



MIRI SMART CITY BLUEPRINT

2020-2030



MIRI SMART CITY PROFILE

Miri City aims to transform into a Green, Smart, and Most Liveable International Resort City by 2030, aligning with Sarawak's Post-Covid Development Strategy (PCDS2030). To ensure robustness of true north, this blueprint has adopted metrics based on best practices and benchmarked frameworks to define and measure its progress in terms of being green, smart, liveable, and internationally competitive.



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MINISTER MESSAGE



I am truly delighted to be a part of the contribution to the Miri Smart City Blueprint. Smart cities are dedicated to elevating the community quality of life by seamlessly integrating technology and data-driven solutions.

Given the increasing speed of urbanization, the Sarawak Government believes that resolving the challenges of our cities is critical to finding solutions to the major issues of our future, from climate change to health, natural resource depletion and poverty. Integrated strategies and the effective planning and management of cities are essential to ensure that the benefits of urbanization are fully shared and inclusive. Urbanization creates many challenges, but it also presents opportunities to improve people's lives.



Miri City holds a strategic position in the northern region of Sarawak, bordering the nation of Brunei, and attracting expatriates primarily linked to the oil and gas sector. Given this unique background, the decision of Miri City Council to embrace the smart city idea stands as both fitting and commendable. This move signifies the city's commitment to adopting intelligent urban solutions and to meet recognized standards.

The cohesive spirit of Miri's diverse and multi-racial population has been a driving force behind the city's remarkable progress on the path toward becoming a

This journey encompasses multifaceted enhancements within the urban landscape, spanning the realms of council service delivery, the safeguarding of security for both residents and visitors, streamlined information dissemination, and optimized transportation services. The ongoing Smart City proof-of-concept expedition, spanning a period of three years, is currently witnessing a surge in momentum as it forges ahead with resolute determination toward comprehensive digital transformation.

It is also crucial to maintain a strong commitment to integrity. This includes transparent communication, ethical data handling, and responsible decision-making. By engaging with the community, collaborating with experts and stakeholders, and prioritizing sustainability and inclusivity, the city can harness the power of technology to address challenges, enhance services, and improve the overall well-being of its community.

With integrity as a guiding principle, Miri City can set a shining example of how a smart city can effectively balance technological advancement with the values that define a thriving, trustworthy, and vibrant community.

I'm confident that under the leadership of the Miri Mayor, the city will keep thriving to create a great place for everyone to live in harmony.

I wish Miri City Council all the best in their subsequent mission towards becoming a

**GREEN, SMART, MOST LIVABLE
INTERNATIONAL RESORT CITY.**

Yang Berhormat Dato Sri Prof. Dr. Sim Kui Hian
Deputy Premier of Sarawak
Minister for Public Health, Housing and Local Government Sarawak



MAYOR STATEMENT

It is great pleasure that I present to you the Miri Smart City Blueprint, a visionary roadmap that outlines our journey towards a more sustainable, efficient, and interconnected future. I am honored to share our aspirations, goals, and strategies for transforming Miri into a smart city that not only embraces cutting-edge technology but also places the well-being of our community at the core of everything we do.

The Miri City Council has revisited, examined, and polished its vision for Miri City, aiming to transform it into a Green, Smart, and most liveable International Resort City by 2030. This aspiration is pursued across three key areas:

01

Boosting economic growth through Miri's distinct tourism attractions.

02

Improving service delivery through digitalization.

03

Advancing Green Initiatives to enhance livability.

In order to produce the desired results, it is essential for Miri City Council to secure cooperation, support and commitment from the State and Federal Governments as well as collaboration with private sector to ensure all stakeholders could benefit from these ambitious Smart City development plans.

I wish to reiterate that we should work together with full efforts and total dedication in fulfilling our aspirations towards True North. I am looking forward to realizing our ambition with support from ministries, agencies, private sector, investors and the State Government so as to realized Sarawak will be a thriving society driven by data and innovation where everyone enjoys economic prosperity, social inclusivity and a sustainable environment.

Introducing the Miri Smart City Blueprint marks a step towards a brighter and sustainable future for generations to come. This blueprint showcases our commitment to building a city that thrives now and preserves its resources and culture for the future. Focusing on sustainability and resilience, we're embarking on a journey that secures a prosperous legacy for the rakyat.

