: Poverty alleviation	
<b>Strategy</b>	: Creating Job and Business Opportunities in All Economic Sectors to Increase Household Income	
<b>Initiative</b>	: 6.5 Inland Fishermen Development Programme for Smallholders: Fishermen's Fishing Equipment Input Assistance Bantuan Input Peralatan Perikanan Nelayan (BIPPN)	
<b>Initiatives</b>	<b>Desired Outcome(s)</b>	
<b>6.5 Inland Fishermen Development Programme for Smallholders: Fishermen's Fishing Equipment Input Assistance Bantuan Input Peralatan Perikanan Nelayan (BIPPN)</b>	<p><b>Economic Prosperity</b></p> <ol style="list-style-type: none"> <li>7,100 low-income fishermen will receive fishing equipment and input to increase their fish catch by 20% which will increase their monthly income above PLI.</li> </ol> <p><b>Environment Sustainability</b></p> <ol style="list-style-type: none"> <li>100% application of good and sustainable fishing practices.</li> </ol>	
<b>Timeline</b>		<b>Resources Required</b>
<b>Start Date</b>	<b>End Date</b>	
2021	2025	<ul style="list-style-type: none"> <li>State - RM100.0 million</li> </ul>
<b>Project Owner</b>	<b>Implementing Agency</b>	<b>Other Stakeholders</b>
DOA	DOA, SLDB	MANRED, MOU, NREB, LKIM, JPLS, R&DO, River Board, Pusat Khidmat YB,

## AIP Level 2 - Poverty alleviation

<b>Sector</b>	: Poverty alleviation		
<b>Initiative</b>	: 6.5 Inland Fishermen Development Programme for Smallholders: Fishermen's Fishing Equipment Input Assistance <i>Bantuan Input Peralatan Perikanan Nelayan (BIPPN)</i>		
<b>Action step</b>	: 6.5.1 - 6.5.4 (2021-2025)		
Action step (s)	Output (s)	Timeline	Resources required
<b>6.5.1 Management of applications.</b>	a) List of applications.	Start date	2021: State - RM100.0 mil
		Jan 2021-2025	
		End date	
		Mar 2021-2025	
<b>6.5.2 On-the-ground verification.</b>	a) Sites verified based on applications.	Start date	
		Jan 2021-2025	
		End date	
		Mar 2021-2025	
<b>6.5.3 Warrant to DOA.</b>	a) Warrant to DOA and allocation to 12 Divisional Offices.	Start date	
		Jan 2021-2025	
		End date	
		Feb 2021-2025	
<b>6.5.4 Procurement process for supply of inputs.</b>	a) Preparation of documents for procurement process.	Start date	
		Feb 2021-2025	
		End date	
		Jun 2021-2025	
Project Owner	Implementing Agency	Other Stakeholders	
DOA	DOA, SLDB	MANRED, MOU, NREB, LKIM, JPLS, R&DO, River Board, Pusat Khidmat YB	

## AIP Level 2 - Poverty alleviation

<b>Sector</b>	: Poverty alleviation		
<b>Initiative</b>	: 6.5 Inland Fishermen Development Programme for Smallholders: Fishermen's Fishing Equipment Input Assistance <i>Bantuan Input Peralatan Perikanan Nelayan (BIPPN)</i>		
<b>Action step</b>	: 6.5.5 - 6.5.6 (2021-2025)		
Action step (s)	Output (s)	Timeline	Resources required
<b>6.5.5 Handover of inputs to participants.</b>	a) Supply of inputs to ±2,000 households.	Start date	
		Jun 2021-2025	
		End date	
<b>6.5.6 Monitoring and evaluation.</b>	a) Monthly financial progress report.	Start date	
		Sep 2021-2025	
		End date	
Nov 2021-2025			
Project Owner	Implementing Agency	Other Stakeholders	
DOA	DOA, SLDB		

## AIP Level 1 - Poverty alleviation

<b>Sector</b>	: Poverty alleviation	
<b>Strategy</b>	: Creating Job and Business Opportunities in All Economic Sectors to Increase Household Income	
<b>Initiative</b>	: 6.6 Livestock Development Programme for Smallholders: Ruminant (cattle, buffalo, goat, deer) and Non-ruminant (chicken, duck, pig and eggs) Assistance Programme	
<b>Initiatives</b>		<b>Desired Outcome(s)</b>
6.6 Livestock Development Programme for Smallholders: Ruminant (cattle, buffalo, goat, deer) and Non-ruminant (chicken, duck, pig and eggs) Assistance Programme		<p><b>Economic Prosperity</b></p> <p>1. 1,000 poor households will earn monthly income above PLI.</p> <p><b>Environment Sustainability</b></p> <p>1. 100% application of Good Animal Husbandry Practices, Halal.</p>
<b>Timeline</b>		<b>Resources Required</b>
<b>Start Date</b>	<b>End Date</b>	
2022	2025	<ul style="list-style-type: none"> <li>• RM9.62 mil</li> <li>• RM40.0 mil (Stock acquisition)</li> <li>• RM7.65 mil (Upgrading of livestock stations)</li> <li>• RM2.0 mil (Quality assurance &amp; biosecurity)</li> <li>• RM2.0 mil (Training &amp; extension)</li> </ul>
<b>Project Owner</b>	<b>Implementing Agency</b>	<b>Other Stakeholders</b>
DVS	DVS	MANRED, MAFI, SALCRA, SMA, PPES Ternak Sdn. Bhd., NREB, L&S, R&DO, Local Council, Local Communities, Livestock farmers, Breeders Association, Anchor Company

## AIP Level 2 - Poverty alleviation

<b>Sector</b>	: Poverty alleviation		
<b>Initiative</b>	: 6.6 Livestock Development Programme for Smallholders: Ruminant (cattle, buffalo, goat, deer) and Non-ruminant (chicken, duck, pig and eggs) Assistance Programme		
<b>Action step</b>	: 6.6.1 - 6.5.4 (2021-2025)		
Action step (s)	Output (s)	Timeline	Resources required
<b>Large Ruminant</b> <b>6.6.1 Screening and identify potential farmers</b>	<b>Large Ruminant:</b> <b>50 Commercial cattle/buffalo farms developed.</b>	<b>Start date</b>	RM10.0 mil
		2021	
<b>6.6.2 Training of the selected farmers</b>	a) 50 cattle/buffalo farmers trained.		
<b>6.6.3 Procurement and distribution of farm inputs &amp; livestock breeders.</b>	a) 1,500 heads of breeder cattle & buffaloes issued to 50 farmers.	<b>End date</b>	
<b>6.6.4 Monitoring &amp; Extension</b>	a) 50 farms monitored.	2025	
<b>6.6.5 Analysis Report</b>	a) One analysis report.		
Project Owner	Implementing Agency	Other Stakeholders	
MANRED	DVS	MANRED, MAFI, SALCRA, SMA, PPES, Ternak Sdn. Bhd., NREB, L&S, R&DO, Local Council, Local Communities, Livestock farmers, Breeders Associations, Anchor Company	

## AIP Level 2 - Poverty alleviation

<b>Sector</b>	: Poverty alleviation		
<b>Initiative</b>	: 6.6 Livestock Development Programme for Smallholders: Ruminant (cattle, buffalo, goat, deer) and Non-ruminant (chicken, duck, pig and eggs) Assistance Programme		
<b>Action step</b>	: 6.6.1 - 6.6.5 (Small Ruminant)		
Action step (s)	Output (s)	Timeline	Resources required
<b>Small Ruminant</b> <b>6.6.1 Screening and identify potential farmers</b>	<b>Small Ruminant:</b> <b>100 commercial goat/sheep farms developed.</b>	Start date	
		2021	
<b>6.6.2 Training of the selected farmers</b>	a) 100 goat/sheep farmers trained.		
<b>6.6.3 Procurement and distribution of farm inputs &amp; livestock breeders.</b>	a) 2,000 heads of breeder sheep & goats issued to 100 farmers.	End date	
		2025	
<b>6.6.4 Monitoring &amp; Extension</b>	a) 100 goat/sheep farms monitored.		
<b>6.6.5 Analysis Report</b>	a) One analysis report.		
Project Owner	Implementing Agency	Other Stakeholders	
MANRED	DVS		

## AIP Level 2 - Poverty alleviation

<b>Sector</b>	: Poverty alleviation		
<b>Initiative</b>	: 6.6 Livestock Development Programme for Smallholders: Ruminant (cattle, buffalo, goat, deer) and Non-ruminant (chicken, duck, pig and eggs) Assistance Programme		
<b>Action step</b>	: 6.6.1 - 6.6.5 (Non-Ruminant)		
Action step (s)	Output (s)	Timeline	Resources required
<b>Non-Ruminant 6.6.1 Screening and identify potential farmers</b>	<b>Non-Ruminant: 150 commercial goat/sheep farms developed.</b>	Start date	
		2021	
<b>6.6.2 Training of the selected farmers</b>	a) 150 goat/sheep farmers trained.		
<b>6.6.3 Procurement and distribution of farm inputs &amp; livestock breeders.</b>	a) 2,000 heads of breeder sheep & goats issued to 100 farmers.	End date	
		2025	
<b>6.6.4 Monitoring &amp; Extension</b>	a) 150 goat/sheep farms monitored.		
<b>6.6.5 Analysis Report</b>	a) One analysis report.		
Project Owner	Implementing Agency	Other Stakeholders	
MANRED	DVS		

## AIP Level 1 - Poverty alleviation

<b>Sector</b>	: Poverty alleviation	
<b>Strategy</b>	: Creating Job and Business Opportunities in All Economic Sectors to Increase Household Income	
<b>Initiative</b>	: 6.7 Agro-based Industry Development Programme for Small-scale Agro Entrepreneurs: Agrofood Product Development Programme	
<b>Initiatives</b>	<b>Desired Outcome(s)</b>	
<b>6.7 Agro-based Industry Development Programme for Small-scale Agro Entrepreneurs: Agrofood Product Development Programme</b> <ul style="list-style-type: none"> <li>Programme Pembangunan Produk Agromakanan</li> </ul>	<b>Economic Prosperity</b> <ol style="list-style-type: none"> <li>1,000 poor households actively participate in Agrofood Product Development Programme will earn monthly income above PLI.</li> </ol> <b>Environment Sustainability</b> <ol style="list-style-type: none"> <li>100% application of Good Manufacturing Practices (GMP), HACCP, Halal, etc.</li> </ol>	
<b>Timeline</b>		<b>Resources Required</b>
<b>Start Date</b>	<b>End Date</b>	
2022	2025	<ul style="list-style-type: none"> <li>State - RM1.0 million</li> </ul>
<b>Project Owner</b>	<b>Implementing Agency</b>	<b>Other Stakeholders</b>
DOA	DOA	MANRED, MAFI, MARDI, SEDC, PPNS, PPK, LKIM, LPNM, IADA, Anchor Company

## AIP Level 2 - Poverty alleviation

<b>Sector</b>	: Poverty alleviation		
<b>Initiative</b>	: 6.7 Agro-based Industry Development Programme for Small-scale Agro Entrepreneurs: Agrofood Product Development Programme		
<b>Action step</b>	: 6.7.1 - 6.7.5 (2022-2023)		
Action step (s)	Output (s)	Timeline	Resources required
<b>2022/2023</b> <b>6.7.1 Management of applications.</b>	a) List of applications.	<b>Start date</b>	2022: State - RM1.0 mil
		Jan 2021-2022	
		<b>End date</b>	
		Oct 2021-2022	
<b>6.7.2 Notification of allocation for Divisions by DOA (HQ Office)</b>	a) List of approved allocations - 27 participants	<b>Start date</b>	
		Jan 2022-2023	
		<b>End date</b>	
		Jan 2022-2023	
<b>6.7.3 Coordination of approved projects based on allocation to respective Division</b>	a) List of approved allocations - 27 participants	<b>Start date</b>	
		Feb 2022-2023	
		<b>End date</b>	
		Mar 2022-2023	
<b>6.7.4 Management of annual tendering process</b>	a) Annual tender for supply of inputs and equipments	<b>Start date</b>	
		Nov 2021-2022	
		<b>End date</b>	
		Feb 2022-2023	
<b>6.7.5 Warrant to respective Divisional Offices.</b>	a) Warrant to <b>12 DOA Divisional Offices.</b>	<b>Start date</b>	
		Jan 2022-2023	
		<b>End date</b>	
		Jan 2022-2023	
Project Owner	Implementing Agency	Other Stakeholders	
DOA	DOA	MANRED, MAFI, MARDI, SEDC, PPNS, PPK, LKIM, LPNM, IADA and Anchor Company	

## AIP Level 2 - Poverty alleviation

<b>Sector</b>	: Poverty alleviation		
<b>Initiative</b>	: 6.7 Agro-based Industry Development Programme for Small-scale Agro Entrepreneurs: Agrofood Product Development Programme		
<b>Action step</b>	: 6.7.6 - 6.7.9 (2022-2023)		
Action step (s)	Output (s)	Timeline	Resources required
<b>6.7.6 Management of quotations and procurement process.</b>	a) Quotations for agriculture inputs and equipments and services from suppliers through procurement process.	Start date	
		Apr 2022/2023	
		End date	
		Jun 2022/2023	
<b>6.7.7 Project implementation.</b>	a) Supply inputs to 27 approved participants	Start date	
		Jul 2022-2023	
		End date	
		Oct 2022-2023	
<b>6.7.8 Project completion verification and payment process.</b>	a) Verification of work completion and preparation of documents for payment process - 27 projects (participants)	Start date	
		Nov 2022-2023	
		End date	
		Dec 2022-2023	
<b>6.7.9 Monitoring and reporting.</b>	a) Monthly financial progress report (12 reports)	Start date	
		Jan 2022-2023	
		End date	
		Dec 2022-2023	
Project Owner	Implementing Agency	Other Stakeholders	
DOA	DOA	MANRED, MAFI, MARDI, SEDC, PPNS, PPK, LKIM, LPNM, IADA and Anchor Company	

## AIP Level 2 - Poverty alleviation

<b>Sector</b>	: Poverty alleviation		
<b>Initiative</b>	: 6.7 Agro-based Industry Development Programme for Small-scale Agro Entrepreneurs: Agrofood Product Development Programme		
<b>Action step</b>	: 6.7.1 - 6.7.5 (2024-2025)		
Action step (s)	Output (s)	Timeline	Resources required
<b>2024/2025</b> <b>6.7.1 Management of applications.</b>	a) List of applications.	Start date	
		Jan 2023-2024	
		End date	
<b>6.7.2 Notification of allocation for Divisions by DOA (HQ Office)</b>	a) List of approved allocations - 18 participants	Start date	
		Jan 2024-2025	
		End date	
<b>6.7.3 Coordination of approved projects based on allocation to respective Division</b>	a) List of approved allocations - 18 participants	Start date	
		Feb 2024-2025	
		End date	
<b>6.7.4 Management of annual tendering process</b>	a) Annual tender for supply of inputs and equipments	Start date	
		Nov 2023-2024	
		End date	
<b>6.7.5 Warrant to respective Divisional Offices.</b>	a) Warrant to <b>12 DOA Divisional Offices.</b>	Start date	
		Jan 2024-2025	
		End date	
		Jan 2024-2025	
		End date	
		Jan 2024-2025	
Project Owner	Implementing Agency	Other Stakeholders	
DOA	DOA	MANRED, MAFI, MARDI, SEDC, PPNS, PPK, LKIM, LPNM, IADA and Anchor Company	

## AIP Level 2 - Poverty alleviation

<b>Sector</b>	: Poverty alleviation		
<b>Initiative</b>	: 6.7 Agro-based Industry Development Programme for Small-scale Agro Entrepreneurs: Agrofood Product Development Programme		
<b>Action step</b>	: 6.7.6 - 6.7.9 (2024-2025)		
Action step (s)	Output (s)	Timeline	Resources required
<b>6.7.6 Management of quotations and procurement process.</b>	a) Quotations for agriculture inputs and equipments and services from suppliers through procurement process.	Start date	
		Apr 2024-2025	
		End date	
		Jun 2024-2025	
<b>6.7.7 Project implementation.</b>	a) Supply inputs to 18 approved participants	Start date	
		Jul 2024-2025	
		End date	
		Oct 2024-2025	
<b>6.7.8 Project completion verification and payment process.</b>	a) Verification of work completion and preparation of documents for payment process - 18 projects (participants)	Start date	
		Nov 2024-2025	
		End date	
		Dec 2024-2025	
<b>6.7.9 Monitoring and reporting.</b>	a) Monthly financial progress report (12 reports)	Start date	
		Jan 2024-2025	
		End date	
		Dec 2024-2025	
Project Owner	Implementing Agency	Other Stakeholders	
DOA	DOA	MANRED, MAFI, MARDI, SEDC, PPNS, PPK, LKIM, LPNM, IADA and Anchor Company	

## AIP Level 1 - Poverty alleviation

<b>Sector</b>	: Poverty alleviation		
<b>Strategy</b>	: Creating Job and Business Opportunities in All Economic Sectors to Increase Household Income		
<b>Initiative</b>	: 6.8 Agro-based Industry Development Programme for Small-scale Agro Entrepreneurs: Agrofood Entrepreneurship Development Programme		
<b>Initiatives</b>		<b>Desired Outcome(s)</b>	
<b>6.8 Agro-based Industry Development Programme for Small-scale Agro Entrepreneurs: Agrofood Entrepreneurship Development Programme</b> <ul style="list-style-type: none"> <li>Program Pembangunan Keusahawanan Agromakanan</li> </ul>		<b>Economic Prosperity</b> <ol style="list-style-type: none"> <li>1,000 poor households actively participate in Agrofood Product Development Programme will earn monthly income above PLI.</li> </ol> <b>Environment Sustainability</b> <ol style="list-style-type: none"> <li>100% application of Good Manufacturing Practices (GMP), HACCP, Halal, etc.</li> </ol>	
<b>Timeline</b>		<b>Resources Required</b>	
<b>Start Date</b>	<b>End Date</b>	<ul style="list-style-type: none"> <li>State - RM4.0 million</li> </ul>	
2022	2025		
<b>Project Owner</b>	<b>Implementing Agency</b>	<b>Other Stakeholders</b>	
DOA	DOA	MANRED, MAFI, MARDI, SEDC, PPNS, PPK, LKIM, LPNM, IADA, Anchor Company	

## AIP Level 2 - Poverty alleviation

<b>Sector</b> :		Poverty alleviation	
<b>Initiative</b> :		6.8 Agro-based Industry Development Programme for Small-scale Agro Entrepreneurs: Agrofood Entrepreneurship Development Programme	
<b>Action step</b> :		6.8.1 - 6.8.4 (2022-2025)	
Action step (s)	Output (s)	Timeline	Resources required
<b>6.8.1 Identifying types of courses and promotional activities and number of participants.</b>	a) List of entrepreneurship courses and promotional activities.	<b>Start date</b>	2022: State - RM4.0 million
		Oct 2021-2024	
		<b>End date</b>	
Oct 2021-2024			
<b>6.8.2 Request for allocation by Divisional Offices and warrant to Divisional Offices.</b>	a) Warrant to 12 DOA Divisional Offices.	<b>Start date</b>	
		Jan 2022-2025	
		<b>End date</b>	
Feb 2022-2025			
<b>6.8.3 Procurement process for courses and activities.</b>	a) Quotations for equipments and services from suppliers through procurement process.	<b>Start date</b>	
		Feb 2022-2025	
		<b>End date</b>	
Oct 2022-2025			
<b>6.8.4 Conducting courses and promotional activities.</b>	a) 38 courses involving 750 participants. b) 25 promotional activities involving 100 participants. c) ( ±1,000 poor households)	<b>Start date</b>	
		Mar 2024-2025	
		<b>End date</b>	
		Oct 2024-2025	
Project Owner	Implementing Agency	Other Stakeholders	
DOA	DOA	MANRED, MAFI, MARDI, SEDC, PPNS, PPK, LKIM, LPNM, IADA, and Anchor Company	

## AIP Level 2 - Poverty alleviation

<b>Sector</b>	: Poverty alleviation		
<b>Initiative</b>	: 6.8 Agro-based Industry Development Programme for Small-scale Agro Entrepreneurs: Agrofood Entrepreneurship Development Programme		
<b>Action step</b>	: 6.8.5 - 6.8.6 (2022-2025)		
Action step (s)	Output (s)	Timeline	Resources required
<b>6.8.5 Verification of work completion and payment process.</b>	a) Preparation of documents for payment process for completed courses and promotion activities (38 courses, 25 promotional activities)	Start date	
		Oct 2021-2024	
		End date	
<b>6.8.6 Progress monitoring and reporting.</b>	a) Monthly financial progress report <b>(12 reports)</b>	Start date	
		Jan 2022-2025	
		End date	
Feb 2022-2025			
Project Owner	Implementing Agency	Other Stakeholders	
DOA	DOA	MANRED, MAFI, MARDI, SEDC, PPNS, PPK, LKIM, LPNM, IADA, and Anchor Company	

## AIP Level 1 - Poverty alleviation

<b>Sector</b> :		Poverty alleviation
<b>Strategy</b> :		Creating Job and Business Opportunities in All Economic Sectors to Increase Household Income
<b>Initiative</b> :		6.9 Native Land Development: Oil Palm Plantation Replanting Project
Initiatives		Desired Outcome(s)
<b>6.9 Native Land Development: Oil Palm Plantation Replanting Project</b> <ul style="list-style-type: none"> <li>Projek Tanam Semula Ladang Kelapa Sawit</li> </ul>		<b>Economic Prosperity</b> <ol style="list-style-type: none"> <li>600 poor households of 6,347 NCR landowners participate in Native Land Development will earn monthly income above PLI through dividend and wages.</li> </ol> <b>Environment Sustainability</b> <ol style="list-style-type: none"> <li>100% application of Good Agriculture Practices (GAP) &amp; MSPO compliance.</li> </ol>
Timeline		Resources Required
Start Date	End Date	
2020	2025	<ul style="list-style-type: none"> <li>Funding: RM300 million <ul style="list-style-type: none"> <li>Batu Kaya Fasa 3 (RM6 mil)</li> <li>Pakit Fasa 4&amp;5 (RM13.4 mil)</li> <li>Estet Rimbas (RM16.5 mil)</li> <li>Estet Kedup (RM13.6 mil)</li> <li>Sri Aman, Serian, Bau &amp; Lundu (RM50 mil)</li> <li>Other areas (RM200 mil)</li> </ul> </li> <li>Existing Manpower/ Consultant</li> </ul>
Project Owner	Implementing Agency	Other Stakeholders
SALCRA	SALCRA	MANRED, MPOD, SFS, KPLB, NCR Landowners, NREB & EIA Consultants, Contractors, Farm Input Service, Providers

## AIP Level 2 - Poverty alleviation

<b>Sector</b>	: Poverty alleviation		
<b>Initiative</b>	: 6.9 Native Land Development: Oil Palm Plantation Replanting Project		
<b>Action step</b>	: 6.9.1 - 6.9.6		
Action step (s)	Output (s)	Timeline	Resources required
<b>6.9.1 Dialogue &amp; Signing of Letter of Consent (LOC) by the participants</b>	16,310 Ha of NCR Land developed and 6,347 LOC Signed	Start date	Existing Manpower
		2020	
		End date	
		2025	
<b>6.9.2 Environmental Management Plan (EMP) Study</b>	13 EMP Reports Approved	Start date	Funding: RM300 Mil
		2018	
		End date	
		2020	
<b>6.9.3 Procurement</b>	Tender & Contract Agreement	Start date	2.2 million seeds
		2021	
		End date	
		2025	
<b>6.9.4 Nursery Establishment</b>	137 seedlings per HA	Start date	
		2022	
		End date	
		2025	
<b>6.9.5 Estate Planning &amp; Design</b>	Estate Planning & Design Report	Start date	Existing Manpower, UAV, consultant
		2020	
<b>6.9.6 Land Establishment and Planting</b>	16,310 HA planted with oil palm	End date	Staff: 100 workers: 650 Technology/machine: farm tractors, lorries, UAV, Watering (Sumisansui)
		2025	
<b>Project Owner</b>	<b>Implementing Agency</b>	<b>Other Stakeholders</b>	
SALCRA	SALCRA	MANRED, MPOD, SFS, KPLB, NCR Landowners, NREB & EIA Consultants, Contractors, Farm Input Service, Providers	

## AIP Level 1 - Poverty alleviation

<b>Sector</b>	: Poverty alleviation	
<b>Strategy</b>	: Creating Job and Business Opportunities in All Economic Sectors to Increase Household Income	
<b>Initiative</b>	: 6.10 Native Land Development: Programme Bantuan Aktiviti Ekonomi Tambahan (AET) Bagi Peserta Ladang Estet SALCRA	
<b>Initiatives</b>	<b>Desired Outcome(s)</b>	
<b>6.10 Native Land Development: Programme Bantuan Aktiviti Ekonomi Tambahan (AET) Bagi Peserta Ladang Estet SALCRA</b>	<b>Economic Prosperity</b> <ol style="list-style-type: none"> <li>200 poor households actively participate in Programme Bantuan Aktiviti Ekonomi Tambahan will earn extra monthly income above RM1,000.</li> </ol>	
<b>Timeline</b>		<b>Resources Required</b>
<b>Start Date</b>	<b>End Date</b>	
2021	2025	<ul style="list-style-type: none"> <li>Funding: RM2.5 million (RM10,000 per participant)</li> </ul>
<b>Project Owner</b>	<b>Implementing Agency</b>	<b>Other Stakeholders</b>
SALCRA	SALCRA	KPLB Malaysia, MANRED, DOA, DVS, Koperasi Permodalan, SALCRA Sarawak Berhad

## AIP Level 2 - Poverty alleviation

<b>Sector</b>	: Poverty alleviation		
<b>Initiative</b>	: 6.10 Native Land Development: Programme Bantuan Aktiviti Ekonomi Tambahan (AET) Bagi Peserta Ladang Estet SALCRA		
<b>Action step</b>	: 6.10.1 - 6.10.4		
Action step (s)	Output (s)	Timeline	Resources required
<b>6.10.1 Identify, screening and select eligible participants that are under B40 income group</b>	a) 200 Participants Selected	Start date	Existing Manpower
		2019	
		End date	
		2025	
Project Owner	Implementing Agency	Other Stakeholders	
SALCRA	SALCRA	Participants	
Action step (s)	Output (s)	Timeline	Resources required
<b>6.10.2 Assign suitable projects &amp; provide necessary trainings to the selected participants</b>	a) Type of AET Projects; 200 selected participants will have basic knowledge on the projects	Start date	Funding: RM0.25 Mil
		2020	
		End date	
		2025	
Project Owner	Implementing Agency	Other Stakeholders	
SALCRA	SALCRA	Consultant, Trainer	
Action step (s)	Output (s)	Timeline	Resources required
<b>6.10.3 Procurement &amp; Delivery</b>	a) Farm inputs, machine & equipments	Start date	Funding: RM2.25 mil
		2020	
		End date	
		2025	
Project Owner	Implementing Agency	Other Stakeholders	
SALCRA	SALCRA	SFS, KPLB, Contractor	
Action step (s)	Output (s)	Timeline	Resources required
<b>6.10.4 Monitoring</b>	a) Report (Production/Productivity/Sales/Profit)	Start date	Existing Manpower
		2021	
		End date	
		2025	
Project Owner	Implementing Agency	Other Stakeholders	
SALCRA	SALCRA	KPLB	

## AIP Level 1 - Poverty alleviation

<b>Sector</b>	: Poverty alleviation	
<b>Strategy</b>	: Creating Job and Business Opportunities in All Economic Sectors to Increase Household Income	
<b>Initiative</b>	: 6.11 Rural Development Economic Programme: Programme Bersepadu Pembangunan Ekonomi Kampung (PROSPEK)	
<b>Initiatives</b>	<b>Desired Outcome(s)</b>	
<b>6.11 Rural Development Economic Programme: Programme Bersepadu Pembangunan Ekonomi Kampung (PROSPEK)</b>	<p><b>Social Inclusivity</b></p> <ol style="list-style-type: none"> <li>600 poor households actively participate in Programme Bersepadu Pembangunan Ekonomi Kampung (PROSPEK) will earn monthly income above PLI.</li> </ol> <p><b>Environment Sustainability</b></p> <ol style="list-style-type: none"> <li>100% application of Good Manufacturing Practices (GMP), HACCP, Halal, etc.</li> </ol>	
<b>Timeline</b>		<b>Resources Required</b>
<b>Start Date</b>	<b>End Date</b>	
2021	2025	
<ul style="list-style-type: none"> <li>Funding: RM9.0 mil</li> </ul>		
<b>Project Owner</b>	<b>Implementing Agency</b>	<b>Other Stakeholders</b>
KPLB Malaysia	SLDB	MANRED, Matu District Office, Koperasi Matu Berhad

## AIP Level 2 - Poverty alleviation

<b>Sector</b> : Poverty alleviation			
<b>Initiative</b> : 6.11 Rural Development Economic Programme: Programme Bersepadu Pembangunan Ekonomi Kampung (PROSPEK)			
<b>Action step</b> : 6.11.1 - 6.11.3			
Action step (s)	Output (s)	Timeline	Resources required
<b>6.11.1 Village Selection - Eligible Village Criteria to apply:</b> <b>a. Involves existing villages only;</b> <b>b. Involves several nearby villages;</b> <b>c. Villages that have never won any competition or award;</b> <b>d. Meet the PROSPEK evaluation criteria and agreed by the State Authority (PBN);</b> <b>e. Villages that have an organisational structure; and</b> <b>f. Villages that have a Niche Product/resource/project/activity that can generate an economy and have the potential to be developed</b>	a) List of nominated villages.	Start date	RM9 mil
		2021	
<b>6.11.2 New applications for PROSPEK are received from the State through Unit Perancang Ekonomi Negeri (UPEN)/BPEN/Agency.</b>	a) Nomination of qualified villages from District Offices throughout Sarawak.	End date	
		2025	
<b>6.11.3 Submission of applications to PROSPEK Main Committee (JKIP)</b>	a) The PROSPEK Main Committee (JKIP) evaluate and make recommendations of applications received from UPEN/BPEN/agencies.		
Project Owner	Implementing Agency	Other Stakeholders	
KPLB Malaysia	SLDB	MANRED, Matu District Office, Koperasi Matu Berhad	

## AIP Level 2 - Poverty alleviation

<b>Sector</b> : Poverty alleviation			
<b>Initiative</b> : 6.11 Rural Development Economic Programme: Programme Bersepadu Pembangunan Ekonomi Kampung (PROSPEK)			
<b>Action step</b> : 6.11.4 - 6.11.6			
Action step (s)	Output (s)	Timeline	Resources required
<b>6.11.4 Data Collection Work/Feasibility Study:</b>	<ul style="list-style-type: none"> <li>a) Data collection work will be carried out on applications approved by JKIP.</li> <li>b) This study will be implemented by any local university determined by JKIP.</li> <li>c) The results of the study should be presented to JKIP.</li> <li>d) The proposal of the implementing agency is made during the application at JKTP.</li> </ul>	Start date	RM9 mil
		2021	
<b>6.11.5 Consideration to the Economic Planning Unit (EPU), Prime Minister's Department:</b>	<ul style="list-style-type: none"> <li>a) Applications approved by JKIP will be raised by KPLB for consideration by the EPU to obtain approval for allocation for implementation.</li> </ul>	End date	
<b>6.11.6 Project implementation: Once the project is approved by the EPU and the project allocation is approved by the Ministry of Finance, the Implementing Agency appointed based on the PROSPEK Guidelines under the KPLB which is currently in force can start implementing the project.</b>	<ul style="list-style-type: none"> <li>a) 11 projects implemented</li> </ul>	2025	
Project Owner	Implementing Agency	Other Stakeholders	
KPLB Malaysia	SLDB		

## AIP Level 1 - Poverty alleviation

<b>Sector</b>	: Poverty alleviation	
<b>Strategy</b>	: Creating Job and Business Opportunities in All Economic Sectors to Increase Household Income	
<b>Initiative</b>	: 6.12 Entrepreneur and Career Development Programme for participants in LCDA's Land Development Area	
<b>Initiatives</b>	<b>Desired Outcome(s)</b>	
<b>6.12 Entrepreneur and Career Development Programme for participants in LCDA's Land Development Area</b>	<p><b>Economic Prosperity</b></p> <ol style="list-style-type: none"> <li>150 poor households actively participate in Entrepreneur and Career Development Programme will earn monthly income above PLI.</li> </ol> <p><b>Environment Sustainability</b></p> <ol style="list-style-type: none"> <li>100% application of Good Agriculture Practices (GAP), MyOrganic, Good Manufacturing Practices (GMP), HACCP, Halal, etc.</li> </ol>	
<b>Timeline</b>		<b>Resources Required</b>
<b>Start Date</b>	<b>End Date</b>	
2022	2028	<ul style="list-style-type: none"> <li>Funding: RM16.7 million</li> </ul>
<b>Project Owner</b>	<b>Implementing Agency</b>	<b>Other Stakeholders</b>
MANRED	LCDA	EPU Sarawak, MANRED, R&DO, NCR Landowners, Investors

## AIP Level 2 - Poverty alleviation

<b>Sector</b>	: Poverty alleviation		
<b>Initiative</b>	: 6.12 Entrepreneur and Career Development Programme for participants in LCDA's Land Development Area		
<b>Action step</b>	: 6.12.1 - 6.12.4		
Action step (s)	Output (s)	Timeline	Resources required
<b>6.12.1 Identification and Profiling of project participants from hardcore poor households</b>	a) A total of <b>89 participants</b> selected from hardcore poor families	Start date	
		Jan 2022	
		End date	
		June 2022	
<b>6.12.2 Scholarship program for participants under hardcore poor households. (The scholarship covers tuition fees, hostel, book and computer allowances.</b>	a) 31 youth undergone courses at plantation academy, college, and University b) (Estimated income of RM2,500/month)	Start date	RM700 k
		July 2022	
		End date	
		2028	
<b>6.12.3 Develop idle land for smart farming project</b>	a) A total of 58 participants selected from hardcore poor families	Start date	RM14 mil
		June 2022	
		End date	
		2028	
<b>6.12.4 Provide Technical training and advisory on agriculture best practices</b>	a) 58 participants undergone training on Rock Melon fertigation farming	Start date	
		End date	
Project Owner	Implementing Agency	Other Stakeholders	
MANRED	LCDA	EPU Sarawak, MANRED, R&DO, NCR Landowners, Investors	

## AIP Level 2 - Poverty alleviation

<b>Sector</b>	: Poverty alleviation		
<b>Initiative</b>	: 6.12 Entrepreneur and Career Development Programme for participants in LCDA's Land Development Area		
<b>Action step</b>	: 6.12.5 - 6.12.7		
Action step (s)	Output (s)	Timeline	Resources required
<b>6.12.5 Construction of 58 units of SPH</b>	a) 58 units of SPH with planting system including agriculture inputs such as seedlings and coco peat	Start date	
<b>6.12.6 Cultivation of high value crops</b>	a) 58 participants provided with 1 units of SPH to cultivate Rock Melon through Fertigation	End date	
<b>6.12.7 Provide marketing network through anchor farmer</b>	a) Agriculture produce sold to the Anchor farmer through contract farming b) (Estimated income of RM3,453/month)		
Project Owner	Implementing Agency	Other Stakeholders	
MANRED	LCDA	EPU Sarawak, MANRED, R&DO, NCR Landowners, Investors	

## AIP Level 1 - Poverty alleviation

<b>Sector</b> :		Poverty alleviation
<b>Strategy</b> :		Creating Job and Business Opportunities in All Economic Sectors to Increase Household Income
<b>Initiative</b> :		6.13 Smart Farming Elevation Program
<b>Initiatives</b>		<b>Desired Outcome(s)</b>
<b>6.13 Smart Farming Elevation Program</b>		<p><b>Economic Prosperity</b></p> <ol style="list-style-type: none"> <li>150 poor households actively participate in Precision Farming Programme will earn monthly income above PLI.</li> </ol> <p><b>Environment Sustainability</b></p> <ol style="list-style-type: none"> <li>100% application of Good Agriculture Practices (GAP) &amp; MyOrganic.</li> </ol>
<b>Timeline</b>		<b>Resources Required</b>
<b>Start Date</b>	<b>End Date</b>	
2022	2030	<ul style="list-style-type: none"> <li>Funding: RM6.1 million</li> </ul>
<b>Project Owner</b>	<b>Implementing Agency</b>	<b>Other Stakeholders</b>
MANRED	LCDA	EPU Sarawak, L&S, NREB, DOA, SEB, DID, JKR, Local Farmers, Entrepreneur

## AIP Level 2 - Poverty alleviation

Sector		Poverty alleviation	
Initiative		6.13 Smart Farming Elevation Program	
Action step		6.13.1 - 6.13.4	
Action step (s)	Output (s)	Timeline	Resources required
<b>6.13.1 Selection of participants</b>	a) A total of <b>57 participants</b> selected from hardcore poor families	Start date	Nonw
		Jan 2022	
		End date	
		Jun 2023	
<b>6.13.2 Provide entrepreneurship training</b>	a) <b>7 participants</b> undergone training on Food Catering (Woman and Single mother)  Targeted income of RM3,000/month	Start date	Training Cost - RM60,000  Start up Capital - RM105,000
		Jul 2022	
		End date	
		Jun 2023	
<b>6.13.3 Provide entrepreneurship training</b>	a) <b>15 participants</b> undergone training on plantation management and business development as contractor  Targeted income RM3,000/month	Start date	Start up Capital - RM1.5 million  Training Cost - RM180,000
		Jul 2022	
		End date	
		Dec 2024	
<b>6.13.4 Provide technical training on oil palm plantation and cultivation of cash crops (Youth)</b>	a) <b>35 participants</b> undergone technical training on harvesting through mechanisation for oil palm plantation and cultivation of cash crops such as chilli  b) Target income of RM2,500/month	Start date	Training Cost - RM110,000
		Jul 2022	
		End date	
		Jun 2023	
<b>Project Owner</b>	<b>Implementing Agency</b>	<b>Other Stakeholders</b>	
MANRED	LCDA		

## AIP Level 1 - Poverty alleviation

<b>Sector</b>		: Poverty alleviation	
<b>Strategy</b>		: Creating Job and Business Opportunities in All Economic Sectors to Increase Household Income	
<b>Initiative</b>		: 7.1 Grow high value manufacturing and enhance local industry ecosystem	
<b>Initiatives</b>		<b>Desired Outcome(s)</b>	
7.1 Grow high value manufacturing and enhance local industry ecosystem		<b>Social Inclusivity</b> 1. 5,000 (50%) jobs created in the manufacturing sector are for the poor households that have been trained and equipped with suitable skills and knowledge to earn monthly income of RM5,000.	
<b>Timeline</b>		<b>Resources Required</b>	
<b>Start Date</b>	<b>End Date</b>		
2021	2025	Policy on technical and skills education  Funding: 1. RM5 million per year for Investment and Trade Promotion (total: RM25 million) 2. RM800 million for development for new high tech park (currently RM3 mil approved under RMK12) 3. RM670 million for development of other industrial parks (currently RM215.9 mil approved under RMK12)	
<b>Project Owner</b>	<b>Implementing Agency</b>	<b>Other Stakeholders</b>	
MINTRED	MINTRED	MESTR, Welfare Department, Business Communities, Foreign Investors, MIDA/MITI, EPU Sarawak	

## AIP Level 2 - Poverty alleviation

<b>Sector</b> : Poverty alleviation			
<b>Initiative</b> : 7.1 Grow high value Manufacturing and enhance local industry ecosystem			
<b>Action step</b> : 7.1.1 - 7.1.2			
Action step (s)	Output (s)	Timeline	Resources required
7.1.1 Formulation investment plan and ecosystem	a) Targeted investment and right ecosystem	Start date	Policy on technical and skills education
		2021	
		End date	Funding: 1) RM5 million per year for Investment and Trade Promotion (total: RM25 million) 2) RM800 million for development for new high tech park (currently RM3 mil approved under RMK12) 3) RM670 million for development of other industrial parks (currently RM215.9 mil approved under RMK12)
		2022	
7.1.2 Analysis on the demand and supply of manpower requirements for targeted investment	a) Manpower requirement in terms of skills and qualification	Start date	Training Cost - RM60,000
		2021	Start up Capital - RM105,000
		End date	
		2022	
Project Owner	Implementing Agency	Other Stakeholders	
MINTRED	MINTRED	MESTR, Welfare Department, Business Communities, Foreign Investors, MIDA/MITI, EPU Sarawak	

## AIP Level 2 - Poverty alleviation

<b>Sector</b> :		Poverty alleviation	
<b>Initiative</b> :		7.1 Grow high value Manufacturing and enhance local industry ecosystem	
<b>Action step</b> :		7.1.3 - 7.1.6	
Action step (s)	Output (s)	Timeline	Resources required
<b>7.1.3 Identify students from poor households to be given scholarship to pursue higher education based on skills and qualification required by the targeted industry</b>	a) List of students from poor households selected for skill development programy	Start date	
		2022	
<b>7.1.4 Enrolment in higher learning/training institutions</b>	a) Trained and qualified workforce for the targeted investment	End date	
		2030	
<b>7.1.5 Collaborate with industry for job placement</b>	a) Job placement		
<b>7.1.6 Monitoring, coordination and evaluation</b>	a) Evaluation report		
Project Owner	Implementing Agency	Other Stakeholders	
MINTRED	MINTRED	MESTR, Welfare Department, Business Communities, Foreign Investors, MIDA/MITI, EPU Sarawak	

## AIP Level 1 - Poverty alleviation

<b>Sector</b>	: Poverty alleviation	
<b>Strategy</b>	: Creating Job and Business Opportunities in All Economic Sectors to Increase Household Income	
<b>Initiative</b>	: 7.2 Empower and grow SMEs with specialised development programmes and infrastructure support - Sarawak Entrepreneur Development (SEED) Programme	
<b>Initiatives</b>	<b>Desired Outcome(s)</b>	
<b>7.2 Empower and grow SMEs with specialised development programmes and infrastructure support - Sarawak Entrepreneur Development (SEED) Programme</b> 1. Informal sector entrepreneurship 2. Micro High Impact Programme (HIP) 3. Grow BIG	Social Inclusivity 1. 100 poor households developed as entrepreneurs that adopt digital platform to increase 50% of their sales and earn monthly income level above PLI by 2025.	
<b>Timeline</b>		<b>Resources Required</b>
<b>Start Date</b>	<b>End Date</b>	
2021	2025	1. RM178.9 mil for programmes/financial assistance 2. 18 Anjung Usahawan: Total RM110 mil (currently RM10 mil approved under RMK12)
<b>Project Owner</b>	<b>Implementing Agency</b>	<b>Other Stakeholders</b>
MINTRED	MINTRED	SEDC, SDEC, AGROBANK, DOA, JKMNS, STIDC, CRAUN, SBC

## AIP Level 2 - Poverty alleviation

<b>Sector</b>	: Poverty alleviation		
<b>Initiative</b>	: 7.2 Empower and grow SMEs with specialised development programmes and infrastructure support - Sarawak Entrepreneur Development (SEED)Programme		
<b>Action step</b>	: 7.2.1 - 7.2.5		
Action step (s)	Output (s)	Timeline	Resources required
<b>7.2.1 Develop entrepreneurship training module and requirement (handhold program)</b>	a) Entrepreneurship training module	Start date	Funding: 1. RM10 mil (Entrepreneurship Programme) 2. RM115 mil (Development of Anjung Usahawan)
		2022	
<b>7.2.2 Identify eligible participants from poor households to be trained and participated in entrepreneurship program</b>	a) List of participants from poor household selected for entrepreneurship activities (per year)	End date	
<b>7.2.3 Assist qualified participants to register their business</b>	a) List of licensed entrepreneurs from poor household	2030	
<b>7.2.4 Collaborate with financial institution/agency to provide financial assistance and business premise to qualified participants for business start up</b>	a) List of licensed entrepreneurs assisted through financial assistance and business premise		
<b>7.2.5 Monitoring, coordination and evaluation</b>	a) Evaluation report		
Project Owner	Implementing Agency	Other Stakeholders	
MINTRED	MINTRED, SEDC, AGROBANK	SBC, Jabatan Kebajikan Masyarakat, MLGH, DOA, RANDO, Jabatan Wanita	

## AIP Level 1 - Poverty alleviation

<b>Sector</b> :		Poverty alleviation
<b>Strategy</b> :		Creating Job and Business Opportunities in All Economic Sectors to Increase Household Income
<b>Initiative</b> :		8.1 Develop geological mapping
Initiatives		Desired Outcome(s)
<b>8.1 Develop geological mapping</b>  Targeted area:- 1. REE: 323,000 ha. 2. Industrial mineral: 3,000,000 ha.  Targeted REE: 1. Dysprosium (Dy) 2. Neodymium (Nd) 3. Ytterbium (Yb) 4. Praseodymium  Average price for targeted REE: RM66 per kg/RM66,000 per mt. Average REE detailed exploration cost: RM150 – RM200 per ha.		<b>Social inclusivity:</b> 1. 30 poor households employed in mining sector earning monthly income more than PLI.
Timeline		Resources Required
Start Date	End Date	
2021	2025	<ul style="list-style-type: none"> <li>● RM100m               <ul style="list-style-type: none"> <li>○ RM50m Government funding for preliminary exploration on REE &amp; industrial minerals.</li> <li>○ RM50m investment from private sector to conduct detailed exploration of REE only.</li> </ul> </li> <li>● Cash Flow (for Govt. funding):               <ul style="list-style-type: none"> <li>○ RMK12: RM25m</li> <li>○ RMK13: RM25m</li> </ul> </li> </ul>
Project Owner	Implementing Agency	Other Stakeholders
MUDeNR	L&S	JMG, Mining Consultant, Industry Player

## AIP Level 2 - Poverty alleviation

<b>Sector</b> : Poverty alleviation			
<b>Initiative</b> : 8.1 Develop geological mapping			
<b>Action step</b> : 8.1.1 - 8.1.4			
Action step (s)	Output (s)	Timeline	Resources required
<b>8.1.1 Identify potential local workers from poor households to be employed to assist geological mapping activities</b>	a) List of potential local workers	Start date	RM100m - RM50m Government funding for preliminary exploration on REE & industrial minerals.  - RM50m investment from private sector to conduct detailed exploration of REE only.  - Cash Flow (for Govt. funding): RMK12: RM25m RMK13: RM25m
		2022	
<b>8.1.2 Recruitment of local workers</b>	a) Local workers recruited	End date	
<b>8.1.3 On-the-job training</b>	a) Skilled manpower	2029	
<b>8.1.4 Monitoring and evaluating</b>	a) Performance report for career progression		
Project Owner	Implementing Agency	Other Stakeholders	
MUDeNR	L&S	JMG, Mining Consultant, Industry player	

## AIP Level 1 - Poverty alleviation

<b>Sector</b>	: Poverty alleviation	
<b>Strategy</b>	: Creating Job and Business Opportunities in All Economic Sectors to Increase Household Income	
<b>Initiative</b>	: 8.2 Enhancing CSR fund and program from upstream industry.	
<b>Initiatives</b>		<b>Desired Outcome(s)</b>
8.2 Enhancing CSR fund and program from upstream industry.		<b>Social inclusivity:</b> <ol style="list-style-type: none"> <li>20,000 persons (average 20 houses per village with 5 persons per house) within a 5km radius of the mining/quarry site will benefit from the CSR Fund to purchase business equipment and machineries.</li> </ol>
<b>Timeline</b>		<b>Resources Required</b>
<b>Start Date</b>	<b>End Date</b>	
2021	2022	<ul style="list-style-type: none"> <li>Funding: RM15 mil per annum</li> </ul>
<b>Project Owner</b>	<b>Implementing Agency</b>	<b>Other Stakeholders</b>
MUDeNR	L&S	SAG, SFS, EPU, MINTRED, L&S, FD, JMG, NREB, Research Institution, Private Sectors, Industry Player

## AIP Level 2 - Poverty alleviation

<b>Sector</b> :		Poverty alleviation	
<b>Initiative</b> :		8.2 Enhancing CSR fund and program from upstream industry.	
<b>Action step</b> :		8.2.1 - 8.2.4	
Action step (s)	Output (s)	Timeline	Resources required
<b>8.2.1 Preparing Standard Operating Procedure for CSR.</b>	a) SOP Prepared	Start date	RM15 mil per annum benefiting: - approximately 200 villages, - 20,000 persons (average 20 houses per village with 5 persons per per house) within a 5km radius of the mining/quarry site.
		2021	
		End date	
		2020	
<b>8.2.2 Identify area, community, and poor households to be involve in CSR Program</b>	a) List of area, community, and poor households.	Start date	
		2022	
<b>8.2.3 Collaborate with industry players for the activities</b>	a) Contribute to society/CSR Implemented	End date	
<b>8.2.4 Monitoring, coordination and evaluation</b>	a) Evaluation report	2022	
Project Owner	Implementing Agency	Other Stakeholders	
MUDeNR	LNS	SAG, SFS, EPU, MINTRED, L&S, FD, JMG, NREB, Research Institution, Private Sectors, Industry Player	

## AIP Level 1 - Poverty alleviation

<b>Sector</b> :		Poverty alleviation	
<b>Strategy</b> :		Creating Job and Business Opportunities in All Economic Sectors to Increase Household Income	
<b>Initiative</b> :		9.1 Enhance Community-based tourism	
<b>Initiatives</b>		<b>Desired Outcome(s)</b>	
<b>9.1 Enhance Community-based tourism:</b> 1. Organise courses for homestay operators and local communities: <ol style="list-style-type: none"> <li>a. Cultural Development Courses - 3 times per year (by Zones)</li> <li>b. Crafts Development Courses - 3 times per year (by Zones)</li> <li>c. Hospitality Courses - 3 times per year (by Zones)</li> <li>d. Event Management Training - 3 times per year (by Zones)</li> <li>e. Adventure Activities - 3 times per year (by Zones)</li> </ol>		<b>Economic Prosperity</b> 1. 700 poor households operating homestay will earn additional monthly income above RM2,800 by 2030.	
<b>Timeline</b>		<b>Resources Required</b>	
<b>Start Date</b>	<b>End Date</b>	<ul style="list-style-type: none"> <li>• Funding: RM10 mil</li> </ul>	
2021	2030		
<b>Project Owner</b>	<b>Implementing Agency</b>	<b>Other Stakeholders</b>	
MTAC	MTAC	MOTSAC, DTTG, Learning Institutions, NGOs, Local Community	

## AIP Level 2 - Poverty alleviation

<b>Sector</b> : Poverty alleviation			
<b>Initiative</b> : 9.1 Enhance Community-based tourism:			
<b>Action step</b> : 9.1.1 - 9.1.2			
Action step (s)	Output (s)	Timeline	Resources required
<b>9.1.1 a) Collaborate and engage with tourism industry players to develop locally distinctive products in term of Culture, Adventure, Nature, Food and Festival categories. -Packaging / Testing / Evaluation</b>  <b>b) Provide assistance to develop or upgrade basic facilities at tourism attractions through community collaboration/engagement.</b>	a) FAM trip organised. b) New tourism product marketed and promoted. c) 900 local community trained in entrepreneurship for the tourism service industries. 1 zone = 30 pax 3 zones = 90 pax/per year d) New or upgrade basic facilities to the tourist destination/attraction e.g. toilet, parking, fencing and litter bin, trails, etc.	Start date	RM10 mil
		2021	
<b>9.1.2 a) Organise Community Host Course for certified homestay &amp; local communities.</b>  <b>b) Collaboration and engagement with relevant stakeholders to acknowledged community host as local guides with appropriate training and certification.</b>	a) 900 new community host trained by 2030. b) 3 zones in Sarawak = 30/zone=90 pax/year c) Trained community host are acknowledged and certified as local guides to transact tour guiding activities in their own territory.	Start date	
		2030	
Project Owner	Implementing Agency	Other Stakeholders	
MTAC	MTAC	MOTSAC, DTTG, learning institutions, NGOs, local communities and other relevant tourism, stakeholders.	

## AIP Level 2 - Poverty alleviation

<b>Sector</b> : Poverty alleviation			
<b>Initiative</b> : 9.1 Enhance Community-based tourism:			
<b>Action step</b> : 9.1.3			
Action step (s)	Output (s)	Timeline	Resources required
<b>7.1.3 a) Organise Tourism Awareness Programs for potential homestays - 5 programmes per year</b>  <b>b) Collaboration and engagement with MOTSAC, DTTG and Community Association to registered local community operating homestay without valid certification.</b>	a) No. of Homestay – increase 3% to 60 homestay by 2030 (existing 46 homestay)	Start date	
		2022	
	b) 5% growth of household annual income of one homestay operators from RM8,401 In 2019 to RM13,700 by 2030	Start date	
		2030	
c) Illegal local community homestay to be registered under MOTSAC endorsement program.			
Project Owner	Implementing Agency	Other Stakeholders	
MTAC	MTAC	MOTSAC, DTTG, learning institutions, NGOs, local communities and other relevant tourism, stakeholders.	

## AIP Level 1 - Poverty alleviation

<b>Sector</b>	: Poverty alleviation	
<b>Strategy</b>	: Creating Job and Business Opportunities in All Economic Sectors to Increase Household Income	
<b>Initiative</b>	: 9.2 Capacity Building of local communities in handicraft production, entrepreneurship and digital technology to promote local crafts	
<b>Initiatives</b>	<b>Desired Outcome(s)</b>	
<p><b>9.2 Capacity Building of local communities in handicraft production, entrepreneurship and digital technology to promote local crafts</b></p> <p>Community Outreach programmes for craft – 5 per year</p> <p>Train 50 skilled handicraft entrepreneurs per year</p> <p>6 training sessions on production skills (90 participants) per year</p> <p>6 training sessions per year on digital technology (60 participants)</p> <p>12 basic production skill training session (120 participants)</p> <p>6 Basic business skill training per year (90 participants)</p>	<p>Economic Prosperity</p> <ol style="list-style-type: none"> <li>1,800 poor households involved in handicraft entrepreneurship and will earn monthly income above RM7,575 by 2030.</li> </ol>	
<b>Timeline</b>		<b>Resources Required</b>
<b>Start Date</b>	<b>End Date</b>	
2022	2030	<ul style="list-style-type: none"> <li>Funding: RM10.5 mil</li> </ul>
<b>Project Owner</b>	<b>Implementing Agency</b>	<b>Other Stakeholders</b>
MTAC	SCC	R&DO, DTTG, NGOs, Local Communities, MINTRED, CENTEX, Kolej Komuniti, Kraftangan Malaysia, SEDC, Local Universities, Learning Institutions

## AIP Level 2 - Poverty alleviation

<b>Sector</b> : Poverty alleviation			
<b>Initiative</b> : 9.2 Capacity Building of local communities in handicraft production, entrepreneurship and digital technology to promote local crafts			
<b>Action step</b> : 9.2.1 - 9.2.4			
Action step (s)	Output (s)	Timeline	Resources required
<b>9.2.1 Identify skill gaps</b> <b>a) Training Need Analysis and market survey by appointed consultants to identify</b> <b>b) Market and product survey and analysis</b>	a) Industry skills requirement (production skill, business skills, design skills and any other skills)  List of a) High demand products b) High Value products c) List of potential products d) List of raw materials and sources e) List of Existing markets f) List of potential markets	Start date	Consultant
		2021	
		End date	
		2022	
<b>9.2.2 Identify training providers for skills required as per TNA</b>	a) List of training providers	Start date	Consultant
		2022	
<b>9.2.3 Identify skills needed &amp; training providers</b>	a) Training modules, duration, cost, training providers and schedule b) MOU with Training Providers	End date	Consultant
		2022	
<b>9.2.4 Recruit/select participants and implementation of training programmes/activities</b>	a) Increase of handicraft entrepreneurs from 1096 in 2020 to 1800 in 2030 with in-depth skills in: b) Business skills and entrepreneurship c) Digital technology d) Production skills e) Design and production of new products	Start date	RM9 million
		2022	
		End date	
		2022	
Project Owner	Implementing Agency	Other Stakeholders	
MTAC	SCC	R&DO, DTTG, NGOs, Local communities, MINTRED, CENTEX, Kolej Komuniti, Kraftangan Malaysia, SEDC, Local Universities, Learning Institutions	

## AIP Level 2 - Poverty alleviation

<b>Sector</b> :		Poverty alleviation	
<b>Initiative</b> :		9.2 Capacity Building of local communities in handicraft production, entrepreneurship and digital technology to promote local crafts	
<b>Action step</b> :		9.2.4 - 9.2.6	
Action step (s)	Output (s)	Timeline	Resources required
<b>4) Increase of handicraft entrepreneurs from 1096 in 2020 to 1800 in 2030 with in-depth skills in</b> a) Business skills and entrepreneurship b) Digital technology c) Production skills d) Design and production of new products	a) Increase of handicraft entrepreneurs from 1096 in 2020 to 1800 in 2030 with in-depth skills in	Start date	
	b) Business skills and entrepreneurship	2022	
	c) Digital technology	End date	
	d) Production skills	2030	
	e) Design and production of new products		
<b>5) Monitoring &amp; mentoring of trainees</b>	a) To ensure that all participants successfully complete and benefited from their training courses.	Start date	
	b) To ensure that all participants have access to market information, business development and opportunities.	2023	
		End date	
		2030	
<b>6) Monitoring and outreach programmes</b> a) Monitor producers monthly sales and production outputs b) Periodic engagement & consultation with industry stakeholders ( 5 sessions per year)	a) Monthly sales and output reports of all producers	Start date	RM1.5 mil
	b) Periodic reports on new products		
	c) Feedbacks from industry stakeholders (for policy, programmes and activities planning)	2024	
	d) Create awareness and interest in the industry	End date	
	e) Ensure information (market trends, demand, policies) are disseminate to stakeholders	2024	
Project Owner	Implementing Agency	Other Stakeholders	
MTAC	SCC	R&DO, DTTG, NGOs, Local communities, MINTRED, CENTEX, Kolej Komuniti, Kraftangan Malaysia, SEDC, Local Universities, Learning Institutions	