The Blueprint is a living document that will continue to evolve to ensure Miri remains on track and be adjusted where needed for Miri to be developed as Green, Smart, and most liveable International Resort City by 2030.



THANK YOU FOR BEING PART OF THIS
TRANSFORMATIVE JOURNEY.

YB Adam Yii Siew Sang
Miri City Mayor

CITY SECRETARY STATEMENT



I wish to convey my heartfelt appreciation to the Sarawak government, Ministry of Public Health, Local Government Sarawak, the esteemed Mayor, the dedicated councillors, and the diligent officers and staff of the Miri City Council. Your unwavering support, guidance, and collaborative efforts have been instrumental in the continued progress and development of our city into Smart City. The commitment to improving the lives of the rakyat and enhancing the overall well-being of our community is truly commendable.

As we move forward, I am confident that Miri will continue to flourish, and together, we will create a city that we can all be proud of. Our contributions serve as an inspiration to every one of us and reinforce our determination to work diligently towards Smart, Green, and most liveable International Resort City.



Our True North guiding star will lead us through the coming years. It is a journey that requires dedication, resilience, and a shared commitment to excellence. Every action we take, every decision we make, and every endeavour we undertake should be aligned with this aspiration.

Living in a Smart City is an approach – a way of thinking that lets us welcome innovation, use technology wisely, and dream big. We're not just shaping our city's future; we're also leading by example and encouraging others to shape the future of our city and inspiring others to follow. standards.

The "Miri Smart City Blueprint" stands as a testament to our achievements and a roadmap for the path ahead. Within its comprehensive pages, our successes shine, our progress is tracked, and the roadmap to attaining our 2030 objectives is outlined. Aligned with Sarawak's digital economy vision, this blueprint reaffirms our dedication to pioneering innovation, elevating our residents' quality of life, and playing a vital role in driving the digital transformation in our region.

I encourage each and every one of us to embrace this vision, to internalize its significance, and to let it fuel our passion for excellence. Our collective efforts, big and small, will collectively build the city we envision—a city that's smart, green, and most liveable international resort city.



**LET'S EMBARK ON THIS JOURNEY WITH
ENTHUSIASM, OPTIMISM, AND
A SENSE OF PURPOSE.**

By 2030, when we look back at the distance we've covered,
I am confident that we'll be amazed at what we've
achieved together.

Abdul Rahman Taupek
*Acting City Secretary
Miri City Council*



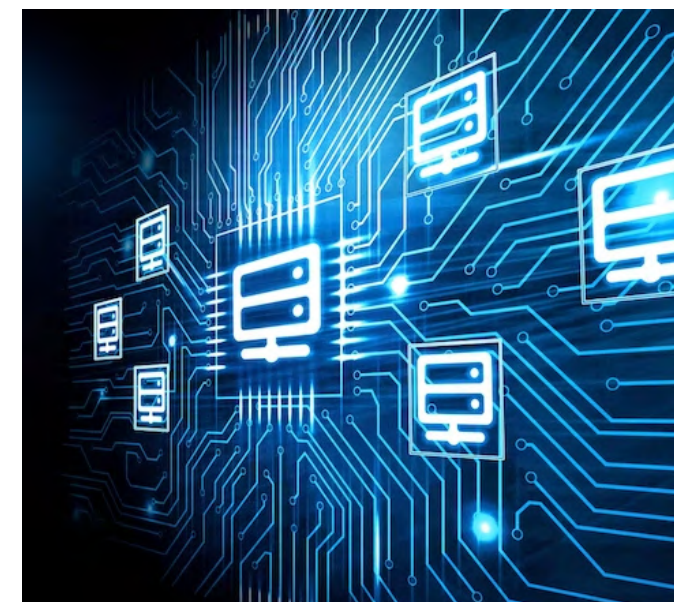
1 INTRODUCTION TO SMART CITIES

The concept of a Smart City brings a fresh approach to managing urban life and services, aiming to tackle city challenges and boost urban sustainability. This trend, mostly seen in developed countries, aligns with the evolution of Industry 4.0, which focuses on technologies like IoT, Big Data, AI, and robotics. These technologies transform existing and new cities into smart cities.