## AIP Level 2 - Poverty alleviation

<b>Sector</b>	: Poverty alleviation		
<b>Initiative</b>	: 9.2 Capacity Building of local communities in handicraft production, entrepreneurship and digital technology to promote local crafts		
<b>Action step</b>	: 9.2.7 - 9.2.8		
Action step (s)	Output (s)	Timeline	Resources required
<b>9.2.7 Evaluate &amp; Review all training programmes &amp; modules (to make changes if necessary)</b>	a) A more effective training modules	Start date	RM9 million
		2022	
		End date	
		2030	
<b>9.2.8 Skill upgrading &amp; Reskilling</b>	a) 1800 Highly skilled, resilient and empowered entrepreneurs, producing high quality products and contributing to the target total sales of RM75 million worth of authentic Sarawak handicraft products by 2030	Start date	
		2022	
		End date	
		2030	
Project Owner	Implementing Agency	Other Stakeholders	
MTAC	SCC	R&DO, DTTG, NGOs, Local communities, MINTRED, CENTEX, Kolej Komuniti, Kraftangan Malaysia, SEDC, Local Universities, Learning Institutions	

## AIP Level 1 - Poverty alleviation

<b>Sector</b>		: Poverty alleviation	
<b>Strategy</b>		: Creating Job and Business Opportunities in All Economic Sectors to Increase Household Income	
<b>Initiative</b>		: 10.1 Community Support Programme in the Heart of Borneo	
<b>Initiatives</b>		<b>Desired Outcome(s)</b>	
10.1 Community Support Programme in the Heart of Borneo		<b>Social Inclusivity</b> 1. 100 poor households employed in handicrafts, homestay, transportation and other tourism related services will earn monthly income above PLI.	
<b>Timeline</b>		<b>Resources Required</b>	
<b>Start Date</b>	<b>End Date</b>		
2022	2026	<ul style="list-style-type: none"> <li>● RMK12 – 3 mil</li> <li>● Cash Flow:               <ul style="list-style-type: none"> <li>○ 2022: RM600,000</li> <li>○ 2023: RM600,000</li> <li>○ 2024: RM600,000</li> <li>○ 2025: RM600,000</li> <li>○ 2026: RM600,000</li> </ul> </li> <li>● Site: HoB new extension area</li> <li>● Manpower:               <ul style="list-style-type: none"> <li>○ 1 project officer preferably with social background/skills</li> <li>○ 2 project assistants</li> <li>○ 5 field contract officers</li> </ul> </li> </ul>	
<b>Project Owner</b>	<b>Implementing Agency</b>	<b>Other Stakeholders</b>	
MUDeNR	FDS	JKR, R&DO, STB, MTAC, MOTs, NGOs, Local Community, Private Sector, Divisional Tourism Task Force, Travel & Tour Agencies	

## AIP Level 2 - Poverty alleviation

<b>Sector</b>	: Poverty alleviation		
<b>Initiative</b>	: 10.1 Community Support Programme in the Heart of Borneo		
<b>Action step</b>	: 10.1.1 - 10.1.6		
Action step (s)	Output (s)	Timeline	Resources required
<b>10.1.1 Develop community support programme module.</b>	a) Community support programme module.	<b>Start date</b>  2022	RMK12 – 3 mil Cash Flow: 2022: RM600,000 2023:RM600,000 2024:RM600,000 2025:RM600,000 2026: RM600,000  Site: HoB new extension area  Manpower: - 1 project officer preferably with social background/skills  - 2 project assistants - 5 field contract officers
<b>10.1.2 Infrastructure and facilities development</b>	a) Improvement of ecotourism facilities at 4 locations; .		
<b>10.1.3 Identify poor households to participate in this programme .</b>	a) List of poor households for community support programme.	<b>End date</b>	
<b>10.1.4 Implement alternative livelihood enhancement programmes/activities that will alleviate poverty level</b>	a) Quality improvement of homestay in Lundu at 5 zone in Lundu;	2026	
<b>10.1.5 Implement Capacity buildings program and training in tourist guide</b>	a) 50 certified tourist guide at Kelinkang Range, Sri Aman;		
<b>10.1.6 Forest Landscape restoration</b>	a) xx number of forest landscape restored		
Project Owner	Implementing Agency	Other Stakeholders	
MUDeNR	FDS	JKR, R&DO, STB, MTAC, MOTS, NGOs, Local Community, Private sector, Divisional Tourism Task Force, Travel & Tour Agencies	

## AIP Level 1 - Poverty alleviation

<b>Sector</b> :		Poverty alleviation	
<b>Strategy</b> :		Creating Job and Business Opportunities in All Economic Sectors to Increase Household Income	
<b>Initiative</b> :		10.2 Strengthening Compliance Mechanism For Sustainability For Post Logging Block Inspection	
Initiatives		Desired Outcome(s)	
<b>10.2 Strengthening Compliance Mechanism For Sustainability For Post Logging Block Inspection</b>		<b>Social Inclusivity:</b> 1. 100 poor households actively participating in Post Logging Block Inspection services will receive additional monthly income of RM500.	
Timeline		Resources Required	
Start Date	End Date	<ul style="list-style-type: none"> <li>• Professional consultation (ground verification of undersized trees and data analyst)</li> <li>• Cash Flow:               <ul style="list-style-type: none"> <li>○ 2022: RM400,000</li> <li>○ 2023: RM200,000</li> <li>○ 2024: RM200,000</li> <li>○ 2025: RM200,000</li> <li>○ Total: RM1,000,000</li> </ul> </li> </ul>	
2022	2025		
Project Owner	Implementing Agency	Other Stakeholders	
MUDeNR	FDS	SAG, SFS, FDS, Private Sector, University	

## AIP Level 2 - Poverty alleviation

<b>Sector</b> : Poverty alleviation			
<b>Initiative</b> : 10.2 Strengthening Compliance Mechanism For Sustainability For Post Logging Block Inspection			
<b>Action step</b> : 10.2.1 - 10.2.4			
Action step (s)	Output (s)	Timeline	Resources required
<b>10.2.1 Analyse operational cost on current practice (PLBI) for both licensee and government</b>	a) Report on the study of undersized logs in the Revlog and verification on the ground;	Start date	Professional consultation (ground verification of undersized trees and data analyst)  Cash Flow: 2022: RM400,000 2023: RM200,000 2024: RM200,000 2025: RM200,000 Total: RM1,000,000
<b>10.2.2 Identify potential job creation for community that contribute to poverty alleviation factor.</b>	a) Poverty alleviation for local community through potential job creation and enhancement of local community living standard and improvement of basic accessibility or facility such as clean water storage, proper drainage, electricity, etc.	2022	
<b>10.2.3 Conduct study on verification of undersized logs that reported in Revlog versus undersized log stump counting on the ground at selected FMU area.</b>	a) Report on the study of undersized logs in the Revlog and verification on the ground	End date	
<b>10.2.4 Develop new mechanism in strengthening compliance for sustainability PLBI.</b>	a) New mechanism in strengthening compliance for sustainability PLBI produced	2030	
Project Owner	Implementing Agency	Other Stakeholders	
MUDeNR	FDS	SAG, SFS, FDS, Private sector, University	

## AIP Level 1 - Poverty alleviation

<b>Sector</b>		: Poverty alleviation	
<b>Strategy</b>		: Creating Job and Business Opportunities in All Economic Sectors to Increase Household Income	
<b>Initiative</b>		: 10.3 Enhancement of community livelihood in Sarawak through social forestry programmes	
<b>Initiatives</b>		<b>Desired Outcome(s)</b>	
<b>10.3 Enhancement of community livelihood in Sarawak through social forestry programmes</b>		<b>Social Inclusivity / Economic Prosperity</b> 1. 400 poor households staying within or adjacent to Planted Forest Estate benefited from Social Forestry Programme and earn additional monthly income of RM800 – RM2,500.	
<b>Timeline</b>		<b>Resources Required</b>	
<b>Start Date</b>	<b>End Date</b>		
2025	2030	<ul style="list-style-type: none"> <li>● Required project funding: RM9,000,000 (2022-2030);</li> <li>● Cashflow:               <ul style="list-style-type: none"> <li>○ 2022: RM1.0 million</li> <li>○ 2023: RM1.0 million</li> <li>○ 2024: RM1.0 million</li> <li>○ 2025: RM1.0 million</li> <li>○ 2026: RM1.0 million</li> <li>○ 2027: RM1.0 million</li> <li>○ 2028: RM1.0 million</li> <li>○ 2029: RM1.0 million</li> <li>○ 2030: RM1.0 million</li> </ul> </li> </ul>	
<b>Project Owner</b>	<b>Implementing Agency</b>	<b>Other Stakeholders</b>	
MUDeNR	FDS	Sarawak Craft Council (SCC), Perbadanan Kemajuan Kraftangan Malaysia, Resident and District Office, Local Council, Licensee, Other relevant agencies	

## AIP Level 2 - Poverty alleviation

<b>Sector</b>	: Poverty alleviation		
<b>Initiative</b>	: 10.3 Enhancement of community livelihood in Sarawak through social forestry programmes		
<b>Action step</b>	: 10.3.1 - 10.3.5		
Action step (s)	Output (s)	Timeline	Resources required
<b>10.3.1 Development of local community non-timber forest product (NTFP) processing facilities</b>	1) 2 palm sugar processing facilities in Betong District	Start date	i.Required project funding: RM9,000,000 (2022-2030);  ii.Cashflow: 2022: RM1 mil 2023: RM1 mil 2024: RM1 mil 2025: RM1 mil 2026: RM1 mil 2027: RM1 mil 2028: RM1 mil 2029: RM1 mil 2030: RM1 mil
<b>10.3.2 Establishment of facilities that will uplift livelihood and indirectly contribute to alleviate poverty local community</b>	2) 1 fermented fish processing facility in Batang Ai, HEP	2025	
<b>10.3.3 Communication, Education &amp; Public Awareness (CEPA) programmes with local community and schools adjacent to PFE</b>	3) 1 smoked fish processing facility in Batang Ai, HEP;	End date	
<b>10.3.4 Forest Landscape Restoration of NTFP planting programmes involving local communities adjacent to PFE;</b>	4) 1 wood-based craft processing facility in Lundu;	2030	
<b>10.3.5 Implement Agroforestry programmes in Communal Forest.</b>	5) 5 CEPA programmes to be implemented; Planting of 10,000 NTFP various species per year and 2 agro-forstry program implemented in Communal Forest		
Project Owner	Implementing Agency	Other Stakeholders	
MUDenR	FDS	Sarawak Craft Council (SCC), Perbadanan Kemajuan Kraftangan Malaysia, Resident and District Office, Local Council, Licensee, Other relevant agencies.	

## AIP Level 1 - Poverty alleviation

<b>Sector</b>		: Poverty alleviation	
<b>Strategy</b>		: Creating Job and Business Opportunities in All Economic Sectors to Increase Household Income	
<b>Initiative</b>		: 10.4 Establish Furniture Park in Tanjung Manis (Upscale Processing)	
Initiatives		Desired Outcome(s)	
10.4 Establish Furniture Park in Tanjung Manis (Upscale Processing)		<b>Social Inclusivity:</b> 1. 1,050 poor households participating in this project will earn monthly income ranging from RM2,000 to RM4,000 by 2030.	
Timeline		Resources Required	
Start Date	End Date		
2022	2024	<ul style="list-style-type: none"> <li>● Funding: RM11.55 million               <ul style="list-style-type: none"> <li>○ 2022: RM3 million</li> <li>○ 2023: RM7 million</li> <li>○ 2024: RM1.55 million</li> </ul> </li> <li>● Manpower: 6</li> <li>● Land: 60 acre</li> </ul>	
Project Owner	Implementing Agency	Other Stakeholders	
MUDeNR	STIDC	Land & Survey, Local Council, MINTRED, MATRADE, MIDA, SPA, STA Furniture Associations, SARADEC, Say D'signers Sarawak, R&D Centres & Foreign Investors	

## AIP Level 2 - Poverty alleviation

<b>Sector</b>	: Poverty alleviation		
<b>Initiative</b>	: 10.4 Establish Furniture Park in Tanjung Manis (Upscale Processing)		
<b>Action step</b>	: 10.4.1 - 10.4.3		
Action step (s)	Output (s)	Timeline	Resources required
<b>10.4.1 To promote job prospect in Furniture Park</b>	a) Promotion activities organised	Start date	Funding: RM11.55 million Manpower: 6 Land: 60 acre
		2022	
End date			
<b>10.4.2 To do recruitment of workers from poor households</b>	a) Recruitment arranged	2024	Funding: RM11.55 million Manpower: 6 Land: 60 acre
<b>10.4.3 Upskilling unskilled workers from poor households to become skilled workers</b>	a) Skill of 1,050 poor households upgraded		
Project Owner	Implementing Agency	Other Stakeholders	
MUDeNR	STIDC	Land & Survey Department, Local Council, MINTRED, MATRADE, MIDA, SPA, Sarawak Timber Association (STA), Furniture Associations, SARADEC, SayD'Signer Sarawak, R&D Centres & Foreign Investors	

## AIP Level 1 - Poverty alleviation

<b>Sector</b>	: Poverty alleviation	
<b>Strategy</b>	: Creating Job and Business Opportunities in All Economic Sectors to Increase Household Income	
<b>Initiative</b>	: 10.5 Establish Bamboo Plantation And Develop Bamboo Based Industry 10.6 Utilise local plywood as one of the key components to manufacture value added products	
<b>Initiatives</b>		<b>Desired Outcome(s)</b>
<b>10.5 Establish Bamboo Plantation And Develop Bamboo Based Industry</b>		<b>Social Inclusivity:</b> 1) 300 poor households participating in this project will earn monthly income above RM2,200.
<b>Timeline</b>		<b>Resources Required</b>
<b>Start Date</b>	<b>End Date</b>	
2022	2030	<ul style="list-style-type: none"> <li>● Funding: RM26 million <ul style="list-style-type: none"> <li>○ 2022: RM15 million</li> <li>○ 2023: RM3.4 million</li> <li>○ 2024: RM2.8 million</li> <li>○ 2025: RM2.5 million</li> <li>○ 2026: RM2.3 million</li> </ul> </li> <li>● Manpower: 11</li> <li>● Land: 11,000 ha</li> </ul>
<b>Project Owner</b>	<b>Implementing Agency</b>	<b>Other Stakeholders</b>
MUDeNR	STIDC	SABIDTec, Timber Industry, STA, LPF Holders, Local Community & Cooperative
<b>Initiatives</b>		<b>Desired Outcome(s)</b>
<b>10.6 Utilise local plywood as one of the key components to manufacture value added products</b>		<b>Social Inclusivity:</b> 1. 200 poor households participating in this project will receive monthly income ranging from RM2,000 to RM4,000.
<b>Timeline</b>		<b>Resources Required</b>
<b>Start Date</b>	<b>End Date</b>	
2022	2030	<ul style="list-style-type: none"> <li>● Funding: RM30 million <ul style="list-style-type: none"> <li>○ 2022: RM11.5 million</li> <li>○ 2023: RM11.9 million</li> <li>○ 2024: RM6.6 million</li> </ul> </li> <li>● Manpower: 5</li> </ul>
<b>Project Owner</b>	<b>Implementing Agency</b>	<b>Other Stakeholders</b>
MUDeNR	STIDC	MINTRED, FDS, MIDA, MITI, MALTRADE, STA, Timber Industry, DO, SEB, Ports, DOE, DOA, KASTAM

## AIP Level 2 - Poverty alleviation

<b>Sector</b>	: Poverty alleviation		
<b>Initiative</b>	: 10.5 Establish Bamboo Plantation And Develop Bamboo Based Industry		
<b>Action step</b>	: 10.5.1 - 10.5.3		
Action step (s)	Output (s)	Timeline	Resources required
<b>10.5.1 To identify communities and poor households to participate in bamboo farming</b>	a) 300 communities identified	<b>Start date</b>	Funding: RM26 million Manpower: 11 Land: 11,000 ha
		2022	
		<b>End date</b>	
<b>10.5.2 To provide seedlings to achieve 1,000 hectares of Community Bamboo Farming</b>	a) 1,000 hectares of Community Bamboo Farming planted	2030	Funding: RM26 million Manpower: 11 Land: 11,000 ha
<b>10.5.3 To provide market access for bamboo products</b>	a) Average income of RM2,000.00 per month for each of the 300 from poor households for selling of seedlings, shoots, culm or handicraft.		
<b>Project Owner</b>	<b>Implementing Agency</b>	<b>Other Stakeholders</b>	
MUDeNR	STIDC	SABIDTEC, Timber Industry, Sarawak Timber Association (STA), Licence for Planted Forests (LPF) Holders, Local Communities & Cooperatives	

## AIP Level 2 - Poverty alleviation

<b>Sector</b>	: Poverty alleviation		
<b>Initiative</b>	: 10.6 Utilise local plywood as one of the key components to manufacture value added products		
<b>Action step</b>	: 10.6.1 - 10.6.3		
Action step (s)	Output (s)	Timeline	Resources required
<b>10.6.1 To promote job prospect</b>	a) Promotion activities organised	Start date	Funding: RM30 million Manpower: 5
		2022	
		End date	
<b>10.6.2 To do recruitment of workers</b>	a) Recruitment arranged	2030	
<b>10.6.3 Upskilling unskilled workers to become skilled workers</b>	a) Skill of 1,050 poor households upgraded		
Project Owner	Implementing Agency	Other Stakeholders	
MUDeNR	STIDC	MINTRED, Forest Department Sarawak (FDS), MIDA, MITI, MATRADE, Sarawak Timber Association (STA), Timber Industry, DO, Sarawak Energy Bhd (SEB), Ports, Department of Environment (DOE), KASTAM	

## AIP Level 1 - Poverty alleviation

<b>Sector</b>	: Poverty alleviation	
<b>Strategy</b>	: Creating Job and Business Opportunities in All Economic Sectors to Increase Household Income	
<b>Initiative</b>	: 10.7 Implementation of Sarawak Young Designers (SayD'SignerSarawak) Programme 10.8 Establish Furniture Park in Kuching (Upscale Processing)	
<b>Initiatives</b>		<b>Desired Outcome(s)</b>
<b>10.7 Implementation of Sarawak Young Designers (SayD'SignerSarawak) Programme</b>		<b>Social Inclusivity:</b> 1. 100 poor households participating in this project will receive monthly income above RM4,000.
<b>Timeline</b>		<b>Resources Required</b>
<b>Start Date</b>	<b>End Date</b>	
2021	2030	<ul style="list-style-type: none"> <li>● Funding: RM27.69 million <ul style="list-style-type: none"> <li>○ 2021: RM3.43 million</li> <li>○ 2022: RM4.46 million</li> <li>○ 2023: RM5.58 million</li> <li>○ 2024: RM6.59 million</li> <li>○ 2025: RM7.63 million</li> </ul> </li> <li>● Manpower: 18</li> </ul>
<b>Project Owner</b>	<b>Implementing Agency</b>	<b>Other Stakeholders</b>
MUDeNR	STIDC	STA, SFIA, Furniture Industry, Creative Consultant, UNIMAS ID Graduates, UNIMAS, ITB Indonesia, Swinburne, Milan, Musashino, UiTM
<b>Initiatives</b>		<b>Desired Outcome(s)</b>
<b>10.8 Establish Furniture Park in Kuching (Upscale Processing)</b>		<b>Social Inclusivity:</b> 1. 1,050 poor households participating in this project will receive monthly income ranging from RM2,000 to RM4,000.
<b>Timeline</b>		<b>Resources Required</b>
<b>Start Date</b>	<b>End Date</b>	
2022	2024	<ul style="list-style-type: none"> <li>● Funding: RM64 million <ul style="list-style-type: none"> <li>○ 2022: RM9 million</li> <li>○ 2023: RM38 million</li> <li>○ 2024: RM17 million</li> </ul> </li> <li>● Manpower: 6</li> <li>● Land: 100 acre</li> </ul>
<b>Project Owner</b>	<b>Implementing Agency</b>	<b>Other Stakeholders</b>
MUDeNR	STIDC	Land & Survey, Local Council, MINTRED, MATRADE, MIDA, SPA, STA, Furniture Associations, SARADEC, Say D'signers Sarawak, R&D Centres, Foreign Investors

## AIP Level 2 - Poverty alleviation

<b>Sector</b>	: Poverty alleviation		
<b>Initiative</b>	: 10.7 Implementation of Sarawak Young Designers (SayD'SignerSarawak) Programme		
<b>Action step</b>	: 10.7.1 - 10.7.4		
Action step (s)	Output (s)	Timeline	Resources required
<b>10.7.1 To engage professional to train and produce young designers (fresh graduates)</b>	a) 100 professional & talented furniture designers by 2030	Start date	
		2021	
		End date	
<b>10.7.2 To facilitate designers to participate in expo / exhibition to showcase their prototypes (Funded by STIDC)</b>	a) 3 international & 2 national expo / exhibition	2030	
			<b>10.7.3 To train young designers with reputable international design centres through collaboration with ITB (Institute Technology Bandung), Swinburne, Musashino &amp; POLI.design Milan</b>
<b>10.7.4 To implement Incubator Programme for the trained young designers</b>	a) Designers Incubator Programme & Centre		
			Project Owner
MUDeNR	STIDC	STA, Sarawak Furniture Industry Association (SFIA), Furniture Industry, Creative Consultant, UNIMAS ID graduates, UNIMAS, ITB Indonesia, Swinburne, Milan, Musashino, UITM	

## AIP Level 2 - Poverty alleviation

<b>Sector</b> : Poverty alleviation			
<b>Initiative</b> : 10.8 Upscale Processing (Establish Furniture Park in Kuching)			
<b>Action step</b> : 10.8.1 - 10.8.3			
Action step (s)	Output (s)	Timeline	Resources required
<b>10.8.1 To promote job prospect in Furniture Park</b>	a) Promotion activities organised	<b>Start date</b>	Funding: RM64 million Manpower: 6 Land: 100 acre
		2022	
		<b>End date</b>	
<b>10.8.2 To do recruitment of workers</b>	a) Recruitment arranged	2024	
<b>Project Owner</b>	<b>Implementing Agency</b>		
MUDeNR	STIDC	Land & Survey Department, Local Council, MINTRED, MATRADE, MIDA, SPA, Sarawak Timber Association (STA), Furniture Associations, SARADEC, SayD'Signer Sarawak, R&D Centres, Foreign Investors	

## AIP Level 1 - Poverty alleviation

<b>Sector</b>		: Poverty alleviation	
<b>Strategy</b>		: Creating Job and Business Opportunities in All Economic Sectors to Increase Household Income	
<b>Initiative</b>		: 10.9 Establish Sarawak Design Centre (SARADEC) 10.10 One Stop Inspection Centre at IQS Merapok, Lawas	
Initiatives		Desired Outcome(s)	
<b>10.9 Establish Sarawak Design Centre (SARADEC)</b>		<b>Social Inclusivity:</b> 1. 120 poor households participating in this project will receive monthly income ranging from RM2,000 to RM4,000.	
Timeline		Resources Required	
Start Date	End Date		
2022	2030	<ul style="list-style-type: none"> <li>• Funding: RM42.4 million <ul style="list-style-type: none"> <li>○ 2022: RM5.3 million</li> <li>○ 2023: RM7.1 million</li> <li>○ 2024: RM7.6 million</li> <li>○ 2025: RM10.3 million</li> <li>○ 2026: RM12.1 million</li> </ul> </li> </ul>	
Project Owner	Implementing Agency	Other Stakeholders	
MUDeNR	STIDC	MINTRED, Kraftangan Sarawak, Ministry of Tourism, Sarawak Tourism Board, Timber Industry, Cottage Industry, Designers & Researchers	
Initiatives		Desired Outcome(s)	
<b>10.10 One Stop Inspection Centre at IQS Merapok, Lawas</b>		<b>Social Inclusivity:</b> 1. 200 poor households employed in this project will earn monthly income of RM2,000.	
Timeline		Resources Required	
Start Date	End Date		
2023	2025	<ul style="list-style-type: none"> <li>• Funding: RM13.12 million <ul style="list-style-type: none"> <li>○ 2023: RM1.97 million</li> <li>○ 2024: RM5 million</li> <li>○ 2025: RM6.15 million</li> </ul> </li> <li>• Manpower: 5</li> <li>• Land: 2 acres</li> </ul>	
Project Owner	Implementing Agency	Other Stakeholders	
MUDeNR	STIDC	FDS, SFC, Harwood, Agriculture Department, Immigration Department, Sabah Forestry Department	

## AIP Level 2 - Poverty alleviation

<b>Sector</b>	: Poverty alleviation		
<b>Initiative</b>	: 10.9 Establish Sarawak Design Centre (SARADec)		
<b>Action step</b>	: 10.9.1 - 10.9.2		
Action step (s)	Output (s)	Timeline	Resources required
<b>10.9.1 To operationalise Saradec and hire poor households</b>	a) 20 full time staff hired from poor households.	Start date	Funding: RM42.4 million
		2022	
End date			
2030			
<b>10.9.2 To implement &amp; monitor programmes in Saradec</b>	a) Average household income of RM4,000.00 per month for poor households.		
Project Owner	Implementing Agency	Other Stakeholders	
MUDeNR	STIDC	MINTRED, Kraftangan Sarawak, Ministry of Tourism, Sarawak Tourism Board, timber industry, cottage industry, designer and researchers	

## AIP Level 2 - Poverty alleviation

<b>Sector</b>	: Poverty alleviation		
<b>Initiative</b>	: 10.10 One Stop Inspection Centre at IQS Merapok, Lawas		
<b>Action step</b>	: 10.10.1 - 10.10.3		
Action step (s)	Output (s)	Timeline	Resources required
<b>10.10.1 To do recruitment for poor households</b>	a) 5 staff recruited from poor households	Start date	Funding: RM13.12 million Manpower: 5 Land: 2 acres
		2023	
<b>10.10.2 To operate &amp; maintain the Centre</b>	a) RM35 million cross border trade value facilitated	End date	
		2025	
<b>10.10.3 To sustain the operation of timber based mill in Lawas</b>	a) Average income of RM4.8 million per year for 200 poor household		
Project Owner	Implementing Agency	Other Stakeholders	
MUDeNR	STIDC	Forest Department Sarawak (FDS), Sarawak Forestry Corporation (SFC), Harwood Timber, Agriculture Department, Immigration Department, Sabah Forestry Department	

## AIP Level 1 - Poverty alleviation

<b>Sector</b>		: Poverty alleviation	
<b>Strategy</b>		: Creating Job and Business Opportunities in All Economic Sectors to Increase Household Income	
<b>Initiative</b>		: 10.11 Applied R&D to Develop Commercially Viable High Value Products from Planted Timber Species	
<b>Initiatives</b>		<b>Desired Outcome(s)</b>	
10.11 Applied R&D to Develop Commercially Viable High Value Products from Planted Timber Species		<b>Social Inclusivity:</b> <ol style="list-style-type: none"> <li>35 poor households employed in this programme will earn monthly income ranging from RM2,000 to RM4,000.</li> </ol>	
<b>Timeline</b>		<b>Resources Required</b>	
<b>Start Date</b>	<b>End Date</b>		
2022	2030	<ul style="list-style-type: none"> <li>Funding: RM10 million <ul style="list-style-type: none"> <li>2022: RM2 million</li> <li>2023: RM2 million</li> <li>2024: RM2 million</li> <li>2025: RM2 million</li> <li>2026: RM2 million</li> </ul> </li> </ul>	
<b>Project Owner</b>	<b>Implementing Agency</b>	<b>Other Stakeholders</b>	
MUDeNR	STIDC	Timber Industry, Investors, Research Institutions, Higher Learning Institutions	

## AIP Level 2 - Poverty alleviation

<b>Sector</b>	: Poverty alleviation		
<b>Initiative</b>	: 10.11 Applied R&D to Develop Commercially Viable High Value Products from Planted Timber Species		
<b>Action step</b>	: 10.11.1 - 10.11.2		
Action step (s)	Output (s)	Timeline	Resources required
<b>10.11.1 To conduct R&amp;D and hire poor households</b>	a) About 20 people involved in research works are hired generating RM720,000 household income per year	Start date	Funding: RM10 million
		2022	
End date			
2030			
<b>10.11.2 To develop new industry through investment opportunities to provide employment for skilled workers or in supervisory level.</b>	a) New investment creating 700 job opportunities that generate average household income of RM17 million per year		
Project Owner	Implementing Agency	Other Stakeholders	
MUDeNR	STIDC	Timber industry, investors, research institutions, higher learning institutions	

## AIP Level 1 - Poverty alleviation

<b>Sector</b>		: Poverty alleviation	
<b>Strategy</b>		: Creating Job and Business Opportunities in All Economic Sectors to Increase Household Income	
<b>Initiative</b>		: 10.12 Establishment and Management of Forest One Stop Compliance Centre (FoSCC) and Permanent Forest Estate (PFE)	
<b>Initiatives</b>		<b>Desired Outcome(s)</b>	
10.12 Establishment and Management of Forest One Stop Compliance Centre (FoSCC) and Permanent Forest Estate (PFE)		Social Inclusivity: 1. 100 poor households employed in this project will earn monthly income of RM4,218.	
<b>Timeline</b>		<b>Resources Required</b>	
<b>Start Date</b>	<b>End Date</b>		
2022	2030	<ul style="list-style-type: none"> <li>● Cashflow: <ul style="list-style-type: none"> <li>○ 2022: RM2.0 million</li> <li>○ 2023: RM2.0 million</li> <li>○ 2024: RM3.2 million</li> <li>○ 2025: RM3.3 million</li> <li>○ 2026: RM3.1 million</li> <li>○ 2027: RM3.1 million</li> <li>○ 2028: RM3.1 million</li> <li>○ 2029: RM3.1 million</li> <li>○ 2030: RM3.1 million</li> <li>○ Total = RM26 million</li> </ul> </li> <li>● RM4.5 million /annually (opex)</li> <li>● At least 350 officers need to execute work</li> </ul>	
<b>Project Owner</b>	<b>Implementing Agency</b>	<b>Other Stakeholders</b>	
MUDeNR	STIDC	Resident, District Office, Local Council, JKR, Licensee, Local Community, Other relevant agencies	

## AIP Level 2 - Poverty alleviation

<b>Sector</b>	: Poverty alleviation		
<b>Initiative</b>	: 10.12 Establishment and Management of Forest One Stop Compliance Centre (FoSCC) and Permanent Forest Estate (PFE)		
<b>Action step</b>	: 10.12.1 - 10.12.3		
Action step (s)	Output (s)	Timeline	Resources required
<b>10.12.1 Identify potential job creation for poor households</b>	a) Poverty alleviation for local community through job creation	Start date	RM4.5 million /annually (opex)  At least 350 officers need to execute work
		2022	
		End date	
<b>10.12.2 Upskilling and training for poor households</b>	a) Competent workforce	2030	
<b>10.12.3 Monitoring and evaluation</b>	a) Performance report		
Project Owner	Implementing Agency	Other Stakeholders	
MUDeNR	FDS	Resident and district office, local council, JKR, licensee, local communities, other relevant agencies	

## AIP Level 1 - Poverty alleviation

<b>Sector</b>		: Poverty alleviation	
<b>Strategy</b>		: Creating Job and Business Opportunities in All Economic Sectors to Increase Household Income	
<b>Initiative</b>		: 10.13 Strengthening Forest Enforcement Through Advancing The Technology and Equipment	
Initiatives		Desired Outcome(s)	
10.13 Strengthening Forest Enforcement Through Advancing The Technology and Equipment		<b>Social Inclusivity:</b> 1. 100 poor households employed in this project will earn monthly income above PLI.	
Timeline		Resources Required	
Start Date	End Date		
2022	2025	<ul style="list-style-type: none"> <li>• Funding: RM14,950,000</li> <li>• Type of Skill: Security, Transportation, Human Capital</li> <li>• Method required: Safety and security</li> <li>• Cash Flow:-               <ul style="list-style-type: none"> <li>○ 2022 = RM5,650,000</li> <li>○ 2023 = RM3,250,000</li> <li>○ 2024 = RM4,500,000</li> <li>○ 2025 = RM1,550,000</li> </ul> </li> </ul>	
Project Owner	Implementing Agency	Other Stakeholders	
MUDeNR	FDS	SAG, SFS, R&DO, private sector, NGOs, International Organisations, Other enforcement agencies, Local communities	

## AIP Level 2 - Poverty alleviation

<b>Sector</b>	: Poverty alleviation		
<b>Initiative</b>	: 10.13 Strengthening Forest Enforcement Through Advancing The Technology and Equipment		
<b>Action step</b>	: 10.13.1 - 10.13.3		
Action step (s)	Output (s)	Timeline	Resources required
<b>10.13.1 Identify potential job creation for poor households</b>	a) Poverty alleviation for local community through job creation	Start date	Required project funding: RM14.95 million Type of Skill: Security, Transportation, Human Capital Method required: Safety and security
		2022	
		End date	
<b>10.13.2 Upskilling and training for poor households</b>	a) Competent workforce	2025	
<b>10.13.3 Monitoring and evaluation</b>	a) Performance report		
Project Owner	Implementing Agency	Other Stakeholders	
MUDeNR	FDS	SAG, SFS, R&DO, private sector, NGOs, international organisations, other enforcement agencies, local communities	

## AIP Level 1 - Poverty alleviation

<b>Sector</b>		: Poverty alleviation	
<b>Strategy</b>		: Creating Job and Business Opportunities in All Economic Sectors to Increase Household Income	
<b>Initiative</b>		: 10.14 Development of Sustainable Forest Management (SFM) Centre in Central Region, Sarawak	
<b>Initiatives</b>		<b>Desired Outcome(s)</b>	
10.14 Development of Sustainable Forest Management (SFM) Centre in Central Region, Sarawak		<b>Social Inclusivity:</b> 1. 50 poor households employed in this programme will earn monthly income of RM9,482.	
<b>Timeline</b>		<b>Resources Required</b>	
<b>Start Date</b>	<b>End Date</b>		
2022	2030	<ul style="list-style-type: none"> <li>● Funding: RM24, 815, 000</li> <li>● Manpower:               <ul style="list-style-type: none"> <li>○ FDS: 10</li> <li>○ Consultant</li> <li>○ Contractor (Construction)</li> </ul> </li> <li>● Land required: Approx. 2 ha</li> <li>● Material: Concrete Building</li> <li>● Cashflow:-               <ul style="list-style-type: none"> <li>○ 2022: RM1,300,000</li> <li>○ 2023: RM2,700,000</li> <li>○ 2024: RM7,805,000</li> <li>○ 2025: RM8, 010,000</li> <li>○ 2026: RM5, 000,000</li> </ul> </li> </ul>	
<b>Project Owner</b>	<b>Implementing Agency</b>	<b>Other Stakeholders</b>	
MUDeNR	FDS	MUDeRN, FDS, R&DO, L&S	

## AIP Level 2 - Poverty alleviation

<b>Sector</b>	: Poverty alleviation		
<b>Initiative</b>	: 10.14 Development of Sustainable Forest Management (SFM) Centre in Central Region, Sarawak		
<b>Action step</b>	: 10.14.1 - 10.14.3		
Action step (s)	Output (s)	Timeline	Resources required
<b>10.14.1 Identify potential job creation for poor households</b>	a) Poverty alleviation for local community through job creation	Start date	Required project funding: RM24.815 million, Manpower: i. FDS: 10 ii. Consultant iii. Contractor (Construction) Land required: Approx. 2 ha Material: Concrete Building
		2022	
End date			
<b>10.14.2 Upskilling and training for poor households</b>	a) Competent workforce	2026	
<b>10.14.3 Monitoring and evaluation</b>	a) Performance report		
Project Owner	Implementing Agency	Other Stakeholders	
MUDeNR	FDS	MUDeNR, FDS, R&DO, L&S	

## AIP Level 1 - Poverty alleviation

<b>Sector</b>		: Poverty alleviation	
<b>Strategy</b>		: Creating Job and Business Opportunities in All Economic Sectors to Increase Household Income	
<b>Initiative</b>		: 10.15 Integrated Forest Ecological Study for Resource Utilisation and Management	
Initiatives		Desired Outcome(s)	
<b>10.15 Integrated Forest Ecological Study for Resource Utilisation and Management</b>		<b>Social Inclusivity:</b> 1. 40 poor households participating in this programme will receive additional monthly income ranging from RM1,200 to RM2,000.	
Timeline		Resources Required	
Start Date	End Date		
2026	2030	<ul style="list-style-type: none"> <li>● Required project funding: RM6,000,000.00</li> <li>● Manpower:               <ul style="list-style-type: none"> <li>○ FDS (Research Officers, Assistant Research Officers, Field Assistants)</li> <li>○ Local communities</li> <li>○ Consultant</li> </ul> </li> <li>● Cash Flow:               <ul style="list-style-type: none"> <li>○ 2026: RM1,000,000.00</li> <li>○ 2027: RM1,000,000.00</li> <li>○ 2028: RM1,500,000.00</li> <li>○ 2029: RM1,500,000.00</li> <li>○ 2030: RM1,000,000.00</li> </ul> </li> </ul>	
Project Owner	Implementing Agency	Other Stakeholders	
MUDeNR	FDS	FDS, Government Agencies, Private Sectors, Universities, Research Institutions, Local Communities, other relevant agencies	

## AIP Level 2 - Poverty alleviation

<b>Sector</b>	: Poverty alleviation		
<b>Initiative</b>	: 10.15 Integrated Forest Ecological Study for Resource Utilisation and Management		
<b>Action step</b>	: 10.15.1 - 10.15.3		
Action step (s)	Output (s)	Timeline	Resources required
<b>10.15.1 Identify potential job creation for poor households</b>	a) Poverty alleviation for local community through job creation	Start date	Required project funding: RM6 million, Manpower: FDS (Research officers, assistant research officers, field assistants), local communities, consultant
		2026	
<b>10.15.2 Upskilling and training for poor households.</b>	a) Competent workforce	End date	
<b>10.15.3 Monitoring and evaluation</b>	a) Performance report	2030	
Project Owner	Implementing Agency	Other Stakeholders	
MUDeNR	FDS	FDS, Government agencies, private sectors, universities, research institutions, local communities, other relevant agencies	

## AIP Level 1 - Poverty alleviation

<b>Sector</b>		: Poverty alleviation	
<b>Strategy</b>		: Creating Job and Business Opportunities in All Economic Sectors to Increase Household Income	
<b>Initiative</b>		: 10.16 Anthropogenic Effects to Forest Conservation and Ecosystem Sustainability	
Initiatives		Desired Outcome(s)	
<b>10.16 Anthropogenic Effects to Forest Conservation and Ecosystem Sustainability</b>		<b>Social Inclusivity:</b> 1. 50 poor households participating in this programme will earn monthly income of RM3575.40.	
Timeline		Resources Required	
Start Date	End Date	<ul style="list-style-type: none"> <li>• Required project funding: RM2,000,000</li> <li>• Site: Selected PFE area in Sarawak</li> <li>• Manpower: Research officers, assistant research officers, field assistants, local communities</li> <li>• Cashflow:               <ul style="list-style-type: none"> <li>○ 2026 – RM200,000</li> <li>○ 2027 – RM300,000</li> <li>○ 2028 – RM500,000</li> <li>○ 2029 – RM500,000</li> <li>○ 2030 – RM500,000</li> </ul> </li> </ul>	
2026	2030		
Project Owner	Implementing Agency	Other Stakeholders	
MUDeNR	FDS	International and local research institutions, higher learning, local Communities, other relevant agencies	

## AIP Level 2 - Poverty alleviation

<b>Sector</b>	: Poverty alleviation		
<b>Initiative</b>	: 10.16 Anthropogenic Effects to Forest Conservation and Ecosystem Sustainability		
<b>Action step</b>	: 10.16.1 - 10.16.4		
Action step (s)	Output (s)	Timeline	Resources required
<b>10.16.1 Create job from research and eco-tourism activities such as homestay, transportation, local guide and porters for the poor households</b>	a) 25 potential job for poor households	Start date	Required project funding: RM2 million, Site: Selected PFE area in Sarawak, Manpower: research officers, assistant research officers, field assistants, local communities
		2026	
End date	2030		
<b>10.16.2 Recruitment of poor households</b>		a) Recruitment of poor households	
<b>10.16.3 Upskilling and training for poor households.</b>		a) Competent workforce	
<b>10.16.4 Monitoring and evaluation</b>	a) Performance report		
Project Owner	Implementing Agency	Other Stakeholders	
MUDeNR	FDS	International and local research institutions, higher learning institutions, local communities, other relevant agencies	

## AIP Level 1 - Poverty alleviation

<b>Sector</b>	: Poverty alleviation	
<b>Strategy</b>	: Creating Job and Business Opportunities in All Economic Sectors to Increase Household Income	
<b>Initiative</b>	: 10.17 Assessment on Habitat of Fauna in Permanent Forest Estate (PFE) in Support of Forest Management Certification (FMC)	
<b>Initiatives</b>		<b>Desired Outcome(s)</b>
10.17 Assessment on Habitat of Fauna in Permanent Forest Estate (PFE) in Support of Forest Management Certification (FMC).		<b>Social Inclusivity:</b> <ol style="list-style-type: none"> <li>55 poor households participating in this programme will earn monthly income above PLI.</li> </ol>
<b>Timeline</b>		<b>Resources Required</b>
<b>Start Date</b>	<b>End Date</b>	
2026	2030	<ul style="list-style-type: none"> <li>Required project funding: RM3.7 mil (2026-2030)</li> <li>Approved funding by EPU: RM2 mil(2026-2027)</li> <li>Manpower: researchers, field assistance, local community and involvement of other relevant agencies</li> <li>Sites: PFE's and FMU's</li> </ul>
<b>Project Owner</b>	<b>Implementing Agency</b>	<b>Other Stakeholders</b>
MUDeNR	FDS	UNIMAS, UPM, WWF, FMUs, other relevant agencies

## AIP Level 2 - Poverty alleviation

<b>Sector</b>	: Poverty alleviation		
<b>Initiative</b>	: 10.17 Assessment on Habitat of Fauna in Permanent Forest Estate (PFE) in Support of Forest Management Certification (FMC)		
<b>Action step</b>	: 10.17.1 - 10.17.5		
Action step (s)	Output (s)	Timeline	Resources required
<b>10.17.1 Conduct awareness program on wildlife to stakeholders and local communities</b>	<ul style="list-style-type: none"> <li>Poverty alleviation for local community</li> </ul>	Start date	Required project funding: RM3.7 million (2026-2030)  Approved funding by EPU: RM2 million (2026-2027)  Manpower: researchers, field assistance, local community and involvement of other relevant agencies  Sites: PFE's and FMU's
		2026	
End date			
2030			
<b>10.17.2 Capacity building program with stakeholders and local communities</b>	<ul style="list-style-type: none"> <li>Local communities will be more knowledgeable about the role of wildlife conservation</li> </ul>	Start date	
		2026	
End date			
2030			
<b>10.17.3 Identify potential job creation and employed local community from poor households</b>	<ul style="list-style-type: none"> <li>Employment of poor households</li> </ul>	Start date	
		2026	
End date			
2030			
<b>10.17.4 Upskilling and training for poor households</b>	<ul style="list-style-type: none"> <li>Competent workforce</li> </ul>	Start date	
		2026	
End date			
2030			
<b>10.17.5 Monitoring and evaluation</b>	<ul style="list-style-type: none"> <li>Performance report</li> </ul>	Start date	
		2026	
End date			
2030			
Project Owner	Implementing Agency	Other Stakeholders	
MUDeNR	FDS	UNIMAS, UPM, WWF, FMUs, other relevant agencies	

## AIP Level 1 - Poverty alleviation

<b>Sector</b>		: Poverty alleviation	
<b>Strategy</b>		: Creating Job and Business Opportunities in All Economic Sectors to Increase Household Income	
<b>Initiative</b>		: 10.18 Achieve world class recognition for biodiversity conservation & protected areas management	
Initiatives		Desired Outcome(s)	
10.18 Achieve world class recognition for biodiversity conservation & protected areas management		<b>Social Inclusivity:</b> 1. 1,500 poor households participating in this programme will earn monthly income above PLI.	
Timeline		Resources Required	
Start Date	End Date		
2021	2030	<ul style="list-style-type: none"> <li>• Funding required:</li> <li>• 1.1. Niah NP: RM54.24 mil               <ul style="list-style-type: none"> <li>○ Cashflow for WHS nomination processes (RM2.24 mil):</li> <li>○ Tourism Mgt Plan: RM250K (2021-2022)</li> <li>○ Nomination dossier: RM250K (2021-2024)</li> <li>○ Publicity program: RM1.74 mil (2021-2023)</li> <li>○ Infrastructure: RM52 mil (due to completion by 2024).</li> </ul> </li> <li>• 1.2. For Lambir Hills NP &amp; Bako NP (RM1 mil):               <ul style="list-style-type: none"> <li>○ Tourism Mgt Plan: RM250K (2021-2025)</li> <li>○ Nomination document: RM250K (2021-2025)</li> <li>○ Publicity program: RM500K (2021-2025)</li> </ul> </li> </ul>	
Project Owner	Implementing Agency	Other Stakeholders	
MUDeNR	SFC	FDS, R&DO, Museum, L&S, Universities, Local communities, KeTSA, jabatan Warisan Negara, UNESCO, ASEAN Centre for Biodiversity (ACB)	

## AIP Level 2 - Poverty alleviation

Sector		Poverty alleviation	
Initiative		10.18 Achieve world class recognition for biodiversity conservation & protected areas management	
Action step		10.18.1 - 10.18.5	
Action step (s)	Output (s)	Timeline	Resources required
10.18.1 Conduct awareness program on wildlife to stakeholders and local communities	<ul style="list-style-type: none"> <li>Poverty alleviation for local community</li> </ul>	Start date	Funding required: 1.1. Niah NP: RM54.24 million 1.2. For Lambir Hills NP & Bako NP
		2021	
End date	2030		
10.18.2 Capacity building program with stakeholders and local communities	<ul style="list-style-type: none"> <li>Local communities will be more knowledgeable about the role of wildlife conservation</li> </ul>	Start date	
		2021	
End date	2030		
10.18.3 Identify potential job creation and employed local community from poor households	<ul style="list-style-type: none"> <li>Employment of poor households</li> </ul>	Start date	
		2021	
End date	2030		
10.18.4 Upskilling and training for poor households	<ul style="list-style-type: none"> <li>Competent workforce</li> </ul>	Start date	
		2021	
End date	2030		
10.18.5 Monitoring and evaluation	<ul style="list-style-type: none"> <li>Performance report</li> </ul>	Start date	
		2021	
End date	2030		
Project Owner	Implementing Agency	Other Stakeholders	
MUDeNR	SFC	FDS, R&DO, museum, L&S, universities, local communities, JBALB, KeTSA, Jabatan Warisan Negara, UNESCO, ASEAN Centre of Biodiversity (ACB)	

## AIP Level 1 - Poverty alleviation

<b>Sector</b>		: Poverty alleviation	
<b>Strategy</b>		: Creating Job and Business Opportunities in All Economic Sectors to Increase Household Income	
<b>Initiative</b>		: 10.19 Development and Upgrading of Integrated Facilities at 20 Totally Protected Areas (TPAs)	
<b>Initiatives</b>		<b>Desired Outcome(s)</b>	
<b>10.19 Development and Upgrading of Integrated Facilities at 20 Totally Protected Areas (TPAs)</b>		<b>Social Inclusivity:</b> 1. 1) 1,000 poor households employed in this project will receive monthly income of RM6,000 for rural households and RM10,000 for urban households.	
<b>Timeline</b>		<b>Resources Required</b>	
<b>Start Date</b>	<b>End Date</b>		
2021	2030	<ul style="list-style-type: none"> <li>● Funding required: RM75 million</li> <li>● Cash Flow:               <ul style="list-style-type: none"> <li>○ 2021: RM900 k</li> <li>○ 2022: RM8.3 mil</li> <li>○ 2023: RM6.5 mil</li> <li>○ 2024: RM1.3 mil</li> </ul> </li> <li>● 2024-2030: RM58 mil required funding for next phases</li> <li>● Manpower Requirement:               <ul style="list-style-type: none"> <li>○ 24 professionals in consultancy services</li> <li>○ 400-500 construction workers</li> <li>○ 200 field staff</li> </ul> </li> </ul>	
<b>Project Owner</b>	<b>Implementing Agency</b>	<b>Other Stakeholders</b>	
MUDeNR	SFC	SAG, MTAC, L&S	

## AIP Level 2 - Poverty alleviation

<b>Sector</b>	: Poverty alleviation		
<b>Initiative</b>	: 10.19 Development and Upgrading of Integrated Facilities at 20 Totally Protected Areas (TPA)		
<b>Action step</b>	: 10.19.1 - 10.19.5		
Action step (s)	Output (s)	Timeline	Resources required
<b>10.19.1 Conduct awareness program on wildlife to stakeholders and local communities</b>	<ul style="list-style-type: none"> <li>Poverty alleviation for local community</li> </ul>	Start date	Funding required: RM75 million, Manpower Requirement: 24 professionals in consultancy services 400-500 construction workers 200 field staff
		2021	
End date			
2030			
<b>10.19.2 Capacity building program with stakeholders and local communities</b>	<ul style="list-style-type: none"> <li>Local communities will be more knowledgeable about the role of wildlife conservation</li> </ul>	Start date	
		2021	
End date			
2030			
<b>10.19.3 Identify potential job creation and employed local community from poor households</b>	<ul style="list-style-type: none"> <li>Employment of poor households</li> </ul>	Start date	
		2021	
End date			
2030			
<b>10.19.4 Upskilling and training for poor households</b>	<ul style="list-style-type: none"> <li>Competent workforce</li> </ul>	Start date	
		2021	
End date			
2030			
<b>10.19.5 Monitoring and evaluation</b>	<ul style="list-style-type: none"> <li>Performance report</li> </ul>	Start date	
		2021	
End date			
2030			
Project Owner	Implementing Agency	Other Stakeholders	
MUDeNR	SFC	SAG, MTAC, L&S, SPA, SFS, local authorities, community, JKR, EPU Sarawak	

## AIP Level 1 - Poverty alleviation

<b>Sector</b>		: Poverty alleviation	
<b>Strategy</b>		: Creating Job and Business Opportunities in All Economic Sectors to Increase Household Income	
<b>Initiative</b>		: 10.20 Integrated Wildlife Conservation and Management in Sarawak	
<b>Initiatives</b>		<b>Desired Outcome(s)</b>	
<b>10.20 Integrated Wildlife Conservation and Management in Sarawak</b>		<b>Social Inclusivity:</b> <ol style="list-style-type: none"> <li>500 poor households participating in this project will receive monthly income of RM6,000 for rural households and RM10,000 for urban households.</li> </ol>	
<b>Timeline</b>		<b>Resources Required</b>	
<b>Start Date</b>	<b>End Date</b>		
2021	2030	<ul style="list-style-type: none"> <li>Manpower Requirement: <ul style="list-style-type: none"> <li>Current SFC field staff: 2021 – 50</li> <li>Increases to: <ul style="list-style-type: none"> <li>2022 – 60</li> <li>2023 – 70</li> </ul> </li> </ul> </li> <li>RMK13 - Increase to (2025 – 2030) – 100</li> </ul>	
<b>Project Owner</b>	<b>Implementing Agency</b>	<b>Other Stakeholders</b>	
MUDeNR	SFC	CITES CBD, RAMSAR, UNDP, GEF, Local Communities, SBC, KeTSA, FDS, NGOs, Institutes of higher learning, local authorities, Energy production companies, water management authorities, agriculture production industries, certification agencies	

## AIP Level 2 - Poverty alleviation

<b>Sector</b> :		Poverty alleviation	
<b>Initiative</b> :		10.20 Integrated Wildlife Conservation and Management in Sarawak	
<b>Action step</b> :		10.20.1 - 10.20.5	
Action step (s)	Output (s)	Timeline	Resources required
10.20.1 To establish a comprehensive database on flora and fauna inside TPAs in Sarawak for effective management	<ul style="list-style-type: none"> <li>Comprehensive database</li> </ul>	Start date	Manpower Requirement: Current SFC field staff 2021 – 50 Increases to 2022 – 60 2023 – 70 RMK13 - Increase to (2025 – 2030) – 100
		2021	
End date			
2030			
10.20.2 To establish a comprehensive database on flora and fauna outside TPAs in Sarawak for future planning.	<ul style="list-style-type: none"> <li>Comprehensive database on flora and fauna outside TPAs in Sarawak for future planning</li> </ul>	Start date	
		2021	
End date			
2030			
10.20.3 To produce Sarawak Redlist (for terrestrial and Marine) mammals	<ul style="list-style-type: none"> <li>Sarawak Redlist</li> </ul>	Start date	
		2021	
End date			
2030			
10.20.4 To restore degraded areas in TPAs in line with state government policy	<ul style="list-style-type: none"> <li>Restoration of TPAS</li> </ul>	Start date	
		2021	
End date			
2030			
10.20.5 To renovate and/or reconstruct where necessary research field station facilities, Landeh (ex-situ conservation facilities), & field station at Ng Segerak, Ng Bloh & Ng Ju.	<ul style="list-style-type: none"> <li>Upgraded facilities</li> </ul>	Start date	
		2021	
End date			
2030			
Project Owner	Implementing Agency	Other Stakeholders	
MUDeNR	SFC	CITES CBD, RAMSAR , UNDP, GEF, local communities, SBC, KeTSA, FDS, NGOs, Institutes of higher learning, local authorities, energy production companies, water management authorities, agriculture production industries certification agencies	

## AIP Level 2 - Poverty alleviation

<b>Sector</b>	: Poverty alleviation		
<b>Initiative</b>	: 10.20 Integrated Wildlife Conservation and Management in Sarawak		
<b>Action step</b>	: 10.20.6 - 10.20.7		
Action step (s)	Output (s)	Timeline	Resources required
<b>10.20.6 To conduct capacity building for staff participating in the project</b>	<ul style="list-style-type: none"> <li>Comprehensive workforce</li> </ul>	<b>Start date</b>	Manpower Requirement: Current SFC field staff 2021 – 50 Increases to 2022 – 60 2023 – 70 RMK13 - Increase to (2025 – 2030) – 100
		2021	
<b>End date</b>			
2030			
<b>10.20.7 To produce brochures, pamphlets, publications, or books</b>	<ul style="list-style-type: none"> <li>To produce brochures, pamphlets, publications, or books</li> </ul>	<b>Start date</b>	
		2021	
<b>End date</b>			
2030			
Project Owner	Implementing Agency	Other Stakeholders	
MUDeNR	SFC	CITES CBD, RAMSAR , UNDP, GEF, local communities, SBC, KeTSA, FDS, NGOs, Institutes of higher learning, local authorities, energy production companies, water management authorities, agriculture production industries certification agencies	

## AIP Level 1 - Poverty alleviation

<b>Sector</b>		: Poverty alleviation	
<b>Strategy</b>		: Creating Job and Business Opportunities in All Economic Sectors to Increase Household Income	
<b>Initiative</b>		: 10.21 Rural Transformation through community participation in Biodiversity conservation and protected areas management services	
Initiatives		Desired Outcome(s)	
10.21 Rural Transformation through community participation in Biodiversity conservation and protected areas management services		<b>Social Inclusivity:</b> <ol style="list-style-type: none"> <li>500 poor households participating in this project will receive monthly income of RM6,000.</li> </ol>	
Timeline		Resources Required	
Start Date	End Date	<ul style="list-style-type: none"> <li>Funding required:               <ul style="list-style-type: none"> <li>RM5 mil (2022-2025)</li> <li>RM5 mil (2026-2030)</li> </ul> </li> <li>Alternative sources of funding</li> <li>2022-2025 RM2 mil from GLC, NGOs, Foundations, Federal Ministries.</li> <li>Manpower requirement:               <ul style="list-style-type: none"> <li>20 Trainers</li> <li>20 field staff</li> <li>5 professional staff/advisor</li> <li>50 competent wildlife rescue personnel</li> </ul> </li> </ul>	
2021	2030		
Project Owner	Implementing Agency	Other Stakeholders	
MUDeNR	SFC	R&DO, MTAC, MANRED, KWPK, MINTRED, Department of Agriculture - Inland Fisheries, Rural Communities, IADA, KeTSA, MARA	

## AIP Level 2 - Poverty alleviation

<b>Sector</b>	: Poverty alleviation		
<b>Initiative</b>	: 10.21 Rural Transformation through community participation in Biodiversity conservation and protected areas management services		
<b>Action step</b>	: 10.21.1		
Action step (s)	Output (s)	Timeline	Resources required
<b>10.21.1 To implement Community engagement programmes by engaging community participation in Biodiversity Conservation Projects:</b> i. Turtle Conservation Project (Kampung Pugu/ Lundu, Sematan & Sibuti) ii. Feed the Wildlife - supply food ration for animals in MWC, SWC and Wildlife Rescue Centre by local communities iii. Non-Timber Forest Product (NTFP) (Similajau NP) Bintulu Region, Miri Region iv. Logistic services (Tanjung Datu NP & Sibuti Coral Reefs NP) v. Engagement of local community for park maintenance services in Niah NP, Similajau NP, Lambir Hill NP, Bako NP, Gunung Gading NP, Tun Ahmad Zaidi NR and Bukit Lima NR	a) Community based eco-tourism program, Non-timber forest products, service providers for transportation, repair & maintenance at TPAs will involved 1,000 poor household and 50% or 500 household will be alleviated from PLI	<b>Start date</b>  2021	Funding required: RM5 million (2022-2025) RM5 million (2026-2030)  Alternative sources of funding 2022-2025 RM2 million from GLC, NGOs, Foundations, Federal Ministries  Manpower requirement 20 Trainers 20 field staff 5 professional staff/advisor 50 competent wildlife rescue personnel
		<b>End date</b>  2030	
Project Owner	Implementing Agency	Other Stakeholders	
MUDeNR	SFC	R&DO, MTAC, MANRED, KWPK, MINTRED, Department of Agriculture - Inland Fisheries, rural communities, IADA, KeTSA, MARA	