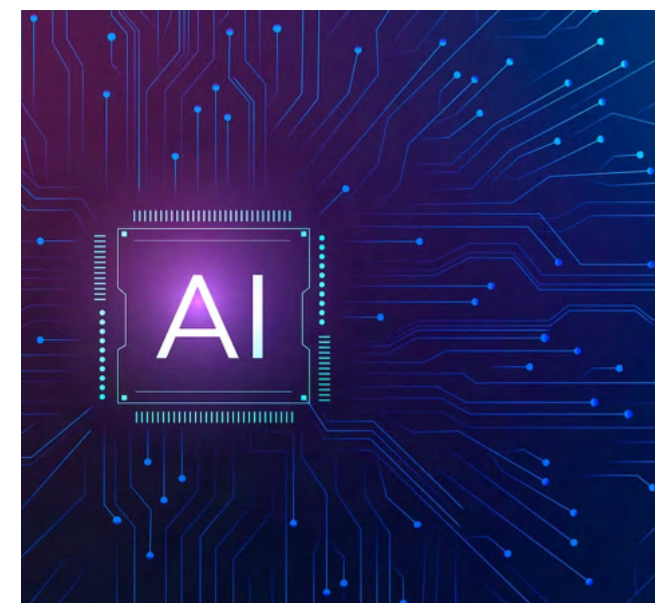
INDUSTRY 4.0



Internet of Things



Big Data

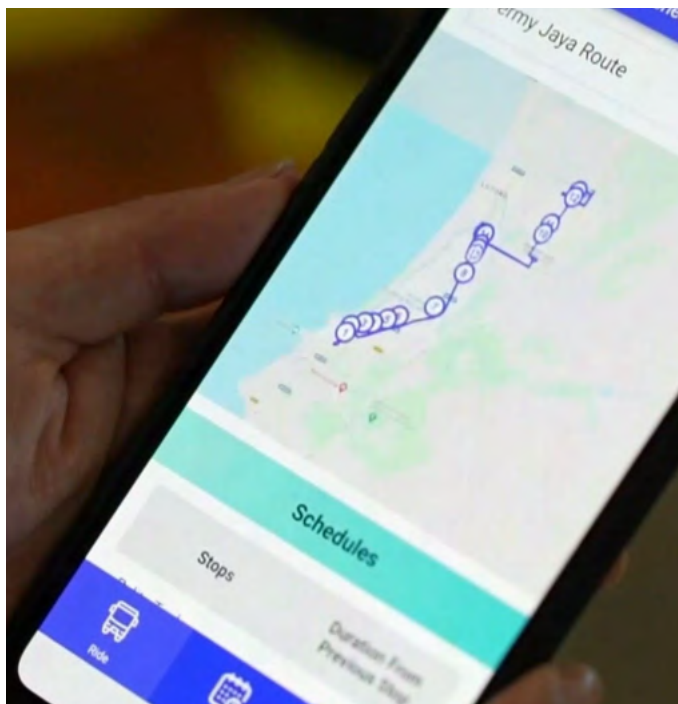
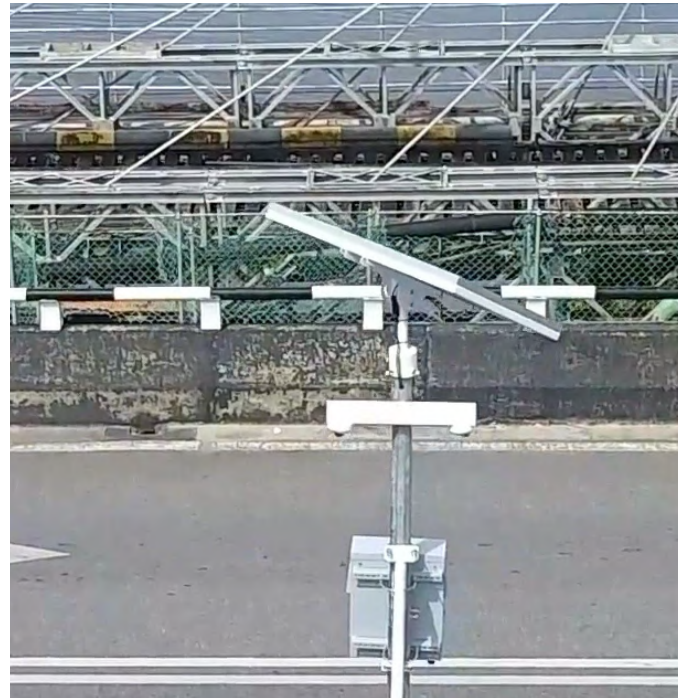


Artificial Intelligence



Robotics

A smart city gathers information from various sources to enhance the efficiency of handling different aspects of a city, like public services, public transport, traffic management and safety and security. This creates a digital system that improves quality of life, safety, community engagement, resource use, and environmental sustainability. It also strengthens digital connections between urban and rural areas.