## AIP Level 2 - Poverty alleviation

<b>Sector</b>	: Poverty alleviation
<b>Initiative</b>	: 10.21 Rural Transformation through community participation in Biodiversity conservation and protected areas management services
<b>Action step</b>	: 10.21.2 - 10.21.4

Action step (s)	Output (s)	Timeline	Resources required
10.21.2 Identify potential job creation and employed local community from poor households	<ul style="list-style-type: none"> <li>Employment of poor households</li> </ul>	Start date	Funding required: RM28 million (RMK12: 10 mil) , manpower requirement - Increase to: 2026 to 2030 – 50 staff (WRC) forensic lab, increase to 2025 to 2030 – 12 staff
		2021	
End date			
2030			
10.21.3 Upskilling and training for poor households	<ul style="list-style-type: none"> <li>Competent workforce</li> </ul>	Start date	
		2021	
End date			
2030			
10.21.4 Monitoring and evaluation	<ul style="list-style-type: none"> <li>Performance report</li> </ul>	Start date	
		2021	
End date			
2030			
Project Owner	Implementing Agency	Other Stakeholders	
MUDeNR	SFC	R&DO, MTAC, MANRED, KWPKP, MINTRED, Department of Agriculture - Inland Fisheries, rural communities, IADA, KeTSA, MARA	

## AIP Level 1 - Poverty alleviation

<b>Sector</b> :		Poverty alleviation
<b>Strategy</b> :		Creating Job and Business Opportunities in All Economic Sectors to Increase Household Income
<b>Initiative</b> :		10.22 Establishment of wildlife rescue centre and forensics laboratory
Initiatives		Desired Outcome(s)
<b>10.22 Establishment:</b>  <b>1. wildlife rescue centre</b>  <b>2. forensics laboratory</b>		<b>Social inclusivity:</b> 1. 50 poor households employed in this project will receive monthly income of RM6,000 for rural households and RM10,000 for urban households.
Timeline		Resources Required
Start Date	End Date	
2021	2030	<ul style="list-style-type: none"> <li>● Funding requirement: RM28 million</li> <li>● 4 wildlife rescue centres:               <ul style="list-style-type: none"> <li>○ Sibuti –RM6m</li> <li>○ Lawas – RM4m</li> <li>○ Kapit – RM4m</li> <li>○ Oya – RM3m</li> <li>○ Total: 17 mil</li> </ul> </li> <li>● 1 forensics lab (RM11 million)</li> <li>● Manpower requirement:               <ul style="list-style-type: none"> <li>○ Current staff: 2021 – 4</li> <li>○ Increase to: 2026 to 2030 – 50 staff (WRC)</li> <li>○ Forensic Lab: increase to 2025 to 2030 – 12 staff.</li> </ul> </li> </ul>
Project Owner	Implementing Agency	Other Stakeholders
MUDeNR	SFC	Local Communities, SBC, DWNP, NGOs, MTAC, Private labs, Tourism agencies consultants, Institutes of higher learning, Local authorities

## AIP Level 2 - Poverty alleviation

<b>Sector</b>	: Poverty alleviation		
<b>Initiative</b>	: 10.22 Establishment: i. wildlife rescue centre ii. forensics laboratory		
<b>Action step</b>	: 10.22.1 - 10.22.4		
Action step (s)	Output (s)	Timeline	Resources required
<b>10.22.1 To establish Wildlife Conservation And Rescue Centres at Lawas, Sibul, Kapit and Sibuti and wildlife forensic laboratory</b>	<ul style="list-style-type: none"> <li>Development of facilities and infrastructure at rescue centres and forensic laboratory will create 300 job opportunities and 15% or about 50 household target of those under PLI will be alleviated from PLI. (15% is the average PLI for Lawas, Sibul, Kapit and Sibuti) <math>300 \times 15\% = 45</math></li> </ul>	Start date	Funding required: RM28 million (RMK12: 10 mil), manpower requirement - Increase to: 2026 to 2030 – 50 staff (WRC) forensic lab, increase to 2025 to 2030 – 12 staff
		2021	
		End date	
		2030	
<b>10.23.2 Identify potential job creation and employed local community from poor households</b>	<ul style="list-style-type: none"> <li>Employment of poor households</li> </ul>	Start date	
		2021	
		End date	
		2030	
<b>10.23.3 Upskilling and training for poor households</b>	<ul style="list-style-type: none"> <li>Competent workforce</li> </ul>	Start date	
		2021	
		End date	
		2030	
<b>10.23.4 Monitoring and evaluation</b>	<ul style="list-style-type: none"> <li>Performance report</li> </ul>	Start date	
		2021	
		End date	
		2030	
Project Owner	Implementing Agency	Other Stakeholders	
MUDeNR	SFC	Local communities, SBC, DWNP. NGOs, MTAC, private labs, tourism agencies consultants, institutes of higher learning, local authorities	

## AIP Level 1 - Poverty alleviation

<b>Sector</b>	: Poverty alleviation	
<b>Strategy</b>	: Creating Job and Business Opportunities in All Economic Sectors to Increase Household Income	
<b>Initiative</b>	: 10.23 Establishment of Rainforest/Nature Discovery Centre (Semenggoh Rainforest Discovery Centre (SRDC) and Nature Discovery Centre, Piasau Nature Reserve	
<b>Initiatives</b>		<b>Desired Outcome(s)</b>
10.23 Establishment of Rainforest/Nature Discovery Centre (Semenggoh Rainforest Discovery Centre (SRDC) and Nature Discovery Centre, Piasau Nature Reserve.		<b>Social Inclusivity:</b> <ol style="list-style-type: none"> <li>1,500 poor households employed in this programme will receive monthly income ranging from RM10,000 to RM13,000 by 2030.</li> </ol>
<b>Timeline</b>		<b>Resources Required</b>
<b>Start Date</b>	<b>End Date</b>	
2021	2030	<ul style="list-style-type: none"> <li>Funding required: RM60 million, (RMK12: 10 mil)</li> <li>Cash Flow: <ul style="list-style-type: none"> <li>Semenggoh <ul style="list-style-type: none"> <li>2021- RM500k</li> <li>2022- RM5.0 mil</li> <li>2023- RM4.5 mil</li> <li>2023-2025 - RM20 mil</li> </ul> </li> <li>Piasau <ul style="list-style-type: none"> <li>2021 – RM300,000</li> <li>2023-2025 (RM29.7 mil)</li> </ul> </li> </ul> </li> <li>Manpower Requirement <ul style="list-style-type: none"> <li>12 professionals in consultancy services</li> <li>120 construction workers</li> <li>20 field staff</li> </ul> </li> </ul>
<b>Project Owner</b>	<b>Implementing Agency</b>	<b>Other Stakeholders</b>
MUDeNR	SFC	SAG, MTAC, L&S, SPA, SFS, Local Authorities, Community, JKR, EPU

## AIP Level 2 - Poverty alleviation

<b>Sector</b>	: Poverty alleviation		
<b>Initiative</b>	: 10.23 Establishment of Rainforest/Nature Discovery Centre (Semenggoh Rainforest Discovery Centre (SRDC) and Nature Discovery Centre, Piasau Nature Reserve.		
<b>Action step</b>	: 10.23.1 - 10.23.4		
Action step (s)	Output (s)	Timeline	Resources required
<b>10.23.1 To establish Rainforest Discovery Centre at Semenggoh and Nature Discovery Centre Piasau</b>	a) Development of facilities and infrastructure at RFDC Semenggoh and NDC Piasau will create 3,000 job opportunities directly or spin-off from the project, i.e. for Semenggoh (2,000) and Piasau (1,000) with percentages of those below PLI at 7.4% and 6% respectively. Semenggoh (Kuching) – 2,000 x 7.4% = 148 Piasau (Miri) – 1,000 x 6% = 60 Total = 208 (from 3,000 opportunities) 200 poor household will be alleviated from PLI	Start date	Funding required: RM60 million (RMK12: 10 mil) , manpower requirement - 12 professionals in consultancy services 120 construction workers 20 field staff
		2021	
		End date	
		2030	
<b>10.23.2 Identify potential job creation and employed local community from poor households</b>	a) Employment of poor households	Start date	
		2021	
		End date	
		2030	
<b>10.23.3 Upskilling and training for poor households</b>	a) Competent workforce	Start date	
		2021	
		End date	
		2030	
<b>10.23.4 Monitoring and evaluation</b>	a) Performance report	Start date	
		2021	
		End date	
		2030	
Project Owner	Implementing Agency	Other Stakeholders	
MUDeNR	SFC	SAG, MTAC, L&S, SPA, SFS, local authorities, community, JKR, EPU Sarawak	

## AIP Level 1 - Poverty alleviation

<b>Sector</b>		: Poverty alleviation	
<b>Strategy</b>		: Creating Job and Business Opportunities in All Economic Sectors to Increase Household Income	
<b>Initiative</b>		: 11.1 Reinvigorate Miri Port as the Northern Gateway to Sarawak	
Initiatives		Desired Outcome(s)	
11.1 Reinvigorate Miri Port as the Northern Gateway to Sarawak		<b>Social Inclusivity:</b> 1. 5,000 poor households employed in this project will receive monthly income above PLI.	
Timeline		Resources Required	
Start Date	End Date	<ul style="list-style-type: none"> <li>• RM540 mil</li> <li>• Internal Fund = RM20 mil</li> <li>• 12MP MTR: RM5 mil</li> <li>• 13MP: RM515 mil</li> </ul>	
2022	2030		
Project Owner	Implementing Agency	Other Stakeholders	
MIPD	MPA	Related Government Agencies and Private Sectors	

## AIP Level 2 - Poverty alleviation

<b>Sector</b>	: Poverty alleviation		
<b>Initiative</b>	: 11.1 Reinvigorate Miri Port as the Northern Gateway to Sarawak		
<b>Action step</b>	: 11.1.1 - 11.1.3		
Action step (s)	Output (s)	Timeline	Resources required
<b>11.1.1 Identification of local manpower from poor households available</b>	a) Number of local manpower available	Start date	RM540 mil  Internal Fund = RM20 million  12MP MTR = RM5 million  13MP = RM515 million
		2022	
End date	2023		
		Start date	
2023	End date		
2024			
End date	2025		
		Start date	
<b>11.1.2 Recruitment of potential local candidate from poor households</b>	a) Number of local manpower employed	2023	
		2024	
<b>11.1.3 Training of for new recruitment</b>	a) Increase competency of the local manpower	2024	
		2025	
Project Owner	Implementing Agency	Other Stakeholders	
MIPD	MPA	Related Government agencies and private sectors	

## AIP Level 1 - Poverty alleviation

<b>Sector</b>		: Poverty alleviation	
<b>Strategy</b>		: Creating Job and Business Opportunities in All Economic Sectors to Increase Household Income	
<b>Initiative</b>		: 11.2 Miri - Limbang - Lawas Road Connectivity	
Initiatives		Desired Outcome(s)	
11.2 Miri - Limbang - Lawas Road Connectivity		<b>Social Inclusivity:</b> <ol style="list-style-type: none"> <li>Poor households employed in this project will receive monthly income above PLI.</li> </ol>	
Timeline		Resources Required	
Start Date	End Date	<ul style="list-style-type: none"> <li>RM3.18 bil</li> </ul>	
2021	2028		
Project Owner	Implementing Agency	Other Stakeholders	
MIPD	JKR, RECODA	MIPD, MOTS, DID, Local Government	

## AIP Level 2 - Poverty alleviation

<b>Sector</b> :		Poverty alleviation	
<b>Initiative</b> :		11.2 Miri - Limbang - Lawas Road Connectivity	
<b>Action step</b> :		11.2.1 - 11.2.3	
Action step (s)	Output (s)	Timeline	Resources required
<b>11.2.1 Identification of local manpower from poor households available</b>	a) Number of local manpower available	Start date	RM3.18 billion
		2022	
		End date	
		2022	
<b>11.2.2 Recruitment of potential local candidate from poor households</b>	a) Number of local manpower employed	Start date	
		2022	
		End date	
		2023	
<b>11.2.3 Training of for new recruitment</b>	a) Increase competency of the local manpower	Start date	
		2023	
		End date	
		2028	
Project Owner	Implementing Agency	Other Stakeholders	
MIPD	JKR, RECODA	MIPD, MOTS, DID, Local Government	

## AIP Level 1 - Poverty alleviation

<b>Sector</b>		: Poverty alleviation	
<b>Strategy</b>		: Creating Job and Business Opportunities in All Economic Sectors to Increase Household Income	
<b>Initiative</b>		: 11.3 Southern Region Development Corridor	
Initiatives		Desired Outcome(s)	
11.3 Southern Region Development Corridor		<b>Social Inclusivity:</b> <ol style="list-style-type: none"> <li>Poor households employed in this project will receive monthly income above PLI.</li> </ol>	
Timeline		Resources Required	
Start Date	End Date	<ul style="list-style-type: none"> <li>RM1.5 billion</li> </ul>	
2021	2028		
Project Owner	Implementing Agency	Other Stakeholders	
MIPD	JKR	MIPD, MOTS, DID, Local Government	

## AIP Level 2 - Poverty alleviation

<b>Sector</b>	: Poverty alleviation		
<b>Initiative</b>	: 11.3 Southern Region Development Corridor		
<b>Action step</b>	: 11.3.1 - 11.3.3		
Action step (s)	Output (s)	Timeline	Resources required
<b>11.3.1 Identification of local manpower from poor households available</b>	a) Number of local manpower available	Start date	RM1.5 billion
		2024	
<b>11.3.2 Recruitment of potential local candidate from poor households</b>	a) Number of local manpower employed	End date	
		2024	
<b>11.3.3 Training of for new recruitment</b>	a) Increase competency of the local manpower	Start date	
		2025	
		End date	
		2028	
Project Owner	Implementing Agency	Other Stakeholders	
MIPD	JKR	MIPD, MOTS, DID, Local Government	

## AIP Level 1 - Poverty alleviation

<b>Sector</b>		: Poverty alleviation	
<b>Strategy</b>		: Creating Job and Business Opportunities in All Economic Sectors to Increase Household Income	
<b>Initiative</b>		: 11.4 Border Security Road	
Initiatives		Desired Outcome(s)	
11.4 Border Security Road		<b>Social Inclusivity:</b> <ol style="list-style-type: none"> <li>Poor households employed in this project will receive monthly income above PLI.</li> </ol>	
Timeline		Resources Required	
Start Date	End Date	<ul style="list-style-type: none"> <li>RM24 bil</li> </ul>	
2021	2030		
Project Owner	Implementing Agency	Other Stakeholders	
MIPD	JKR	MIPD, MOTS, DID, Local Government	

## AIP Level 2 - Poverty alleviation

<b>Sector</b> :		Poverty alleviation	
<b>Initiative</b> :		11.4 Border Security Road	
<b>Action step</b> :		11.4.1 - 11.4.3	
Action step (s)	Output (s)	Timeline	Resources required
<b>11.4.1 Identification of local manpower from poor households available</b>	a) Number of local manpower available	Start date	RM24 billion
		2026	
		End date	
		2027	
<b>11.4.2 Recruitment of potential local candidate from poor households</b>	a) Number of local manpower employed	Start date	
		2027	
		End date	
		2028	
<b>11.4.3 Training of for new recruitment</b>	a) Increase competency of the local manpower	Start date	
		2028	
		End date	
		2035	
Project Owner	Implementing Agency	Other Stakeholders	
MIPD	JKR	MIPD, MOTS, DID, Local Government	

## AIP Level 1 - Poverty alleviation

<b>Sector</b>		: Poverty alleviation	
<b>Strategy</b>		: Creating Job and Business Opportunities in All Economic Sectors to Increase Household Income	
<b>Initiative</b>		: 11.5a Job Opportunities through Water Supply Projects	
Initiatives		Desired Outcome(s)	
11.5a Job Opportunities through Water Supply Projects		<b>Social Inclusivity:</b> <ol style="list-style-type: none"> <li>Creates 1,196 skilled workers whereby 400 from the poor household income group will be employed.</li> <li>To provide about 39,300 semi-skilled and unskilled jobs for poor households' breadwinners in the construction of water supply projects with income more than Poverty Line Income (PLI).</li> </ol>	
Timeline		Resources Required	
Start Date	End Date		
11MP	2030	<ul style="list-style-type: none"> <li>RM20.05 bil</li> </ul>	
Project Owner	Implementing Agency	Other Stakeholders	
Ministry of Utilities	JBALB, KWB, SWB, LAKU	SFS, EPU Sarawak, Industry Players	

## AIP Level 2 - Poverty alleviation

<b>Sector</b> :		Poverty alleviation	
<b>Initiative</b> :		11.5a Job Opportunities through Water Supply Projects	
<b>Action step</b> :		11.5a.1 - 11.5b.3	
Action step (s)	Output (s)	Timeline	Resources required
<b>11.5a.1 To seek fund amounting RM20.5 billion</b>	a) Approval of the required fund	Start date	RM20.5 billion
<b>11.5a.2 To implement the Sarawak Water Supply Grid program, SAWAS, NRW Reduction program and Digitalisation and Modernisation which will create 39,300 semi-skilled and unskilled jobs and 400 skilled workers for the poor household income group</b>	a) Completion of water supply projects  (Creation of 39,300 semi-skilled and unskilled jobs and 400 skilled workers for the poor household income group.)	11MP	
<b>11.5a.3 To introduce policy for the Water Supply Agencies, consultant and contractor to hire locals by incorporating requirement in the contract</b>	a) 20% of the workers for each contract must be employed from the poor households b) Out of this 20%, 1/3 is from low skill and 2/3 is for semi skilled and high skilled.	End date  2030	
Project Owner	Implementing Agency	Other Stakeholders	
MOU	JBALB, KWB, SWB, LAKU	SFS, EPU Sarawak, industry players	

## AIP Level 1 - Poverty alleviation

<b>Sector</b>		: Poverty alleviation	
<b>Strategy</b>		: Creating Job and Business Opportunities in All Economic Sectors to Increase Household Income	
<b>Initiative</b>		: 11.5b Training and upskilling of poor households/ breadwinners for Water Supply Projects	
Initiatives		Desired Outcome(s)	
11.5b Training and upskilling of poor households/ breadwinners for Water Supply Projects		<b>Social Inclusivity</b> 1. To train about 404 Mains Layer and 404 Pipe fitters from the poor household income group.	
Timeline		Resources Required	
Start Date	End Date	<ul style="list-style-type: none"> <li>• RM1.5 mil</li> </ul>	
2022	2030		
Project Owner	Implementing Agency	Other Stakeholders	
Ministry of Utilities	Ministry of Utilities: ABM, PPKS, IKM, UNIMAS, Yayasan Sarawak	Industry Players, All ministries and government agencies, Local communities, Private companies, Local YB's offices	

## AIP Level 2 - Poverty alleviation

<b>Sector</b>	: Poverty alleviation		
<b>Initiative</b>	: 11.5b Training and upskilling of poor households/ breadwinners for Water Supply Projects		
<b>Action step</b>	: 11.5b.1 - 11.5b.2		
Action step (s)	Output (s)	Timeline	Resources required
<b>11.5b.1 To train about 404 Mains Layer and 404 Pipefitters from the poor household income group.</b>	a) 404 Mains Layer and 404 Pipefitters from the poor household income group will be trained	Start date	RM1.5 billion
		2022	
		End date	
		2030	
<b>11.5b.2 To provide training fees worth RM1.5 million for poor households breadwinners</b>	a) 404 Mains Layer and 404 Pipefitters from the poor household income group will be given training fees from the Government.	Start date	RM1.5 billion
		2022	
		End date	
		2030	
Project Owner	Implementing Agency	Other Stakeholders	
MOU	MOU, ABM, PPKS, IKM, UNIMAS, Yayasan Sarawak	Industry player, utility provide, local communities	

## AIP Level 1 - Poverty alleviation

<b>Sector</b>		: Poverty alleviation	
<b>Strategy</b>		: Creating Job and Business Opportunities in All Economic Sectors to Increase Household Income	
<b>Initiative</b>		: 11.6a Job opportunities through Electricity Supply Projects	
Initiatives		Desired Outcome(s)	
11.6a Job opportunities through Electricity Supply Projects		<b>Social Inclusivity</b> 1. Creation of 4,000 low skilled, and 8,000 semi – skilled and high skilled workers from poor households.	
Timeline		Resources Required	
Start Date	End Date	<ul style="list-style-type: none"> <li>RM18.5 bil</li> </ul>	
2021	2025		
Project Owner	Implementing Agency	Other Stakeholders	
Ministry of Utilities	SEB	Industry Players	

## AIP Level 2 - Poverty alleviation

<b>Sector</b>	: Poverty alleviation		
<b>Initiative</b>	: 11.6a Job opportunities through Electricity Supply Projects		
<b>Action step</b>	: 11.6a.1 - 11.6a.2		
Action step (s)	Output (s)	Timeline	Resources required
<b>11.6a.1 JTo implement SEB-funded and State-funded electricity infrastructure and rural supply projects for about 1,500 projects creating 60,000 jobs for unskilled, semi-skilled and skilled workers</b>	a) Completion of 1,500 projects creating jobs contributing to increased income level for the poor household group	Start date	RM18.5 billion
		2021	
		End date	
		2025	
<b>11.6a.2 To introduce policy for SEB, consultant and contractor to hire locals by incorporating requirement in the contract</b>	a) 20% of the workers for each contract(total 12,000 workers) to be employed from the poor households. b) Out of this 20%, 1/3 (4,000 workers) is from low skill and 2/3 (8,000 workers) is for semi skilled and high skilled	Start date	RM18.5 billion
		2021	
		End date	
		2025	
Project Owner	Implementing Agency	Other Stakeholders	
MOU	SEB	Industry player	

## AIP Level 1 - Poverty alleviation

<b>Sector</b>		: Poverty alleviation	
<b>Strategy</b>		: Creating Job and Business Opportunities in All Economic Sectors to Increase Household Income	
<b>Initiative</b>		: 11.6b Training and upskilling of poor households/ breadwinners for Electricity Supply Projects	
<b>Initiatives</b>		<b>Desired Outcome(s)</b>	
11.6b Training and upskilling of poor households/ breadwinners for Electricity Supply Projects		<b>Social Inclusivity</b> <ol style="list-style-type: none"> <li>To train about 4,000 competent person/contractor (50% of poor households with skilled education will be employed as skilled workers with high income).</li> <li>For 277 villages under community-based solar SARES projects, provide training to 500 eligible individuals for training in skilled electrical competency related to solar system.</li> </ol>	
<b>Timeline</b>		<b>Resources Required</b>	
<b>Start Date</b>	<b>End Date</b>		
2022	2025	<ul style="list-style-type: none"> <li>RM15 mil</li> </ul>	
<b>Project Owner</b>	<b>Implementing Agency</b>	<b>Other Stakeholders</b>	
Ministry of Utilities	CENTED, Pusat Giatmara, IKM, ILP, CIDB, Leadership Institute, SEB Training Centre, Private institution, Institution of Higher learning	Industry Players, All ministries and government agencies, utility provider, local communities, private companies, local YB's offices	

## AIP Level 2 - Poverty alleviation

<b>Sector</b>	: Poverty alleviation		
<b>Initiative</b>	: 11.6b Training and upskilling of poor households/ breadwinners for Electricity Supply Projects		
<b>Action step</b>	: 11.6b.1 - 11.6b.2		
Action step (s)	Output (s)	Timeline	Resources required
<b>11.6b.1 Job training for skilled competency training</b>  <ul style="list-style-type: none"> <li>- Institutions to increase the capacity to train more competent person</li> <li>- Funding or sponsorship for student from low-household to undertake electrical competency course</li> <li>- Active promotion and recruitment of student</li> <li>- Collaborate with electrical associations for on job training</li> </ul>	a) To train about 4,000 competent person/contractor (50% of poor households with skilled education will be employed as skilled workers with high income)	Start date	RM10 billion
		2022	
		End date	
		2025	
<b>11.6b.2 Skilled competency training for remote community</b>  <ul style="list-style-type: none"> <li>- To identify eligible individuals from 277 villages to be trained</li> <li>- To collaborate with institutions to provide package training for this group</li> </ul>	a) 500 eligible individuals from 277 SARES villages trained in electrical competency related to solar	Start date	RM5 billion
		2022	
		End date	
		2025	
Project Owner	Implementing Agency	Other Stakeholders	
MOU	CENTEX, Pusat Giatmara, IKM, ILP, CIDB, SEB Training Center, private institution, Yayasan Sarawak, UNIMAS, PLP, CENTEX	Industry player, all ministries and government agencies, utility provider, local communities, private companies, local YB's offices	

## AIP Level 1 - Poverty alleviation

<b>Sector</b>		: Poverty alleviation	
<b>Strategy</b>		: Creating Job and Business Opportunities in All Economic Sectors to Increase Household Income	
<b>Initiative</b>		: 11.7 Job opportunities through the Gas Supply Network Project	
Initiatives		Desired Outcome(s)	
11.7 Job opportunities through the Gas Supply Network Project		<b>Social Inclusivity:</b> 1. 7,000 poor households employed in the Gas Supply Network Project will earn monthly income above PLI.	
Timeline		Resources Required	
Start Date	End Date		
2021	2025	-	
Project Owner	Implementing Agency	Other Stakeholders	
Ministry of Utilities	Petroleum Sarawak Berhad (PETROS)	Industry Players	

## AIP Level 2 - Poverty alleviation

<b>Sector</b> : Poverty alleviation			
<b>Initiative</b> : 11.7 Job opportunities through the Gas Supply Network Project			
<b>Action step</b> : 11.7.1 - 11.7.3			
Action step (s)	Output (s)	Timeline	Resources required
<b>11.7.1 To seek funding/investment amounting RM1.6 billion</b>	a) Approval of the required fund	Start date	RM1.6 billion
		2021	
		End date	
		2022	
<b>11.7.2 To implement the development of Gas Supply Network Project across Sarawak which create approximately 2,000 low skilled and 7,000 semi-skilled and high skilled workers from poor household</b>	a) Completion of gas supply network project	Start date	-
		2021	
		End date	
		2025	
<b>11.7.3 To introduce policy for the PETROS, consultant and contractor to hire locals by incorporating requirement in the contract</b>	a) 20% of the workers for each contract must be employed from the poor households. b) Out of this 20%, 1/3 is from low skill and 2/3 is for semi skilled and high skilled.	Start date	-
		2021	
		End date	
		2025	
Project Owner	Implementing Agency	Other Stakeholders	
MOU	PETROS	Industry player	

## AIP Level 1 - Poverty alleviation

<b>Sector</b>		: Poverty alleviation	
<b>Strategy</b>		: Creating Job and Business Opportunities in All Economic Sectors to Increase Household Income	
<b>Initiative</b>		: 11.8 Gas competency training programmes	
<b>Initiatives</b>		<b>Desired Outcome(s)</b>	
11.8 Gas competency training programmes		<b>Social Inclusivity:</b> <ol style="list-style-type: none"> <li>500 poor households trained to be gas competent person and will be able to be employed in this sector with monthly income above PLI.</li> </ol>	
<b>Timeline</b>		<b>Resources Required</b>	
<b>Start Date</b>	<b>End Date</b>		
2021	2025	<ul style="list-style-type: none"> <li>RM1.75 mil</li> </ul>	
<b>Project Owner</b>	<b>Implementing Agency</b>	<b>Other Stakeholders</b>	
Ministry of Utilities	Ministry of Utilities	UNIMAS, Other training centres, Institution of Higher Learning	

## AIP Level 2 - Poverty alleviation

<b>Sector</b> :		Poverty alleviation	
<b>Initiative</b> :		11.8 Gas competency training programmes	
<b>Action step</b> :		11.8	
Action step (s)	Output (s)	Timeline	Resources required
<b>11.8 Gas competency training programmes</b>  (i) Increase the number of local institution to provide gas competency training program to train about 500 people from poor households (ii) Provide training fees worth RM1.75mil to 500 people for poor households	a) 500 people from poor households equipped with the right knowledge and skill in gas industry b) 500 people from the poor household income group will be given training fees from the Government	Start date	RM1.75 million
		2022	
		End date	
		2025	
Project Owner	Implementing Agency	Other Stakeholders	
MOU	MOU	UNIMAS, other training centres, Institution of Higher Learning	

## AIP Level 1 - Poverty alleviation

<b>Sector</b> :		Poverty alleviation	
<b>Strategy</b> :		Creating Job and Business Opportunities in All Economic Sectors to Increase Household Income	
<b>Initiative</b> :		11.9 Upgrade digital infrastructure in key economic centres & research centres	
Initiatives		Desired Outcome(s)	
11.9 Upgrade digital infrastructure in key economic centres & research centres.		<b>Social Inclusivity:</b> <ol style="list-style-type: none"> <li>95,000 poor households will have access to fixed telecommunication infrastructure services and access to 100Mbps internet speed.</li> </ol>	
Timeline		Resources Required	
Start Date	End Date		
2019	2030	<ul style="list-style-type: none"> <li>RM2.5 billion</li> <li>Commercial 4G/5G Structure</li> <li>Policy on telecommunication</li> </ul>	
Project Owner	Implementing Agency	Other Stakeholders	
SMA, SSMU, SDEC	SDEC, SAINS	EPU, SSMU, MCMC, L&S, MRPE	

## AIP Level 2 - Poverty alleviation

<b>Sector</b> :		Poverty alleviation		
<b>Initiative</b> :		11.9 Upgrade digital infrastructure in key economic centres & research centres		
<b>Action step</b> :		11.9.1 - 11.9.5		
Action step (s)	Output (s)	Timeline	Resources required	
<b>11.9.1 Identify the needs of digital infrastructure for the 5 key economic sectors for poor households</b>	a) Explore the directions and strategies for the 5 key economic sectors under SEAC for poor households	Start date	RM2.5 billion, commercial 4G/5G structure, policy on Sarawak telecommunications spectrum implementation	
		2021		
		End date		
		2023		
<b>11.9.2 Engagement &amp; coordination with relevant stakeholders &amp; industry players</b>	a) Engagement with the relevant industry players to determine their requirements	Start date	-	
		2021		
		End date		
		2023		
<b>11.9.3 Project planning &amp; prioritise the initiatives</b>	a) Engagement and desktop planning with relevant stakeholders for the required telecommunication coverage and services	Start date	-	
		2021		
		End date		
		2023		
<b>11.9.4 Digital infrastructure project execution, coordination and monitoring on the approved projects</b>	a) Project milestones and deliverables monitoring for the telecommunication services for the 5 economic sectors	Start date	-	
		2022		
		End date		
		2030		
<b>11.9.5 Impact study and KPIs reporting for each 5 key economic sectors</b>	a) Assessment in each economy sectors and identify Opportunity for Improvement (OFI)	Start date	-	
		2024		
		End date		
		2025		
<b>Project Owner</b>	<b>Implementing Agency</b>	<b>Other Stakeholders</b>		
SMA, SSMU, SDEC	SDEC, SAINS	EPU Sarawak, SSMU, MCMC, L&S, MRPE		

## AIP Level 2 - Poverty alleviation

<b>Sector</b>	: Poverty alleviation		
<b>Initiative</b>	: 11.9 Upgrade digital infrastructure in key economic centres & research centres		
<b>Action step</b>	: 11.9.6 - 11.9.7		
Action step (s)	Output (s)	Timeline	Resources required
<b>11.9.6 Digital infrastructure project execution, coordination and monitoring on the approved projects</b>	a) Project milestones and deliverables monitoring for the telecommunication services for the 5 economic sectors	Start date	RM2.5 billion, commercial 4G/5G structure, policy on Sarawak telecommunications spectrum implementation
		2024	
		End date	
		2026	
<b>11.9.7 Impact study and KPIs reporting for each 5 key economic sectors</b>	a) Assessment in each economy sectors and identify Opportunity for Improvement (OFI)	Start date	-
		2024	
		End date	
		2026	
Project Owner	Implementing Agency	Other Stakeholders	
SMA, SSMU, SDEC	SDEC, SAINS	EPU Sarawak, SSMU, MCMC, L&S, MRPE	

## AIP Level 1 - Poverty alleviation

<b>Sector</b>		: Poverty alleviation	
<b>Strategy</b>		: Creating Job and Business Opportunities in All Economic Sectors to Increase Household Income	
<b>Initiative</b>		: 11.10 Pilot – Batang Ai Floating Solar project	
Initiatives		Desired Outcome(s)	
<b>11.10 Pilot – Batang Ai Floating Solar project</b>  <b>Establish Large Scale Solar (LSS) IPPs</b>		<b>Social Inclusivity:</b> <ol style="list-style-type: none"> <li>3,000 poor households employed in this project will earn monthly income above PLI.</li> </ol>	
Timeline		Resources Required	
Start Date	End Date	<ul style="list-style-type: none"> <li>Private (Local/Foreign) Investment from established Solar Developers</li> </ul>	
2021	2030		
Project Owner	Implementing Agency	Other Stakeholders	
Sarawak Energy, Independent Power Producer (IPP), Ministry of Utilities (MOU)	Sarawak Energy, Independent Power Producer (IPP), Ministry of Utilities (MOU)	Electrical Inspectorate Unit (EIU), Natural Resources and Environment Board (NREB), Economic Planning Unit (EPU), Land and Survey (L&S)	

## AIP Level 2 - Poverty alleviation

<b>Sector</b> :		Poverty alleviation	
<b>Initiative</b> :		11.10 Pilot – Batang Ai Floating Solar project Establish Large Scale Solar (LSS) IPPs	
<b>Action step</b> :		11.10	
Action step (s)	Output (s)	Timeline	Resources required
<b>11.10 Public-Private Partnership for development of Floating Solar Projects</b>  (i) Develop local capability & capacity building through knowledge transfer in areas of management and technology, etc. (ii) Identify and maximise local content and participation in high value works (iii) Identify and collaborate with industries and local communities for job placement with focus on assisting poor households	a) For every MW installed, 10 jobs are created – 5 for upstream (manufacturing, assembly) and 5 for downstream (system installation, construction) totalling 3,000 jobs b) 40% highly-skilled workforce and 60% low-skilled workforce.  No. of Workers & Mean Salary: (i) ~1,200 Skilled Workers: ~RM4,600/month (ii) 1,800 Low Skilled Workers: ~RM1,700/month	Start date	Private (local/foreign) investment from established solar developers
		2022	
		End date	
		2030	
Project Owner	Implementing Agency	Other Stakeholders	
Sarawak Energy, Independent Power Producer (IPP), Ministry of Utilities (MOU)	Sarawak Energy, Independent Power Producer (IPP), Ministry of Utilities (MOU)	Electrical Inspectorate Unit (EIU), Natural Resources and Environment Board (NREB), Economic Planning Unit (EPU), Land and Survey (L&S)	

## AIP Level 1 - Poverty alleviation

<b>Sector</b>		: Poverty alleviation	
<b>Strategy</b>		: Creating Job and Business Opportunities in All Economic Sectors to Increase Household Income	
<b>Initiative</b>		: 11.11 Attract investments for large scale hydrogen production to meet regional green hydrogen	
Initiatives		Desired Outcome(s)	
11.11 Attract investments for large scale hydrogen production to meet regional green hydrogen.		<b>Social Inclusivity:</b> <ol style="list-style-type: none"> <li>1,000 poor households employed in this project will earn monthly income above PLI.</li> </ol>	
Timeline		Resources Required	
Start Date	End Date		
2021	2030	<ul style="list-style-type: none"> <li>Private Funding</li> <li>Hydrogen Value Chain Technology Market</li> </ul>	
Project Owner	Implementing Agency	Other Stakeholders	
Sarawak Energy, SEDC, Sarawak Metro, PETROS, Hydrogen Value Chain Technology Providers and Foreign H2 Market Offtaker	Sarawak Energy, SEDC, Sarawak Metro, PETROS, Hydrogen Value Chain Technology Providers and Foreign H2 Market Offtaker	MUDeNR, MINTRED, EPU, MOU, MOTS, Relevant Government Agencies	

## AIP Level 2 - Poverty alleviation

<b>Sector</b> :		Poverty alleviation	
<b>Initiative</b> :		11.11 Attract investments for large scale hydrogen production to meet regional green hydrogen	
<b>Action step</b> :		11.11	
Action step (s)	Output (s)	Timeline	Resources required
<b>11.11 Establish Hydrogen Economy in Sarawak through:</b>  <b>(i) Large scale Hydrogen production</b> <b>(ii) Private sector participation in Hydrogen value chain</b> <b>(iii) Hydrogen in Mobility</b>  (i) Develop local capability & capacity building through knowledge transfer in areas of management and technology, etc. (ii) Identify and maximise local content and participation in high value works (iii) Identify and collaborate with industries and local communities for job placement with focus on assisting poor households	a) Increasing job employment by 1,000 (Direct & Indirect). Creating 3 job employment opportunities per MW. 60% highly-skilled workforce and 40% low-skilled workforce  No. of Workers & Mean Salary: (i) ~540 Skilled Workers: ~RM4,600/month (ii) 1,260 Low Skilled Workers: ~RM1,700/month	Start date	Private funding, Hydrogen Value Chain Technology Market
		2023	
		End date	
		2030	
Project Owner	Implementing Agency	Other Stakeholders	
Sarawak Energy, SEDC, Sarawak Metro, PETROS, Hydrogen Value Chain Technology provide and Foreign H2 Market offtake	Sarawak Energy, SEDC, Sarawak Metro, PETROS, Hydrogen Value Chain Technology provide and Foreign H2 Market offtake	MUDeNR, MINTRED, EPU Sarawak, MOU, MOTS, relevant Government authorities	

## AIP Level 1 - Poverty alleviation

<b>Sector</b>		: Poverty alleviation	
<b>Strategy</b>		: Creating Job and Business Opportunities in All Economic Sectors to Increase Household Income	
<b>Initiative</b>		: 11.12 Provide transparent framework to further promote NEM Uptake in Sarawak	
Initiatives		Desired Outcome(s)	
11.12 Provide transparent framework to further promote NEM Uptake in Sarawak		<b>Social Inclusivity:</b> <ol style="list-style-type: none"> <li>2,000 poor households employed in this project will earn monthly income above PLI.</li> </ol>	
Timeline		Resources Required	
Start Date	End Date	<ul style="list-style-type: none"> <li>Expertise</li> <li>Manpower</li> <li>Funding</li> <li>Private Investment</li> </ul>	
2021	2030		
Project Owner	Implementing Agency	Other Stakeholders	
Electrical Inspections Unit, Building Owner	Electrical Inspections Unit, Building Owner	SEB, MOU, Local Councils, Government agencies	

## AIP Level 2 - Poverty alleviation

<b>Sector</b> :		Poverty alleviation	
<b>Initiative</b> :		11.12 Provide transparent framework to further promote NEM Uptake in Sarawak	
<b>Action step</b> :		11.12	
Action step (s)	Output (s)	Timeline	Resources required
<b>11.12 Increase NEM uptake and business model in Sarawak</b>  (i) Develop local capability & capacity building through knowledge transfer in areas of management and technology, etc. (ii) Identify and maximise local content and participation in high value works	a) For every MW installed, 12 jobs are created - 6 for upstream (manufacturing, assembly) and 6 for downstream (system installation, construction) totalling 1,800 jobs. 30% highly-skilled workforce and 70% low-skilled workforce  No. of Workers & Mean Salary: (i) ~540 Skilled Workers: ~RM4,600/month (ii) 1,260 Low Skilled Workers: ~RM1,700/month	Start date	Expertise, manpower, funding, private investment
		2022	
		End date	
		2030	
Project Owner	Implementing Agency	Other Stakeholders	
Electrical inspectorate unit, building owner	Electrical inspectorate unit, building owner	SEB, MOU, local councils, Government agencies	

## AIP Level 1 - Poverty alleviation

<b>Sector</b> :		Poverty alleviation	
<b>Strategy</b> :		Creating Job and Business Opportunities in All Economic Sectors to Increase Household Income	
<b>Initiative</b> :		11.13 Introduce Electric Vehicles (EV) for high utilisation fleet and Incentives for purchase of EV	
Initiatives		Desired Outcome(s)	
11.13 Introduce Electric Vehicles (EV) for high utilisation fleet and Incentives for purchase of EV		<b>Social Inclusivity:</b> <ol style="list-style-type: none"> <li>5,000 poor households employed in this project will earn monthly income above PLI.</li> </ol>	
Timeline		Resources Required	
Start Date	End Date	<ul style="list-style-type: none"> <li>Foreign Direct Investment from established EV value chain players</li> </ul>	
2021	2030		
Project Owner	Implementing Agency	Other Stakeholders	
Sarawak Energy, Sarawak Metro, SEDC, PETROS, EV Fuel cell and battery manufacturers	Sarawak Energy, Sarawak Metro, SEDC, PETROS, EV Fuel cell and battery manufacturers	MUDeNR, MINTRED, EPU, MOTS, MOU, Sarawak Energy, Local councils	

## AIP Level 2 - Poverty alleviation

<b>Sector</b>	: Poverty alleviation		
<b>Initiative</b>	: 11.13 Introduce Electric Vehicles (EV) for high utilisation fleet and Incentives for purchase of EV		
<b>Action step</b>	: 11.13		
Action step (s)	Output (s)	Timeline	Resources required
<b>11.13 Establish EV Value Chain in Sarawak</b>  (i) Develop local capability & capacity building through knowledge transfer in areas of management and technology, etc. (ii) Identify and maximise local content and participation in high value works	a) Increasing job employment by 5,000 (Direct & Indirect). Creating 100 job employment opportunities per 1k EV sold annually. 50% highly-skilled workforce and 50% low-skilled workforce. No. of Workers & Mean Salary: (i) ~2,500 Skilled Workers: ~RM4,600/month (ii) ~2,500 Low Skilled Workers: ~RM1,700/month	Start date	Foreign Direct Investment from established EV value chain players
		2022	
		End date	
		2030	
Project Owner	Implementing Agency	Other Stakeholders	
Sarawak Energy, Sarawak Metro, SEDC, PETROS, EV, fuel cell and battery manufacturers	Sarawak Energy, Sarawak Metro, SEDC, PETROS, EV, fuel cell and battery manufacturers	MUDeNR, MINTRED, EPU Sarawak, MOTS, MOU, Sarawak Energy	

## AIP Level 1 - Poverty alleviation

<b>Sector</b> :		Poverty alleviation
<b>Strategy</b> :		Creating Job and Business Opportunities in All Economic Sectors to Increase Household Income
<b>Initiative</b> :		11.14a Develop Digital Talent
Initiatives		Desired Outcome(s)
<p><b>11.14 Develop Digital Talent</b></p> <p><b>a. Large scale upskilling via Digital Academy</b></p> <p>(Establishment of industry standard training labs/centres at Centexs Digital Academy in partnership with industry. The industry training centres includes:-</p> <ul style="list-style-type: none"> <li>- Industry 4.0 training Centre (Bosch &amp; GE)</li> <li>- IBM training Centre for Big Data, Data Analytics and Blockchain Training</li> <li>- Microsoft Cloud &amp; Software Centre</li> <li>- EOn Reality AR/VR training Centre</li> <li>- Huawei Telecommunication Centre</li> <li>- Cybersecurity training Centre, etc.)</li> </ul>		<p><b>Social Inclusivity:</b></p> <ol style="list-style-type: none"> <li>1. 50% job readiness required by Industry by 2025</li> <li>2. 50% Workforce equipped with specific skills that allows them to grow in tandem with Sarawak's digital economy.</li> <li>3. 100% Industry Certified Training centre and Microcredentials Certifications</li> </ol>
Timeline		Resources Required
Start Date	End Date	
2022	2023	<ul style="list-style-type: none"> <li>• RM60 mil</li> </ul>
Project Owner	Implementing Agency	Other Stakeholders
CENTEXS	CENTEXS	SMA, MESTR, IHLs, SHRU, SCOPE, LI

## AIP Level 2 - Poverty alleviation

<b>Sector</b>	: Poverty alleviation		
<b>Initiative</b>	: 11.14a Develop Digital Talent - Large scale upskilling via Digital Academy		
<b>Action step</b>	: 11.14a.1 - 11.14a.3		
Action step (s)	Output (s)	Timeline	Resources required
<b>11.14a.1 Physical infrastructure &amp; renovation: Project planning &amp; prioritise the initiatives</b>  - Seeking procurement approval from the Board and relevant State authorities	a) Engagement and desktop planning with relevant stakeholders for the needs of Digital Academy	Start date	RM60 million
		2022	
		End date	
		2022	
<b>11.14a.2 Identify poor households to be involved in the Digital Talent Programme</b>	a) List of poor households to be involved in the Digital Talent Programme by Divisions	Start date	-
		2022	
		End date	
		2022	
<b>11.14a.3 Digital infrastructure project execution:</b>  - Engaging consultants and project managers - Develop the infrastructure design - Seeking design plan approval - Construction & Renovation starts - Coordination and monitoring on the approved projects	a) Project milestones and deliverables monitoring for the digital academy services and program within the 6 academy labs/centres. - Physical construction and renovation - Supply, install, testing & commissioning of the training equipment, tools, software licensing	Start date	-
		2022	
		End date	
		2023	
Project Owner	Implementing Agency	Other Stakeholders	
CENTEXS	CENTEXS	SMA, MESTR, IHLs, SHRU, SCOPE, LI	

## AIP Level 2 - Poverty alleviation

<b>Sector</b>	: Poverty alleviation		
<b>Initiative</b>	: 11.14a Develop Digital Talent - Large scale upskilling via Digital Academy		
<b>Action step</b>	: 11.14a.1 - 11.14a.3		
Action step (s)	Output (s)	Timeline	Resources required
<b>11.14a.1 Physical infrastructure &amp; renovation: Project planning &amp; prioritise the initiatives</b>  - Seeking procurement approval from the Board and relevant State authorities	a) Engagement and desktop planning with relevant stakeholders for the needs of Digital Academy	Start date	RM60 million
		2022	
		End date	
		2022	
<b>11.14a.2 Identify poor households to be involved in the Digital Talent Programme</b>	a) List of poor households to be involved in the Digital Talent Programme by Divisions	Start date	-
		2022	
		End date	
		2022	
<b>11.14a.3 Digital infrastructure project execution:</b>  - Engaging consultants and project managers - Develop the infrastructure design - Seeking design plan approval - Construction & Renovation starts - Coordination and monitoring on the approved projects	a) Project milestones and deliverables monitoring for the digital academy services and program within the 6 academy labs/centres. - Physical construction and renovation - Supply, install, testing & commissioning of the training equipment, tools, software licensing	Start date	-
		2022	
		End date	
		2023	
Project Owner	Implementing Agency	Other Stakeholders	
CENTEXS	CENTEXS	SMA, MESTR, IHLs, SHRU, SCOPE, LI	

## AIP Level 1 - Poverty alleviation

<b>Sector</b> :		Poverty alleviation
<b>Strategy</b> :		Creating Job and Business Opportunities in All Economic Sectors to Increase Household Income
<b>Initiative</b> :		11.14b Develop Digital Talent
Initiatives		Desired Outcome(s)
<b>11.14 Develop Digital Talent</b> <b>b. Digital ICT Centers = Digital Community Centre (DCC)</b>  (to leverage the existing local libraries to provide digital training programmes for the local community in order to help generate new skills needed for education & employment)		<b>Social Inclusivity:</b> 1. Each DCC to train 100 households every year on capacity building for education and employment opportunities
Timeline		Resources Required
Start Date	End Date	
2021	2025	<ul style="list-style-type: none"> <li>RM67 mil</li> </ul>
Project Owner	Implementing Agency	Other Stakeholders
SMA	PUSTAKA	MLGH

## AIP Level 2 - Poverty alleviation

<b>Sector</b> :		Poverty alleviation	
<b>Initiative</b> :		11.14b Develop Digital Talent - Digital ICT Centers = Digital Community Centre (DCC)	
<b>Action step</b> :		11.14b.1 - 11.14b.3	
Action step (s)	Output (s)	Timeline	Resources required
<b>11.14b.1 Engagement and consultation with both the leaders and members of the community</b>  - Engaging communities to identify the poor household that requires skills and job placement - Identify the potential sites that can be transformed into DCC	a) Hold dialogue sessions on the role(s) of lead & supporting agency in this project. Identify objectives and targets, and assign roles and responsibilities - Identify poor household list provided by the communities	Start date	RM67 million
		2021	
		End date	
		2021	
<b>11.14b.2 Engage with stakeholders on the DCC locality and the needs of infrastructure refurbishment and program design</b>	a) Identifying and confirmation of physical infrastructure, facilities at site and program design needs	Start date	-
		2022	
		End date	
		2022	
<b>11.14b.3 Digital infrastructure project execution, coordination and monitoring on the approved projects</b>	a) Project milestones and deliverables monitoring for the DCC development	Start date	-
		2022	
		End date	
		2023	
Project Owner	Implementing Agency	Other Stakeholders	
SMA	PUSTAKA	MLGH	

## AIP Level 2 - Poverty alleviation

<b>Sector</b>	: Poverty alleviation		
<b>Initiative</b>	: 11.14b Develop Digital Talent - Digital ICT Centers = Digital Community Centre (DCC)		
<b>Action step</b>	: 11.14b.4 - 11.14b.5		
Action step (s)	Output (s)	Timeline	Resources required
<b>11.14b.4 Programme design development and conduct training based on the needs of the poor household community at sites</b>	a) DCC program development based on the need of community. These program to span across the community over 12Mp & 13MP based on the needs of the communities	Start date	-
		2022	
		End date	
		2030	
<b>11.14b.5 Impact study based on KPIs and reporting for each DCC established in the communities</b>  - Assess the impact to the poor households - Determine the success of the programmes that designed for the poor household in terms of skills developed and job placement	a) Performance assessment at each DCC and identify Opportunity for Improvement (OFI).	Start date	-
		2023	
		End date	
		2030	
Project Owner	Implementing Agency	Other Stakeholders	
SMA	PUSTAKA	MLGH	

## AIP Level 1 - Poverty alleviation

<b>Sector</b> :		Poverty alleviation
<b>Strategy</b> :		Creating Job and Business Opportunities in All Economic Sectors to Increase Household Income
<b>Initiative</b> :		11.14c Develop Digital Talent
Initiatives		Desired Outcome(s)
<b>11.14 Develop Digital Talent</b> <b>c. Establish a talent repository database to match talent supply to industry demand</b>		<b>Social Inclusivity:</b> 1. Enabler to manage the State talent management in the job markets. This helps to manage the disparity of the job employment in the State.
Timeline		Resources Required
Start Date	End Date	
2022	2030	<ul style="list-style-type: none"> <li>• RM474,860,000.00</li> <li>• Note: This project ceiling is submitted under 12MP for initiative "Develop Digital Talent". Talent repository database is one of the initiatives.</li> </ul>
Project Owner	Implementing Agency	Other Stakeholders
CENTEXS	CENTEXS	SMA, MESTR, IHLs, SHRU,SCOPE, LI

## AIP Level 2 - Poverty alleviation

<b>Sector</b> :		Poverty alleviation	
<b>Initiative</b> :		11.14c Develop Digital Talent - Establish a talent repository database to match talent supply to industry demand	
<b>Action step</b> :		11.14c.1 - 11.14c.2	
Action step (s)	Output (s)	Timeline	Resources required
<b>11.14c.1 Formalised Sarawak talent management database framework exercise that to assist the State agencies on talent needs and analysis. This includes the mapping the poor household skills for the job placement needs</b>  <ul style="list-style-type: none"> <li>- Engage the relevant stakeholders</li> <li>- Engage the consultants that able to deliver the database schematic and process flows</li> </ul>	a) Engage & coordinate relevant stakeholders to develop the needs, requirement and strategies that can be aligned within Sarawak talent management and poverty alleviation framework	Start date	RM474.86 million  Note: This project ceiling is submitted under 12MP for initiative "Develop Digital Talent" Talent repository database is one of the initiatives
		2022	
		End date	
		2023	
<b>11.14c.2 Identify, mapping and planning for the talent supply in the public sectors, industry and private sectors, educational sectors, and community in Sarawak</b>  <ul style="list-style-type: none"> <li>- Shortlisting the poor household from the communities that requires the skills set for job market</li> </ul>	a) Undertaken data collection, data cleaning, analysis & propose resolutions for leadership and skills training needs. Perform data analytic on the collected talent data  b) Develop Sarawak talent management database framework integrated with components that relevant to skills & semi-skills, competency, professional & succession planning.  c) This will enable the job matching of skills requirement, planning for the poor household and forecasting	Start date	-
		2023	
		End date	
		2023	
Project Owner	Implementing Agency	Other Stakeholders	
CENTEXS	CENTEXS	SMA, MESTR, IHLs, SHRU, SCOPE, LI	

## AIP Level 2 - Poverty alleviation

<b>Sector</b> :		Poverty alleviation	
<b>Initiative</b> :		11.14c Develop Digital Talent - Establish a talent repository database to match talent supply to industry demand	
<b>Action step</b> :		11.14c.3 - 11.14c.4	
Action step (s)	Output (s)	Timeline	Resources required
<b>11.14c.3 Establish systematic &amp; structured poor household database and talent development database to cater for all clusters</b>  - Database development	a) Development and consolidate expert database with integrated skills requirement & training modules to facilitate the establishment of the talent repository, and the opportunity of the job placement for the poor household	Start date	-
		2023	
		End date	
		2024	
<b>11.14c.4 Conduct impact study on the reliability of the database system</b>  - Impact study report	a) Perform analysis study and efficiency of database system of the talent repository and provide Opportunity for Improvement (OFI)	Start date	-
		2024	
		End date	
		2025	
Project Owner	Implementing Agency	Other Stakeholders	
CENTEXS	CENTEXS	SMA, MESTR, IHLs, SHRU, SCOPE, LI	

## AIP Level 1 - Poverty alleviation

<b>Sector</b>		: Poverty alleviation	
<b>Strategy</b>		: Providing the Right Ecosystem to Support Involvement of Households in Productive Activities	
<b>Initiative</b>		: 12.1 Housing Scheme Through Urban Renewal, Kampung Extension and Social Housing	
Initiatives		Desired Outcome(s)	
<b>12.0 Systematic Housing</b>  <b>12.1 Housing Scheme Through Urban Renewal, Kampung Extension and Social Housing</b>		Social Inclusivity 1. 30,000 poor households have access to systematic housing. 2. 4,000 poor households have access to vacant lot for housing.	
Timeline		Resources Required	
Start Date	End Date	<ul style="list-style-type: none"> <li>• RM6 bil</li> <li>• Manpower</li> <li>• Policy</li> </ul>	
2022	2030		
Project Owner	Implementing Agency	Other Stakeholders	
MUDeNR	MUDeNR, L&S, LCDA, HDC	Local Authorities, Local Communities, MLGH, Health Department, SSD, DID, JKR, KWKPK	

## AIP Level 2 - Poverty alleviation

<b>Sector</b> :		Poverty alleviation	
<b>Initiative</b> :		12.1 Housing Scheme Through Urban Renewal, Kampung Extension and Social Housing	
<b>Action step</b> :		12.1.1 - 12.1.5	
Action step (s)	Output (s)	Timeline	Resources required
<b>12.1.1 Appointment of consultant to prepare EIA, SIA, and census for urban renewal and housing.</b>	a) Approved EIA and SIA report	Start date	RM20 million
		2022	
		End date	
2030			
<b>12.1.2 Masterplan preparation.</b>	a) SPA approval for building and engineering design, siting and layout plan	Start date	RM20 million
		-	
		End date	
-			
<b>12.1.3 Community engagement</b>	a) Community consent	Start date	RM5 million
		-	
		End date	
-			
<b>12.1.4 Land acquisition</b>	a) Land for development	Start date	RM5 million
		-	
		End date	
-			
<b>12.1.5 Procurement</b>	a) Appointment of contractors	Start date	RM5 million
		-	
		End date	
-			
Project Owner	Implementing Agency	Other Stakeholders	
MUDeNR, MLGH	MUDeNR, L&S, LCDA, HDC	Local authorities, local communities, MLGH, Health Department, SSD, DID, JKR, KWPKPK	

## AIP Level 2 - Poverty alleviation

<b>Sector</b>	: Poverty alleviation		
<b>Initiative</b>	: 12.1 Housing Scheme Through Urban Renewal, Kampung Extension and Social Housing		
<b>Action step</b>	: 12.1.6 - 12.1.8		
Action step (s)	Output (s)	Timeline	Resources required
<b>12.1.6 Project implementation, coordination and monitoring</b>	a) Progress report	Start date	-
		-	
		End date	
<b>12.1.7 Project completion and allotment</b>	a) Handing over of property	Start date	-
		-	
		End date	
<b>12.1.8 Formulating financing facilities for poor households</b>	a) Financing facilities for poor households	Start date	-
		-	
		End date	
<b>Project Owner</b>	<b>Implementing Agency</b>	<b>Other Stakeholders</b>	
MUDeNR, MLGH	MUDeNR, L&S, LCDA, HDC	Local authorities, local communities, MLGH, Health Department, SSD, DID, JKR, KWPKP	

## AIP Level 1 - Poverty alleviation

<b>Sector</b>		: Poverty alleviation	
<b>Strategy</b>		: Providing the Right Ecosystem to Support Involvement of Households in Productive Activities	
<b>Initiative</b>		: 12.2 Sarawak Rental Assistance Scheme (SRAS)	
Initiatives		Desired Outcome(s)	
12.2 Sarawak Rental Assistance Scheme (SRAS)		<b>Social Inclusivity:</b> 1. 20,000 poor households will have additional RM200 per month of disposable income for 3 years from this scheme.	
Timeline		Resources Required	
Start Date	End Date	<ul style="list-style-type: none"> <li>RM144 million</li> </ul>	
2021	2030		
Project Owner	Implementing Agency	Other Stakeholders	
MLGH	HDC	EPU Sarawak, SFS, SAG, JKMS, RANDO, DBKU, MBKS, SMC, BDA, MCC	