Collaboration is vital for smart city success, with all sectors, especially society, playing a vital role. This digital transformation and tech shift reshape how communities live through smart solutions, fostering a smarter urban setup.

For Miri, adapting to rapid digital change is crucial. Sarawak's Post-Covid Development Strategy (PCDS2030) and the UN's Sustainable Development Goals (SDGs) serve as a guide for Miri, offering direction to the Miri City Council, government agencies and other stakeholders involved in implementing and advancing the Smart City concept in Miri, outlining policies, strategies, and benchmarks to address transformation challenges.



This Miri Smart City Blueprint 2020-2030 provides a road map for Miri to achieve its goal of becoming a Green, Smart, and Most Liveable International Resort City by 2030. This blueprint covers smart city elements, coordination among agencies and stakeholders, and supports Miri's and Sarawak's smart city goals.



2

LANDSCAPE AND CASE OF CHANGE

2.1 UNITED NATIONS SUSTAINABLE DEVELOPMENT GOALS (SDGs)

Worldwide, sustainable development is gaining traction as nations and cities look to ensure economic growth does not come at the expense of the environment and quality of life. The United Nations Sustainable Development Goals (SDGs) are a comprehensive set of global objectives designed to address the world's most pressing challenges and create a more equitable and sustainable future for all.



All UN member states, including Malaysia, have adopted the 17 SDGs, which encompass a wide range of interconnected issues, including poverty, inequality, climate change, environmental degradation, peace, and justice. With a target to be achieved by 2030, the SDGs serve as a universal call to action, urging governments, businesses, communities, and individuals to collaborate and contribute towards building a better world that leaves no one behind.