## AIP Level 2 - Poverty alleviation

<b>Sector</b> :		Poverty alleviation	
<b>Initiative</b> :		12.2 Sarawak Rental Assistance Scheme (SRAS)	
<b>Action step</b> :		12.1.1 - 12.1.5	
Action step (s)	Output (s)	Timeline	Resources required
<b>12.2.1 To formulate Sarawak Rental Assistance Scheme (SRAS)'s TOR at Ministry level</b>	a) Formulation of the TOR Sarawak Rental Assistance Scheme (SRAS)	Start date	-
		2020	
		End date	
		2020	
<b>12.2.2 To formulate Guideline/SOP for SRAS implementation</b>	a) Formulation of SRAS's implementation guidelines/SOP	Start date	-
		2020	
		End date	
		2020	
<b>12.2.3 To do engagement with the stakeholders</b>	a) Engagement held through meetings, lab and workshops b) Information, variables, requirements identified for the implementation	Start date	-
		2020	
		End date	
		2020	
<b>12.2.4 To identify the implementing agency</b>	a) Implementing agency identified	Start date	-
		2020	
		End date	
		2020	
<b>12.2.5 Preparation of final SRAS guideline/SOP and obtaining YB Minister approval for implementation</b>	a) Final SRAS implementation guideline/SOP ready	Start date	-
		2020	
		End date	
		2020	
Project Owner	Implementing Agency	Other Stakeholders	
MLGH	MLGH	EPU Sarawak, SFS, SAG, UAD , JKM, JKMNS, SDO, RANDO, DBKU, MBKS, SMC, BDA, MCC	

## AIP Level 2 - Poverty alleviation

<b>Sector</b> : Poverty alleviation			
<b>Initiative</b> : 12.2 Sarawak Rental Assistance Scheme (SRAS)			
<b>Action step</b> : 12.2.6 - 12.2.10			
Action step (s)	Output (s)	Timeline	Resources required
<b>12.2.6 To establish the SRAS Selection Committee</b>	a) Committee TOR prepared and SRAS Selection Committee established	Start date	-
		2020	
		End date	
<b>12.2.7 Obtaining YB Minister for Local Government and Housing approval for implementation</b>	a) Approval from YB Minister of Local Government and Housing obtained	Start date	-
		2020	
		End date	
<b>12.2.8 To conduct Kick-off meeting for implementation</b>	a) Kick-off meeting held together with all stakeholders	Start date	-
		2020	
		End date	
<b>12.2.9 To do promotion of SRAS</b>	a) SRAS promoted through local newspapers, websites, social media, TV and radio	Start date	-
		2020	
		End date	
<b>12.2.10 To implement SRAS from 2021 until 2030 and to benefit 60,000 eligible tenants</b>	a) SRAS first implemented to 4 major cities and it is Kuching, Sibul, Bintulu and Miri. SRAS expended/implemented to other districts in Sarawak b) 20,000 of eligible tenants for the first 3 year (2021 - 2023) assisted c) 20,000 eligible tenants for second 3 years (2024 - 2026) assisted d) 20,000 eligible tenants for final 3 year (2027 - 2030) assisted	Start date	RM144 million
		2020	
		End date	
		2030	
Project Owner	Implementing Agency	Other Stakeholders	
MLGH	MLGH	EPU Sarawak, SFS, SAG, UAD , JKM, JKMNS, SDO, RANDO, DBKU, MBKS, SMC, BDA, MCC	

## AIP Level 2 - Poverty alleviation

<b>Sector</b> :		Poverty alleviation	
<b>Initiative</b> :		12.2 Sarawak Rental Assistance Scheme (SRAS)	
<b>Action step</b> :		12.2.11	
Action step (s)	Output (s)	Timeline	Resources required
<b>12.2.11 To review and intensify guideline/sop and the delivery processes of the SRAS</b>	a) Guideline/sop and delivery processes for SRAS reviewed and enhanced	Start date	-
		2021	
		End date	
		2030	
Project Owner	Implementing Agency	Other Stakeholders	
MLGH	MLGH	EPU Sarawak, SFS, SAG, UAD , JKM, JKMNS, SDO, RANDO, DBKU, MBKS, SMC, BDA, MCC	

## AIP Level 1 - Poverty alleviation

<b>Sector</b>		: Poverty alleviation	
<b>Strategy</b>		: Providing the Right Ecosystem to Support Involvement of Households in Productive Activities	
<b>Initiative</b>		: 12.3 Minor Rural Project- Project Baikpulih Rumah Rakyat Miskin Sarawak (MRP-PPRMS)	
Initiatives		Desired Outcome(s)	
12.3 Minor Rural Project- Project Baikpulih Rumah Rakyat Miskin Sarawak (MRP-PPRMS)		<b>Social Inclusivity:</b> 1. 60,000 poor households will have better standard of living through improved housing condition.	
Timeline		Resources Required	
Start Date	End Date	<ul style="list-style-type: none"> <li>RM860 mil</li> </ul>	
2021	2030		
Project Owner	Implementing Agency	Other Stakeholders	
EPU Sarawak	DUN & Parliament Service Centres	SFS Office, SIMU, UNION, R&DO, Chief Community, Headmen, COntrollers, JKKK	

## AIP Level 2 - Poverty alleviation

<b>Sector</b>	: Poverty alleviation		
<b>Initiative</b>	: 12.3 Minor Rural Project- Project Baikpulih Rumah Rakyat Miskin Sarawak (MRP-PPRMS)		
<b>Action step</b>	: 12.3.1 - 12.3.5		
Action step (s)	Output (s)	Timeline	Resources required
<b>12.3.1 To review and intensify guideline/sop and the delivery processes of the SRAS</b>	a) Guideline/sop and delivery processes for SRAS reviewed and enhanced	Start date	RM860 million
		2021	
		End date	
2030			
<b>12.3.2 EPU Sarawak to submit the bank account information to SFS Office</b>	a) MRP-PPRMS Bank Account under DUN & Parliament Service Centre	Start date	-
		2021	
		End date	
2030			
<b>12.3.3 SFS Office to disburse grant for MRP-PPRMS directly to MRP-PPRMS bank account under DUN &amp; Parliament Service Centre in two tranches yearly that is RM500,000.00 for the first tranche</b>	a) The first tranche of the grant amounting RM500,000.00 to be disbursed to MRP-PPRMS Bank Account under DUN & Parliament Service Centre	Start date	RM860 million
		2021	
		End date	
2030			
<b>12.3.4 DUN and Parliament Service Centre to implement the MRP-PPRMS projects and each project must be provided with sign board</b>	a) Repaired houses for poor households	Start date	RM860 million
		2021	
		End date	
2030			
<b>12.3.5 DUN &amp; Parliament Service Centre to provide project completion report to EPU Sarawak and SIMU</b>	a) MRP-PPRMS project completion report	Start date	-
		2021	
		End date	
2030			
Project Owner	Implementing Agency	Other Stakeholders	
EPU Sarawak	DUN & Parliament Service Centres	SFS Office, R&DO, Chief Community, headmen, contractors, JKKK, SIMU	

## AIP Level 2 - Poverty alleviation

<b>Sector</b> :		Poverty alleviation	
<b>Initiative</b> :		12.3 Minor Rural Project- Project Baikpulih Rumah Rakyat Miskin Sarawak (MRP-PPRMS)	
<b>Action step</b> :		12.3.6 - 12.3.10	
Action step (s)	Output (s)	Timeline	Resources required
<b>12.3.6 The second tranche of RM500,000.00 will be disbursed subject to the completion of MRP-PPRMS projects approved under the first tranche and endorsed by MRP-PPRMS Allocation Disbursement Committee</b>	a) The second tranche of the grant amounting RM500,000.00 to be disbursed to MRP-PPRMS Bank Account under DUN & Parliament Service Centre	Start date	RM860 million
		2021	
		End date	
		2030	
<b>12.3.7 DUN and Parliament Service Centre to implement the MRP-PPRMS projects and each project must be provided with MRP-PPRMS sign board</b>	a) Repaired houses for poor households	Start date	RM860 million
		2021	
		End date	
		2030	
<b>12.3.8 DUN &amp; Parliament Service Centre to provide project completion report to EPU Sarawak and SIMU</b>	a) MRP-PPRMS project completion report	Start date	-
		2021	
		End date	
		2030	
<b>12.3.9 SIMU to monitor the implementation of MRP-PPRMS projects</b>	a) Monitoring report for MRP-PPRMS project	Start date	-
		2021	
		End date	
		2030	
<b>12.3.10 District Office to lead inspection by Independent Checking Team, if needed</b>	a) Independent Checking report for MRP-PPRMS project	Start date	-
		2021	
		End date	
		2030	
Project Owner	Implementing Agency	Other Stakeholders	
EPU Sarawak	DUN & Parliament Service Centres	SFS Office, SIMU, Union, R&DO, Chief community, headmen, contractors, JKKK, EPU Sarawak	

## AIP Level 2 - Poverty alleviation

<b>Sector</b>	: Poverty alleviation		
<b>Initiative</b>	: 12.3 Minor Rural Project- Project Baikpulih Rumah Rakyat Miskin Sarawak (MRP-PPRMS)		
<b>Action step</b>	: 12.3.11		
Action step (s)	Output (s)	Timeline	Resources required
<b>12.3.11 SIMU to lead random inspection by Audit Team, if needed i.e. based on public complaint and report received by Independent Checking Team</b>	a) Audit report for MRP-PPRMS project	Start date	
		2021	
		End date	
		2030	
Project Owner	Implementing Agency	Other Stakeholders	
EPU Sarawak	DUN & Parliament Service Centres	SIMU, EPU Sarawak, UNION, SFS Office, internal audit unit, MACC, National Audit Department Malaysia	

## AIP Level 1 - Poverty alleviation

<b>Sector</b>		: Poverty alleviation	
<b>Strategy</b>		: Providing the Right Ecosystem to Support Involvement of Households in Productive Activities	
<b>Initiative</b>		: 13. Affordable and convenient public transport	
<b>Initiatives</b>		<b>Desired Outcome(s)</b>	
<b>13. Affordable and convenient public transport: RM1.00 Flat Rate Bus Fare Subsidy Programme (Greater Kuching, Kabong, Mukah, Tatau, etc.</b>		<b>Social Inclusivity:</b> 1. 11,000 poor households have access to RM1.00 bus services to improve mobility.	
<b>Timeline</b>		<b>Resources Required</b>	
<b>Start Date</b>	<b>End Date</b>		
2022	2024	<ul style="list-style-type: none"> <li>• RM10 mil</li> </ul>	
<b>Project Owner</b>	<b>Implementing Agency</b>	<b>Other Stakeholders</b>	
MOTS	MOTS	Bus companies, industry players	

## AIP Level 2 - Poverty alleviation

<b>Sector</b>	: Poverty alleviation		
<b>Initiative</b>	: 13. Affordable and convenient public transport – RM1.00 Flat Rate Bus Fare Subsidy Programme (Greater Kuching, Kabong, Mukah, Tatau, etc.)		
<b>Action step</b>	: 13.1 - 13.5		
Action step (s)	Output (s)	Timeline	Resources required
<b>13.1 Identify bus operator in major towns registered with and licensed by CVLB</b>	a) List of bus operators, assets and approved routes	Start date	RM15 million per year
		2021	
		End date	
		2025	
<b>13.2 Invite bus operators to participate in the programme</b>	a) List of interested bus operators	Start date	-
		2021	
		End date	
		2025	
<b>13.3 Acceptance by bus operators and offer by the State</b>	a) Memorandum of Agreement between bus operators and State	Start date	-
		2021	
		End date	
		2025	
<b>13.4 Bus service operation and monthly reporting by the bus operators</b>	a) Report on RM1 bus service operation	Start date	-
		2021	
		End date	
		2030	
<b>13.5 Verification and payment</b>	a) Payment to bus operators	Start date	-
		2021	
		End date	
		2030	
Project Owner	Implementing Agency	Other Stakeholders	
EPU Sarawak	Bank Negara Malaysia, commercial banks, Development Financial Bank	Bank customers	

## AIP Level 1 - Poverty alleviation

<b>Sector</b>		: Poverty alleviation	
<b>Strategy</b>		: Providing the Right Ecosystem to Support Involvement of Households in Productive Activities	
<b>Initiative</b>		: 14.1 Rural road connectivity	
Initiatives		Desired Outcome(s)	
<b>14.0 Reliable infra &amp; utilities</b>  <b>14.1 Rural road connectivity</b>		<b>Social Inclusivity:</b> 1. 100% rural poor connected by road.	
Timeline		Resources Required	
Start Date	End Date	<ul style="list-style-type: none"> <li>• Funding: RM4.55 bil</li> <li>• Manpower</li> <li>• Policy</li> </ul>	
2022	2030		
Project Owner	Implementing Agency	Other Stakeholders	
MIPD, MOU, MUDeNR, MIPD	MIPD, JKR, DID, RECODA, URDA, HDA, NRDA, MANRED	SIMU	

## AIP Level 2 - Poverty alleviation

<b>Sector</b> :		Poverty alleviation	
<b>Initiative</b> :		14.1 Rural road connectivity	
<b>Action step</b> :		14.1.1 - 14.1.2	
Action step (s)	Output (s)	Timeline	Resources required
<b>14.1.1 Setting up criteria for project prioritisation</b>	a) Project list for implementation by priority	Start date	RM4.55 billion, manpower policy
		2024	
End date			
2025			
<b>14.1.2 Identify projects contributing to local economic growth</b>	a) Project implementation and completion	Start date	
		2025	
		End date	
		2030	
Project Owner	Implementing Agency	Other Stakeholders	
MIPD, MOU, MUDeNR, MIPD	MIPD, JKR, DID, RECODA, URDA, HDA, NRDA, MANRED	SIMU	

## AIP Level 1 - Poverty alleviation

<b>Sector</b>		: Poverty alleviation	
<b>Strategy</b>		: Providing the Right Ecosystem to Support Involvement of Households in Productive Activities	
<b>Initiative</b>		: 14.2 Sarawak Alternative Rural Water Supply (SAWAS) Programme	
Initiatives		Desired Outcome(s)	
14.2 Sarawak Alternative Rural Water Supply (SAWAS) Programme		<b>Social Inclusivity:</b> 1. 100% rural poor have access to safe water.	
Timeline		Resources Required	
Start Date	End Date	<ul style="list-style-type: none"> <li>RM3,025,000,000</li> </ul>	
11MP	2025		
Project Owner	Implementing Agency	Other Stakeholders	
Ministry of Utilities	JBALB, SWB, KWB, LAKU	Industry Players, All ministries and government agency, Local communities, Private Companies, Local YB's offices, KWKPK	

## AIP Level 2 - Poverty alleviation

<b>Sector</b>	: Poverty alleviation		
<b>Initiative</b>	: 14.2 Sarawak Alternative Rural Water Supply (SAWAS) Programme		
<b>Action step</b>	: 14.2.1 - 14.2.3		
Action step (s)	Output (s)	Timeline	Resources required
<b>14.2.1 To seek fund amounting RM17.2 bil</b>	a) Approval of the required fund	Start date	RM17.2 billion
<b>14.2.2 To implement the Sarawak Water Supply Grid program.</b>  (Please refer to details action steps at the Utilities Sector PCDS Level 2)	a) Completion of Sarawak Water Supply Grid program  About additional 72,000 HH will benefit from this programme including the rural poor household income group	11MP	
<b>14.2.3 To implement SAWAS program.</b>  (Please refer to details action steps at the Utilities Sector PCDS Level 2)	a) Completion of SAWAS projects  (Providing every rural household with safe water to improve their quality of life and raise their living standard. Providing water supply to Isolated Rural Community - about 1,000 kampungs (22,400 HH) will be served)	End date  2028	
Project Owner	Implementing Agency	Other Stakeholders	
Ministry of Utilities	SEB	EPU Sarawak, SFS, MIPD, RANDO, RECODA, MANRED, KWKPK, private sectors	

## AIP Level 1 - Poverty alleviation

<b>Sector</b>		: Poverty alleviation
<b>Strategy</b>		: Providing the Right Ecosystem to Support Involvement of Households in Productive Activities
<b>Initiative</b>		: 14.3 Enhancing and sustaining electricity supply system
Initiatives		Desired Outcome(s)
14.3 Enhancing and sustaining electricity supply system		<b>Social Inclusivity:</b> 1. 100% poor households have access to reliable electricity supply.
Timeline		Resources Required
Start Date	End Date	
11MP	2025	<ul style="list-style-type: none"> <li>RM645,000,000</li> </ul>
Project Owner	Implementing Agency	Other Stakeholders
Ministry of Utilities	SEB	EPU Sarawak, SFS, MIPD, RANDO, RECODA, MANRED, KWKPK

## AIP Level 2 - Poverty alleviation

<b>Sector</b>	: Poverty alleviation		
<b>Initiative</b>	: 14.3 Enhancing and sustaining electricity supply system		
<b>Action step</b>	: 14.3.1 - 14.3.7		
Action step (s)	Output (s)	Timeline	Resources required
<b>14.3.1 Rural Electrification Scheme (RES)- To Grid Connect SARES/Hybrid Villages</b>	a) To Grid Connect SARES/Hybrid 72 villages with about 4,000 HH	2022	RM645 million
<b>14.3.2 Replacement of batteries &amp; key components for stand alone Solar System</b>	a) Continuity of 24-hr electricity supply to existing off-grid remote SARES communities involving 277 villages with about 8,000 HH		
<b>14.3.3 Additional ALAF fund to supply to late/ additional applicants</b>	a) Connecting new rural applicants to existing electricity infrastructure involving about 10,000 HH in need of the basic amenities for improvement in livelihood		
<b>14.3.4 Rural Power Supply Scheme (RPSS) for Mulu - 33kV CC line (80km) from Marudi Substation</b>	a) Providing reliable and adequate supply to Mulu area involving 38 villages with about 397 HH	2025	
<b>14.3.5 Rural Power Supply Scheme (RPSS) for Bario - 33kV CC line (40km) from Bakelalan MV Substation</b>	a) Providing reliable and adequate supply to Bario areas involving 16 villages with about 397 HH		
<b>14.3.6 Rural Power Supply Scheme (RPSS) for Nanga Merit - 33kV CC line (60km) from Kapit</b>	a) Providing reliable and adequate supply to Ng. Merit areas involving 26 villages with about 591 HH		
<b>14.3.7 Rural Power Supply Scheme (RPSS) for Mulu - 33kV Substation</b>	a) Providing reliable and adequate supply to Mulu areas involving 38 villages with about 2392 HH		
Project Owner	Implementing Agency	Other Stakeholders	
Ministry of Utilities	SEB	EPU Sarawak, SFS, MIPD, RANDO, RECODA, MANRED, KWKPK, private sectors	

## AIP Level 2 - Poverty alleviation

<b>Sector</b>	: Poverty alleviation		
<b>Initiative</b>	: 14.3 Enhancing and sustaining electricity supply system		
<b>Action step</b>	: 14.3.8 - 14.3.9		
Action step (s)	Output (s)	Timeline	Resources required
<b>14.3.8 Rural Power Supply Scheme (RPSS) for Tunoh -33kV CC line (50km) from Gaat 33kV Substation</b>	a) Providing reliable and adequate supply to Tunoh areas involving 30 villages with about 660 HH	Start date	RM645 million
		2022	
<b>14.3.9 Rural Power Supply Scheme (RPSS) for Tunoh - 33kV Substation</b>	a) Providing reliable and adequate supply to Tunoh areas involving 30 villages with about 660 HH	End date	
		2025	
Project Owner	Implementing Agency	Other Stakeholders	
Ministry of Utilities	SEB	EPU Sarawak, SFS, MIPD, RANDO, RECODA, MANRED, KWKPK, private sectors	

## AIP Level 1 - Poverty alleviation

<b>Sector</b>		: Poverty alleviation	
<b>Strategy</b>		: Providing the Right Ecosystem to Support Involvement of Households in Productive Activities	
<b>Initiative</b>		: 14.4 Upgrade Digital Connectivity Infrastructure	
Initiatives		Desired Outcome(s)	
<b>14.4 Upgrade Digital Connectivity Infrastructure</b>		<b>Social Inclusivity:</b> <ol style="list-style-type: none"> <li>90% of the population including poor household covered by fixed telecommunication infrastructure.</li> <li>10% remaining covered by wireless telecommunication service.</li> </ol>	
Timeline		Resources Required	
Start Date	End Date	<ul style="list-style-type: none"> <li>RM2.5 billion</li> <li>Commercial 4G/5G Structure</li> <li>Policy on telecommunications</li> </ul>	
2019	2030		
Project Owner	Implementing Agency	Other Stakeholders	
SMA, SSMU, SDEC	SDEC, SAINS	EPU Sarawak, SSMU, MCMC, L&S, MRPE	

## AIP Level 2 - Poverty alleviation

<b>Sector</b>	: Poverty alleviation			
<b>Initiative</b>	: 14.4 Upgrade Digital Connectivity Infrastructure Rolling out affordable digital connectivity to rural areas (coverage to community)			
<b>Action step</b>	: 14.4.1 - 14.4.7			
Action step (s)	Output (s)	Timeline	Resources required	
<b>14.4.1 Digital connectivity data collection</b>	a) Identify populated areas to plan for affordable telecommunication coverage to the sites	Start date	RM2.5 billion	
		2019		
		End date		
<b>14.4.2 Mapping &amp; analysis</b>	a) Synergise MCMC's JENDELA and State's SMART (SMA Rural Telecommunication) initiatives	2030		RM2.5 billion
<b>14.4.3 Project planning (by priority &amp; phases)</b>	a) Appointment of consultant and tender procurement process			
<b>14.4.4 Engagement &amp; coordination with relevant stakeholders &amp; community at sites</b>	a) Appointment of contractors and engagement with stakeholders			
<b>14.4.5 Digital connectivity project implementation, coordination and monitoring on the approved sites</b>	a) Project monitoring and sites evaluation			
<b>14.4.6 Power, ICT hardware and system delivery and service commission</b>	a) Power supply, equipment installation and commissioning			
<b>14.4.7 Impact study, performance review (QoS) and reporting</b>	a) Perform sites performance review and confirm the service performance as in accordance to the project requirements			
Project Owner	Implementing Agency	Other Stakeholders		
SMA, SSMU, SDEC	SDEC, SAINS	EPU Sarawak, SSMU, MCMC, L&S, MRPE		

## AIP Level 1 - Poverty alleviation

<b>Sector</b>		: Poverty alleviation	
<b>Strategy</b>		: Providing the Right Ecosystem to Support Involvement of Households in Productive Activities	
<b>Initiative</b>		: 15.1 Mobile Bank 15.2 ATM & CDM	
Initiatives		Desired Outcome(s)	
<b>15.0 Financial Services</b>  <b>15.1 Mobile Bank</b>  <b>15.2 ATM &amp; CDM</b>		<b>Social Inclusivity:</b> 1. 50,000 unserved poor households will have access to banking facilities and services.	
Timeline		Resources Required	
Start Date	End Date	<ul style="list-style-type: none"> <li>RM80 mil</li> </ul>	
2021	2030		
Project Owner	Implementing Agency	Other Stakeholders	
EPU	Bank Negara Malaysia, Commercial Banks, Development Financial Bank	Banks customers	

## AIP Level 2 - Poverty alleviation

<b>Sector</b>	: Poverty alleviation		
<b>Initiative</b>	: 15. Financial Services 15.1 Mobile Bank		
<b>Action step</b>	: 15.1.1 - 15.1.4		
Action step (s)	Output (s)	Timeline	Resources required
<b>15.1.1 Invite financial institution to participate in this programme</b>	List of interested financial institutions: a) BSN b) RHB Bank c) Bank Rakyat d) AgroBank	Start date	-
		2021	
		End date	
		2021	
<b>15.1.2 Acceptance by financial institutions and offer by the State Government</b>	a) Memorandum of Understanding between financial institution and State Government	Start date	-
		2021	
		End date	
		2021	
<b>15.1.3 Mobile banking service operation and bi-annual reporting by the financial institution</b>	a) Report on mobile banking service operation	Start date	-
		2021	
		End date	
		2030	
<b>15.1.4 Verification and reimbursable payment</b>	a) Reimburse payment to financial institutions	Start date	RM0.8 million
		2021	
		End date	
		2021	
Project Owner	Implementing Agency	Other Stakeholders	
EPU Sarawak	Bank Negara Malaysia, commercial banks, Development Financial Bank	Bank customers	

## AIP Level 2 - Poverty alleviation

<b>Sector</b>	: Poverty alleviation		
<b>Initiative</b>	: 15. Financial Services 15.2 ATM & CDM		
<b>Action step</b>	: 15.2.1 - 15.2.5		
Action step (s)	Output (s)	Timeline	Resources required
<b>15.2.1 Identify district and subdistrict without banking services</b>	a) List of district and subdistrict without banking services	Start date	-
		2021	
		End date	
2021			
<b>15.2.2 Invite financial institution to participate in this programme</b>	a) List of interested financial institutions.	Start date	-
		2021	
		End date	
2022			
<b>15.2.3 Acceptance by financial institutions and offer by the State Government</b>	a) Memorandum of Agreement between financial institution and State Government	Start date	-
		2021	
		End date	
2025			
<b>15.2.4 Installation of ATM &amp; CDM at district and subdistrict offices</b>	a) ATM & CDM at district and subdistrict offices	Start date	-
		2021	
		End date	
2025			
<b>15.2.5 Verification and reimbursable payment</b>	a) Payment to financial institution	Start date	RM5 million
		2021	
		End date	
2025			
Project Owner	Implementing Agency	Other Stakeholders	
Chief Minister's Department	Bank Negara Malaysia, commercial banks, Development Financial Bank	Bank customers	

## AIP Level 1 - Poverty alleviation

<b>Sector</b>		: Poverty alleviation	
<b>Strategy</b>		: Providing the Right Ecosystem to Support Involvement of Households in Productive Activities	
<b>Initiative</b>		: 16. Integrated Social Intervention Programme and Community Support (KWPK)	
Initiatives		Desired Outcome(s)	
16. Integrated Social Intervention Programme and Community Support (KWPK)		Social Inclusivity <ol style="list-style-type: none"> <li>1. 100% of disadvantaged, vulnerable, risky and marginalised poor households given assistance and received at least minimal standards of intervention.</li> <li>2. 100% person with disabilities (PwDs) from poor households given early intervention, education, training and job opportunities (people with severe disability).</li> <li>3. 1,000 poor elderly registered in Day-Care Centres.</li> <li>4. 250 poor elderly registered in Aged-Care Centres.</li> </ol>	
Timeline		Resources Required	
Start Date	End Date	<ul style="list-style-type: none"> <li>• RM135 mil</li> </ul>	
2022	2030		
Project Owner	Implementing Agency	Other Stakeholders	
KWPK	KWPK	Resident Office, District Office, NGOS, CSOs, AADK, JPNS, JKNS, Hospital Sentosa, JKMS	

## AIP Level 2 - Poverty alleviation

<b>Sector</b>	: Poverty alleviation		
<b>Initiative</b>	: 16. Integrated Social Intervention Programme and Community Support (KWPKP)		
<b>Action step</b>	: 16.1		
Action step (s)	Output (s)	Timeline	Resources required
<b>16.1 Setting up of Integrated Social Intervention and Community Support facilities</b>  a) Acquisition of premises (siting, rental/ purchase) b) Procurement process (design, tender) c) Renovation of premises d) Recruitment of competent manpower e) Centre operations f) Digitalisation of social intervention	a) 8 Community Social Intervention Centres (CSIC) at Kuching, Sibul, Lawas, Mukah, Sri Aman, Kapit, Miri and Bintulu b) Integrated Sarawak Social Intervention Program c) 1 Special Need Community Centre (SNCC) d) 1 Rumah Seri Kenangan at Sibul e) 1 Aged Day Care Centre at Miri f) Programme empowerment for the aged	Start date	RM135 million  a. CSIC - RM40 million b. Integrated Sarawak Social Intervention Programme - RM10 million c. SNCC - RM55 million d. RSK Sibul Phase 2 - RM20 million e. Aged Day Care Centre - RM3 million f. Programme empowerment for the aged - RM7 million
		2022	
		End date	
		2030	
Project Owner	Implementing Agency	Other Stakeholders	
KWPKP	KWPKP	Resident office, district office, NGOs, CSOs, AADK, JPNS, JKNS, Hospital Sentosa, JKMS	

## AIP Level 2 - Poverty alleviation

<b>Sector</b>	: Poverty alleviation		
<b>Initiative</b>	: 16. Integrated Social Intervention Programme and Community Support (KWPKP)		
<b>Action step</b>	: 16.2		
Action step (s)	Output (s)	Timeline	Resources required
<b>16.2 Development and Implementation of new, comprehensive, evidence-based and integrated social intervention programmes</b>	10 New integrated social program and intervention in the community: a) Integrated Drug Abuse Prevention and Treatment Intervention - teenagers, youths and families at risk and vulnerable b) Psychology and Counseling Intervention Programme - communities affected by social issues and problems c) Intervention for the safety and protection of affected, risky and vulnerable children and adolescents in Sarawak - school dropouts below 18 years old and children & adolescent d) Teenage Pregnancy Intervention: Kesedaran dan Advokasi Pendidikan Seksual (KAPS) - primary and secondary school students e) Crime Prevention Intervention - risky and vulnerable communities f) Empowerment of NGOs and social workers - NGOs and social workers g) Community Mental Health Literacy(COMHEL) - risky and vulnerable communities	<b>Start date</b>	RM10 million, collaboration with relevant partners: Local authorities, Federal and State Government agencies, NGOs and volunteers
		2022	
		<b>End date</b>	
		2030	
Project Owner	Implementing Agency	Other Stakeholders	
KWPKP	KWPKP	Resident office, district office, NGOs, CSOs, AADK, JPNS, JKNS, Hospital Sentosa, JKMS	

## AIP Level 2 - Poverty alleviation

<b>Sector</b>	: Poverty alleviation		
<b>Initiative</b>	: 16. Integrated Social Intervention Programme and Community Support (KWPKP)		
<b>Action step</b>	: 16.2 - 16.3		
Action step (s)	Output (s)	Timeline	Resources required
<b>16.2 Development and Implementation of new, comprehensive, evidence-based and integrated social intervention programmes</b>	10 New integrated social program and intervention in the community: h) Bullying of Child Intervention Programme - affected, risky and vulnerable children in targeted primary and secondary schools i) Intervention program for domestic violence in Sarawak - affected families with DV, social workers j) Integrated intervention program to address marriage and divorce issues in Sarawak - rural parents, teenage parents and single parents	Start date	RM10 million, collaboration with relevant partners: Local authorities, Federal and State Government agencies, NGOs and volunteers
		2022	
		End date	
		2030	
<b>16.3 Impact evaluation of Integrated Social Intervention Programme and Community Support</b>	a) Sarawak Social Wellbeing Index Report (2023; 2025; 2027; 2029; and 2031)	Start date	-
		-	
		End date	
		-	
Project Owner	Implementing Agency	Other Stakeholders	
KWPKP	KWPKP	Resident office, district office, NGOs, CSOs, AADK, JPNS, JKNS, Hospital Sentosa, JKMS	

## AIP Level 1 - Poverty alleviation

<b>Sector</b>		: Poverty alleviation	
<b>Strategy</b>		: Providing the Right Ecosystem to Support Involvement of Households in Productive Activities	
<b>Initiative</b>		: 17. Temporary Shelter for homeless and displaced persons	
Initiatives		Desired Outcome(s)	
17. Temporary Shelter for homeless and displaced persons		<b>Social Inclusivity:</b> 1. 1,125 homeless and displaced families have access to temporary shelter.	
Timeline		Resources Required	
Start Date	End Date	<ul style="list-style-type: none"> <li>RM90 million</li> </ul>	
2022	2030		
Project Owner	Implementing Agency	Other Stakeholders	
KWKPK	KWKPK	Resident Office, District Office, Jabatan Penjara Malaysia, AADK, JKMNS, JWKS, NGOs	

## AIP Level 2 - Poverty alleviation

Sector		Poverty alleviation	
Initiative		17. Temporary Shelter for homeless & displaced persons	
Action step		17.1 - 17.5	
Action step (s)	Output (s)	Timeline	Resources required
17.1 Development of TOR for the project	a) Guideline for management of temporary shelter for homeless and displaced person	Start date	-
		2022	
		End date	
2023			
17.2 Identification of beneficiaries	a) List of beneficiaries	Start date	-
		2022	
		End date	
2030			
17.3 Site identification and procurement management	a) Site for temporary shelter	Start date	-
		2022	
		End date	
2030			
17.4 Construction of the building	a) 1,125 units temporary shelter	Start date	RM90 mil/ RM80,000 per shelter
		2023	
		End date	
2030			
17.5 Operation and maintenance of temporary shelter	a) 1,125 units temporary shelter fully operational and occupied	Start date	Collaboration with relevant partners: local authorities, Land and Survey Department, Jabatan Penjara, AADK, MUDeNR, NGOs and volunteers
		2024	
		End date	
2031			
Project Owner	Implementing Agency	Other Stakeholders	
KWKPK	KWKPK	Resident office, district office, Jabatan Penjara Malaysia, AADK, JKMNS, JWKS, NGOs	

# 3. Additional Information

# 3.1 Abbreviations

# Abbreviations

Term	Definition
<b>4IR</b>	Fourth Industrial Revolution
<b>11MP / RMK-11</b>	11th Malaysia Plan
<b>12MP / RMK-12</b>	12th Malaysia Plan
<b>AADK</b>	Agensi Anti Dadah Kebangsaan
<b>ABM</b>	Akademi Binaan Malaysia
<b>ADO</b>	Assistant District Office
<b>AET</b>	Aktiviti Ekonomi Tambahan
<b>AIP</b>	Action and Implementation Plan
<b>API</b>	Application Programming Interface
<b>APM</b>	Angkatan Pertahanan Awam Malaysia
<b>APMM</b>	Agensi Penguatkuasaan Maritim Malaysia
<b>ART</b>	Automated Rapid Transit
<b>ASEAN</b>	Association of Southeast Asian Nations
<b>AtoN</b>	Aids to Navigation
<b>AZAM</b>	Angkatan Zaman Mansang
<b>B40</b>	Bottom 40
<b>BAKAS</b>	Bekalan Air Luar Bandar dan Kebersihan Alam Sekeliling
<b>BDA</b>	Bintulu Development Authority
<b>BERNAS</b>	Padiberas Nasional Berhad
<b>BIM</b>	Building Information Modelling
<b>BIPPN</b>	Bantuan Input Peralatan Perikanan Nelayan
<b>BIS</b>	Bus Integrated System
<b>BMC</b>	Borneo Medical Centre
<b>BNM</b>	Bank Negara Malaysia
<b>BNR</b>	Business Name Registration
<b>BOD</b>	Board of Director
<b>bil</b>	billion
<b>BKSS</b>	Bantuan Khas Sarawakku Sayang
<b>CAAM</b>	Civil Aviation Authority of Malaysia
<b>CAGR</b>	- Compounded Annual Growth Rate
<b>CAPEX</b>	Capital expenditure
<b>CBO</b>	Community-based Organisations
<b>CD</b>	Chart Datum
<b>CDO</b>	Central Design Office
<b>CENTEX</b>	Centre of Technical Excellence
<b>CEO</b>	Chief executive officer
<b>CEPA</b>	Conservation, Education, Promotion and Awareness
<b>CIDB</b>	Construction Industry Development Board

Term	Definition
<b>CITES</b>	Convention on International Trade in Endangered Species of Wild Fauna and Flora
<b>CMGD</b>	Certificate of Making Good Practise
<b>CMD</b>	Chief Minister's Department
<b>CMP</b>	Conservation Management Plan
<b>CO<sub>2</sub></b>	Carbon dioxide
<b>COMHEL</b>	Community Mental Health Literacy
<b>COVID-19</b>	Coronavirus disease 2019
<b>CPC</b>	Certificate of Practical Completion
<b>CPD</b>	Continuous Professional Development
<b>CPO</b>	Crude palm oil
<b>CPPC</b>	Collecting, Processing and Packaging Centre
<b>CSIC</b>	Community Social Intervention Centers
<b>CSO</b>	Civil Society Organisations
<b>CVLB</b>	Commercial Vehicle Licensing Board
<b>D11</b>	Bahagian Siasatan Seksual, Penderaan dan Kanak-Kanak
<b>DBKU</b>	Dewan Bandaraya Kuching Utara
<b>DCA</b>	Department Of Civil Aviation
<b>DCC</b>	Digital Community Centre
<b>DDI</b>	Domestic Direct Investment
<b>DGC</b>	Digital Government Committee
<b>DID</b>	Department of Irrigation and Drainage
<b>Digitalise / Digitalisation</b>	The processes involved in utilising digital technologies and digitised data to impact how work gets done
<b>DoE</b>	Department of Environment
<b>DOSH</b>	Department of Occupational Safety And Health
<b>DOSM</b>	Department of Statistics Malaysia
<b>DTTG</b>	Dayak Think Tank Group
<b>DUN</b>	Dewan Undangan Negeri
<b>DVS</b>	Department Of Veterinary Services
<b>DWNP</b>	Department of Wildlife and National Parks
<b>EDMS</b>	Electronic Document Management System
<b>E&amp;E</b>	Electrical & Electronics
<b>e.g.</b>	<i>exempli gratia</i>
<b>E-Government</b>	Electronic government
<b>eHDF</b>	e-Health Declaration Form
<b>e-KISS</b>	e-KPI System for Water Supply Services
<b>e-KISWA</b>	e-Khidmat Islam Sarawak
<b>eMINDS</b>	EIU Main Information, Network & Database System
<b>eQP</b>	e-Qualified Person

Term	Definition
<b>EIA</b>	Environmental Impact Assessment
<b>eKYC</b>	electronic Know Your Customer
<b>EPU</b>	Economic Planning Unit
<b>ESG</b>	Environmental, social and governance
<b>ESS</b>	Employee Self-Service
<b>etc.</b>	Et cetera
<b>EUR</b>	Euro
<b>EV</b>	Electric vehicle
<b>FAMA</b>	Federal Agricultural Marketing Authority
<b>FDS</b>	Forest Department Sarawak
<b>FEED</b>	Front-End- Engineering & Design
<b>F&amp;B</b>	Food and beverage
<b>FDI</b>	Foreign Direct Investment
<b>FDS</b>	Forest Department Sarawak
<b>FI</b>	Farmers Institution
<b>FLR</b>	Forest Landscape Restoration
<b>FMUs</b>	Forest Management Units
<b>FPMU</b>	Forest Plantation Management Unit
<b>FRD</b>	Functional Requirement Documents
<b>FRIM</b>	Forest Research Institute Malaysia
<b>FTE</b>	full-time equivalent
<b>G2G</b>	Government to Government
<b>GAP</b>	Good Agriculture Practices
<b>GBI</b>	Green Building Index
<b>Gbps</b>	Gigabits per second
<b>GCAP</b>	Green City Action Plan
<b>GDP</b>	Gross domestic product
<b>GEF</b>	Global Environment Facility
<b>GERD</b>	R&D expenditure as % of GDP
<b>GFCF</b>	Gross Fixed Capital Formation
<b>GHG</b>	Greenhouse gas
<b>GHP</b>	Good Hygiene Practice
<b>GIS</b>	Geographic Information System
<b>GITA</b>	Green Investment Tax Allowance
<b>GITE</b>	Green Investment Tax Exemption
<b>GLC</b>	Government Linked Companies
<b>GMP</b>	Good Manufacturing Practice
<b>GPN</b>	Gred Purata Negeri
<b>GRP</b>	Good Regulatory Practice
<b>H2</b>	Hydrogen
<b>ha</b>	Hectare

Term	Definition
<b>HACCP</b>	Hazard Analysis Critical Control Point
<b>HASIL</b>	Lembaga Hasil Dalam Negeri
<b>HDC</b>	Housing Development Corporation
<b>HEP</b>	Hydroelectric Power Plant
<b>HIP</b>	High Impact Program
<b>HRDF</b>	Human Resource Development Fund
<b>HVDC</b>	High Voltage Direct Current
<b>i.e.</b>	id est
<b>IAB</b>	Institut Aminuddin Baki
<b>IADA</b>	Integrated Agricultural Development Area
<b>IAMS</b>	Integrated Assets Management System
<b>ICE</b>	Internal Combustion Engine
<b>ICT</b>	Information and Communications Technology
<b>ICTRMS</b>	ICT Requisition Management System
<b>IHL</b>	Institutions of Higher Learning
<b>IMF</b>	International Monetary Fund
<b>IP</b>	Intellectual Property
<b>IPGM</b>	Institut Pendidikan Guru Kampus
<b>IPMS</b>	Intelligent Property Management System
<b>IPP</b>	Independent Power Producer
<b>IPT</b>	Institusi Pengajian Tinggi
<b>IRDA</b>	Iskandar Regional Development Authority
<b>IRSDA</b>	Integrated Regional Samarahan Development Agency
<b>ISM</b>	Integrated Service Management
<b>ISP</b>	Internet Service Provider
<b>ITB</b>	Institut Teknologi Bandung
<b>IUCN</b>	International Union for Conservation of Nature
<b>JAIS</b>	Jabatan Agama Islam Sarawak
<b>JBALB</b>	Jabatan Bekalan Air Luar Bandar
<b>Jendela</b>	Jalinan Digital Negara
<b>JIM</b>	Jabatan Imigresen Malaysia
<b>JKIP</b>	PROSPEK Main Committee
<b>JKKK</b>	Jawatankuasa Kemajuan dan Keselamatan Kampung
<b>JKM</b>	Jabatan Kebajikan Masyarakat
<b>JKMS</b>	Jabatan Kebajikan Masyarakat Sarawak
<b>JKNS</b>	Jabatan Kesihatan Negeri Sarawak
<b>JKR</b>	Jabatan Kerja Raya
<b>JLWS</b>	Jabatan Laut Wilayah Sarawak
<b>JMG</b>	Jabatan Mineral dan Geosains
<b>JMS</b>	Jabatan Muzium Sarawak

Term	Definition
JPA	Jabatan Perkhidmatan Awam
JPJKK	Jabatan Pencegahan Jenayah dan Keselamatan Komuniti
JPLS	Jabatan Perikanan Laut Sarawak
JPN	Jabatan Pendaftaran Negara
JPNS	Jabatan Pendidikan Negeri Sarawak
JPTPANS	Jawatankuasa Pemandu Transformasi Perkhidmatan Awam Negeri Sarawak
JPTT	Jawatankuasa Penilaian Teknikal Tender
JRTM	Journal of Responsible Tourism Management
JSJK	Jabatan Siasatan Jenayah Komersil
JSJN	Jabatan Siasatan Jenayah Narkotik
JTK	Jabatan Tenaga Kerja
JUPEM	Jabatan Ukur dan Pemetaan Malaysia
JVC	Joint Venture Capital
JWKS	Jabatan Wanita dan Keluarga Sarawak
JWN	Jabatan Warisan Negara
KAPS	Kesedaran dan Advokasi Pendidikan Seksual
KASA	Kementerian Alam Sekitar dan Air
KBS	Kementerian Belia dan Sukan
KeTSA	Kementerian Tenaga dan Sumber Asli
kg	kilogram
KM	Kilometre
KKM	Kementerian Kesihatan Malaysia
KKR	Kementerian Kerja Raya
KMKK	Ketua Masyarakat dan Ketua Kaum
KPA	Kuching Port Authority
KPI	Key Performance Indicator
KPLB	Kementerian Pembangunan Luar Bandar
KRI	Khazanah Research Institute
KWB	Kuching Water Board
KWKPK	Ministry of Welfare, Community Wellbeing, Women, Family and Childhood Development
LASIS	Land and Survey Information System
LBAS	Lembaga Boya Dan Api Sarawak
lcpd	litres per capita per day
LCDA	Land Custody and Development Authority
LFS	Labour Force Survey
LHDN	Lembaga Hasil Dalam Negeri
LKIM	Lembaga Kemajuan Ikan Malaysia
LNG	Liquefied natural gas

Term	Definition
L&S	Land & Survey
LOB	Line of Business
LoRaWAN	Long range, wide area network
LOS	Level Of Service
IoT	Internet of Things
LPF	Licence For Planted Forests
LPNM	Lembaga Perindustrian Nanas Malaysia
LPPKN	Lembaga Penduduk Dan Pembangunan Keluarga Negara
LPS	Local Port Service
LSS	Large Scale Solar
LULUCF	land use, land use change and forestry
M40	Middle 40
MAB	Malaysia Airlines Berhad
MAFI	Ministry of Agriculture and Food Industries
MAGIC	Malaysian Global Innovation & Creativity Centre
MAH	Malaysian Association of Hotel
MAHB	Malaysia Airports Holdings Berhad
MAFI	Ministry of Agriculture and Food Industries
MAIFI	Momentary Average Interruption Frequency Index
MAIS	Majlis Adat Istiadat Sarawak
MAMPU	Malaysian Administrative Modernisation and Management Planning Unit
MANRED	Ministry of Modernization of Agriculture, Native Land and Regional Development
MARDI	Malaysian Agricultural Research and Development Institute
MATRADE	Malaysia External Trade Development Corporation
MATTA	Malaysian Association of Tour and Travel Agents
MAVCAP	Malaysia Venture Capital Management Bhd
MAVCOM	Malaysian Aviation Commission
Mbps	Megabits per second
MCC	Miri City Council
MCMC	Malaysian Communication & Multimedia Commission
MD	Majlis Daerah
MDEC	Malaysia Digital Economy Corporation
MDLA	Majlis Daerah Lubok Antu
MDSA	Majlis Daerah Sri Aman
MESTR	Ministry of Education, Science and Technological Research
MGTC	Malaysian Green Technology and Climate Centre
MHTC	Malaysia Healthcare Travel Council
MIDA	Malaysian Investment Development Authority

Term	Definition
<b>mil</b>	million
<b>MINDEF</b>	Kementerian Pertahanan
<b>MINTRED</b>	Ministry of International Trade & Industry, Industrial Terminal & Entrepreneur Development Sarawak
<b>MIPD</b>	Ministry of Infrastructure and Port Development
<b>MIS</b>	Majlis Islam Sarawak
<b>MITI</b>	Ministry of International Trade and Industry
<b>MKN</b>	Majlis Keselamatan Negara
<b>MLD</b>	million liters a day
<b>MLGH</b>	Ministry of Local Government and Housing
<b>MM</b>	Median Multiple
<b>mm</b>	millimetre
<b>MMKN</b>	Majlis Mesyuarat Kerajaan Negeri
<b>MNCs</b>	Multinational corporations
<b>MoU</b>	Memorandum of Understanding
<b>MOFA</b>	Ministry of Foreign Affairs
<b>MOHE</b>	Ministry of Higher Education
<b>MOTS</b>	Ministry of Transport
<b>MOTSAC</b>	Ministry of Tourism, Arts and Culture
<b>MPA</b>	Miri Port Authority
<b>MPC</b>	Malaysia Productivity Corporation
<b>MPKS</b>	Majlis Perbandaran Kota Samarahan
<b>MPOB</b>	Malaysian Palm Oil Board
<b>MPP</b>	Majlis Perbandaran Padawan
<b>MPS</b>	Malaysian Pharmacists Society
<b>MRP-PPRMS</b>	Minor Rural Project- Project Baikpulih Rumah Rakyat Miskin Sarawak
<b>MRPE</b>	Ministry of Resource Planning and Environment
<b>MS1525</b>	A rating under Green Building Index
<b>MSN</b>	Majlis Sukan Negeri
<b>MSPO</b>	Malaysian Sustainable Palm Oil
<b>MSS</b>	Majlis Sukan Sekolah
<b>MT</b>	Metric Ton
<b>MTAC</b>	Ministry of Tourism, Arts and Culture Sarawak
<b>MTDC</b>	Malaysian Technology Development Corporation
<b>MUDeNR</b>	Ministry of Urban Development and Natural Resources
<b>MW</b>	Megawatt

Term	Definition
<b>MWC</b>	Matang Wildlife Centre
<b>MyBHA</b>	Malaysia Budget Hotel Association
<b>MyDigital</b>	Malaysia Digital Economy Blueprint
<b>MyGAP</b>	Skim Amalan Pertanian Baik Malaysia
<b>MYSS</b>	Ministry of Youth and Sports Sarawak
<b>NAMES</b>	Native Marriage Management Electronic System
<b>NAPIC</b>	National Property Information Centre
<b>NBIOT</b>	Narrow Band IoT
<b>NEM</b>	Net Energy Metering
<b>NFP</b>	Nutritious Food Programme
<b>NRDA</b>	Northern Region Development Agency
<b>NRW</b>	Non-revenue water
<b>NREB</b>	Natural Resources and Environment Board
<b>NREO</b>	Natural Resources and Environment Ordinance
<b>NSC</b>	National Security Council
<b>OBA</b>	Outcome Based Assessment
<b>OECD</b>	Organisation for Economic Co-operation and Development
<b>OFI</b>	Opportunity for Improvement
<b>OLAM</b>	Online License Application
<b>OPEC</b>	Organization of Petroleum Exporting Countries
<b>OPEX</b>	Operating expenses
<b>p.a.</b>	Per annum
<b>PACES</b>	Professional & Continuing Education Centre Sarawak
<b>PATA</b>	Pacific Asia Travel Association
<b>PAWE</b>	Pusat Aktiviti Warga Emas
<b>PBT</b>	Pihak Berkuasa Tempatan
<b>PCDS 2030</b>	Post COVID-19 Development Strategy 2030
<b>PDA</b>	Preliminary Detailed Abstract
<b>PDRM</b>	Polis Diraja Malaysia
<b>PERKESO</b>	Pertubuhan Keselamatan Sosial
<b>PETROS</b>	Petroleum Sarawak Berhad
<b>PFA</b>	Pig Farming Area
<b>PFE</b>	Permanent Forest Estate
<b>PIBG</b>	Persatuan Ibu Bapa Guru
<b>PKB</b>	Pejabat Kesihatan Bahagian
<b>PKI</b>	Public Key Infrastructure
<b>PLBI</b>	Post Logging Block Inspection
<b>PLF</b>	Passenger Load Factor
<b>PLI</b>	Poverty Line Income
<b>POC</b>	Proof of concept

Term	Definition
PPD	Pejabat Pendidikan Daerah
PPDK	Pertubuhan Pemulihan Dalam Komuniti
PPKS	Pusat Pembangunan Kemahiran Sarawak
PPNS	Pertubuhan Peladang Negeri Sarawak
PPP	purchasing power parity
PPWE	Policy Partnership on Women and the Economy
PTA	Parent-Teacher Association
PVR	Pasukan Sukarelawan Polis
PWD	People with Disability
QR Code	Quick Response code
RANDO	Resident Office
RCE Kuching	Regional Centre of Expertise Kuching
RECODA	Regional Corridor Development Authority
R&D	Research and Development
R&D&C&I	Research, Development, Commercialisation and Innovation
RE	Renewable Energy
RIS	Regulatory Impact Statement
RM	Ringgit Malaysia
RMC	Rejang Medical Centre
RNDO	Resident and District Office
ROI	Return of Investment
RPA	Rajang Port Authority
RPSS	Rural Power Supply Scheme
RTPMS	Rural Transformation Projects Monitoring System
SABIDTeC	Sarawak Bamboo Industry Development Technical Committee
SAC	State Administrative Council
SACREST	Sarawak Commitment to Responsible Tourism
SADA	Sri Aman Development Agency
SAG	State Attorney-General
SAGC	Sarawak State Attorney-General's Chambers
SAIDI	System Average Interruption Duration Index
SAIFI	System Average Interruption Frequency Index
SALCRA	Sarawak Land Consolidation and Rehabilitation Authority
SARADEC	Sarawak Digital Entrepreneur Community Cooperative
SARES	Sarawak Alternative Rural Electrification Scheme
SAWAS	Sarawak Alternative Water Supply
SBDC	State Building Design Committee
SBP	Sarawak Bio-Industrial Park
SBTB	Sarawak Building Technology Board
SBTC	State Building Design Committee

Term	Definition
<b>SCATS</b>	Sydney Coordinated Adaptive Traffic System
<b>SCB</b>	Sarawak Convention Bureau
<b>SCC</b>	Standard and Cost Committee
<b>SCOPE</b>	Sarawak Centre of Performance Excellence
<b>SCS</b>	State Civil Service
<b>SCTB</b>	State Central Tenders Board
<b>SDEC</b>	Sarawak Digital Economy Corporation
<b>SDG</b>	Sustainable Development Goals
<b>SDI</b>	Sarawak Development Institute
<b>SDIE</b>	Sarawak Digital and Innovation Ecosystem
<b>SDMC</b>	State Disaster Management Committee
<b>Sdn Bhd</b>	<i>Sendirian Berhad</i> / Private Limited Company
<b>SDO</b>	Sarawak State Federal Development Office
<b>SEAC</b>	Sarawak Economic Action Council
<b>SEB</b>	Sarawak Energy Berhad
<b>SEDC</b>	Sarawak Economic Development Corporation
<b>SEED</b>	Sarawak Entrepreneur Development
<b>SESCO</b>	Syarikat SESCO Berhad
<b>SFC</b>	Sarawak Forestry Corporation
<b>SFD</b>	Sarawak Forest Department
<b>SFIA</b>	Sarawak Furniture Industry Association
<b>SFM</b>	Sustainable Forest Management
<b>SFO</b>	Sarawak Forest Ordinance
<b>SFS</b>	State Financial Secretary
<b>SHEDA</b>	Sarawak Housing And Real Estate Developers' Association
<b>SHRU</b>	State Human Resource Unit
<b>SI</b>	Soil Investigation
<b>SIMU</b>	State Implementation Monitoring Unit
<b>SIFBAS</b>	State Integrated Financial, Budgeting Accounting System
<b>SIOC</b>	Sarawak Integrated Operations Centre
<b>SKMM</b>	Suruhanjaya Komunikasi dan Multimedia Malaysia
<b>SLDB</b>	Sarawak Land Development Board
<b>SLTA</b>	Sarawak Land Transport Authority
<b>SMA</b>	Sarawak Multimedia Authority
<b>SMC</b>	Sibu Municipal Council
<b>SMEs</b>	Small-medium enterprises
<b>SMG</b>	Sarawak Media Group
<b>SMMA</b>	State Minerals Management Authority
<b>SMSB</b>	Sarawak Metro Sdn Bhd
<b>SNCC</b>	Special Needs Community Centre

Term	Definition
<b>SODC</b>	State Organization Development
<b>SOP</b>	Standard Operating Procedure
<b>SPA</b>	State Planning Authority
<b>SPANS</b>	Suruhanjaya Perkhidmatan Awam Negeri Sarawak
<b>SPH</b>	Sistem Pelindung Hujan
<b>SPM</b>	Sijil Pelajaran Malaysia
<b>SPPMS</b>	Special Project Programs Monitoring System
<b>SPV</b>	Special Purpose Vehicle
<b>SRAS</b>	Sarawak Rental Assistance Scheme
<b>SRB</b>	Sarawak River Board
<b>SRO</b>	Sarawak River Ordinance
<b>SRS</b>	Sarawak Research Society
<b>SSMU</b>	State Service Modernisation Unit
<b>SSL</b>	Self-sufficiency level
<b>SST</b>	Sales & Service Tax
<b>STATOS</b>	Sarawak Trade and Tourism Office Singapore
<b>STB</b>	Sarawak Tourism Board
<b>STBC</b>	State Tender Board Committee
<b>STEM</b>	Science, technology, engineering and mathematics
<b>STF</b>	Sarawak Tourism Federation
<b>STGA</b>	Sarawak Tourist Guides Association
<b>STIDC</b>	Sarawak Timber Industry Development Corporation
<b>STLVS</b>	Sarawak Timber Legality Verification System
<b>SWC</b>	Semenggoh Wildlife Centre
<b>SWIS</b>	Sarawak Workforce Information System
<b>T20</b>	Top 20
<b>TDA</b>	Technology Depository Agency
<b>TEGAS</b>	Tabung Ekonomi Gagasan Anak Sarawak
<b>TEU</b>	Twenty Equipment Unit
<b>TM</b>	Telekom Malaysia
<b>TMPA</b>	Tanjung Manis Port Authority
<b>TOR</b>	Terms of Reference
<b>ToT</b>	Taking Over Test
<b>TPA</b>	Totally protected area
<b>TSA</b>	Transportation Security Administration
<b>TVET</b>	Technical and Vocational Education and Training
<b>UAD</b>	Unit Audit Dalam
<b>UI</b>	User Interface
<b>UKAS</b>	Unit Komunikasi Awam Sarawak
<b>UKPN</b>	Unit Keselamatan Dan Penguatkuasaan Negeri

<b>Term</b>	<b>Definition</b>
<b>UNDP</b>	United Nations Development Programme
<b>UNESCO</b>	United Nations Educational, Scientific and Cultural Organization
<b>UNFCCC</b>	United Nations Framework Convention on Climate Change
<b>UNIFOR</b>	Unit for Other Religions
<b>UNIMAS</b>	University of Malaysia, Sarawak
<b>UNU</b>	United Nations University
<b>UNWTO</b>	United Nations World Tourism Organisation
<b>UP</b>	Unit Pentadbiran
<b>UPKJ</b>	Unit Pendaftaran Kontraktor Dan Juruperunding
<b>UPKN</b>	Unit Keselamatan Dan Penguatkuasaan Negeri
<b>UPM</b>	Universiti Putra Malaysia
<b>UPPN</b>	Unit Pemodenan Perkhidmatan Negeri
<b>URDA</b>	Upper Rajang Development Agency
<b>US</b>	United States
<b>USD</b>	United States Dollar
<b>VCMC</b>	Venture Capital Management Company
<b>VTMS</b>	Vessel Traffic management System
<b>WEO</b>	World Economic Outlook
<b>WRC</b>	Wildlife Rescue Centre
<b>WTP</b>	Water Treatment Plant
<b>WWF</b>	World Wildlife Fund
<b>VRA</b>	Vulnerable, risky and affected
<b>VSAT</b>	Very Small Aperture Terminal
<b>YB</b>	Yang Berhormat
<b>YSIE</b>	YS International Education
<b>YSISS</b>	YAYASAN Sarawak International Secondary School

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