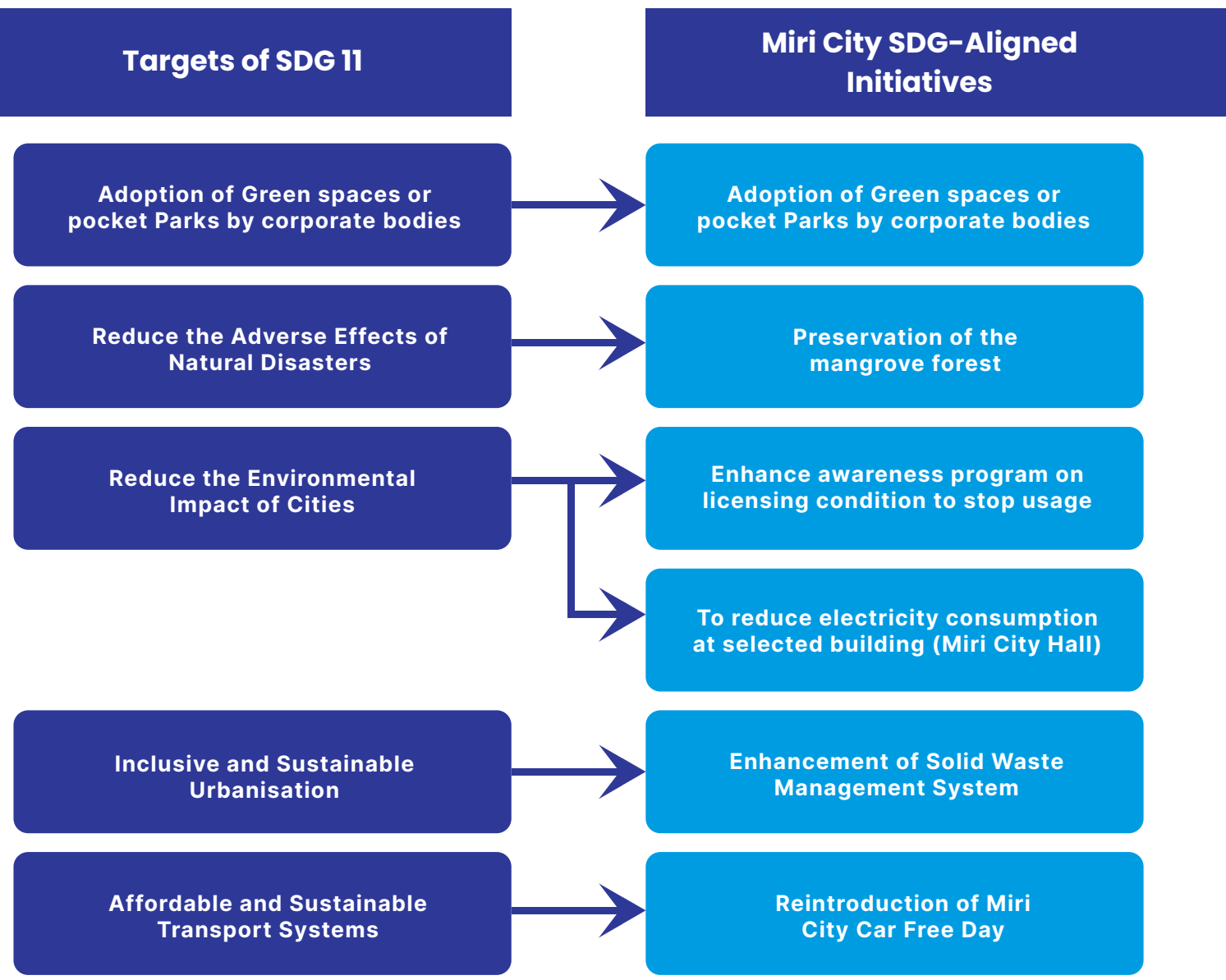
**RANCANGAN
MALAYSIA
KESEBELAS**
2016-2020
PERTUMBUHAN BERPAKSIKAN RAKYAT



**RANCANGAN
MALAYSIA
KEDUA BELAS**
2021-2025
MALAYSIA MAKHUR, INKLUSIF, HAMPAH



Miri City Council has aligned its strategies to SDGs, particularly SDG11 – Sustainable Cities and Communities



2.2 SARAWAK POST COVID-19 DEVELOPMENT STRATEGY 2030 (PCDS 2030)



The Sarawak Post COVID-19 Development Strategy 2030 stands as a comprehensive long-term plan that outlines Sarawak's trajectory toward becoming a developed state by 2030. This plan serves as the cornerstone of the Sarawak Government's efforts to realize economic prosperity, social inclusivity, and environmental sustainability by 2030.

Encompassing 13 key sectors, PCDS 2030 presents a unified and robust strategy for positioning Sarawak to embrace an extensive transformation through leveraging worldwide megatrends, focusing on sustainable development, and transitioning toward a low-carbon economy.

PCDS 2030 has set out the path to realizing Sarawak's vision through three primary pillars that centre on fostering economic prosperity, ensuring environmental sustainability, and promoting an inclusive society. These objectives will be executed through a focus on six prioritized economic sectors.

Key Highlights



Economic Prosperity

For Sarawak to achieve RM282 billion by 2030 from RM136 billion in 2019



Inclusive Society

For all Sarawakians to have equal opportunities to participate in the State's overall development and enjoy equitable distribution of wealth through jobs and business opportunities



Environmental Sustainability

To ensure clean and healthy environment for current and future generations

2.3 SUSTAINABLE SARAWAK BLUEPRINT



Sarawak plans to prioritise its environmental sustainability and align its development path with the Sustainable Development Goals (SDGs) while pursuing balanced economic growth by adopting a responsible approach towards development of its natural resources. To do this, a Sustainable Sarawak Blueprint will be developed to guide all government agencies, businesses and communities in achieving Sarawak's desired environmental sustainability goals.



The blueprint will address concerns related to biodiversity conservation and natural resources management as well as climate change mitigation and adaptation and concurrently creating an enabling environment with modern infrastructure in tandem with the country's Fourth Industrial Revolution or Industry 4.0

Datuk Patinggi Tan Sri Abang Johari Tun Openg

Premier of Sarawak
Minister for Energy and Environmental Sustainability, Sarawak



Sarawak is focused on three sources of clean green energy, namely hydropower, solar energy, and hydrogen. Hence, we are on the right track in improving the environment and moving to a more sustainable future. Sarawak hopes that environmental, social and governance (ESG) evaluation will be further introduced in the state, placing Sarawak among the world's forerunners in such efforts

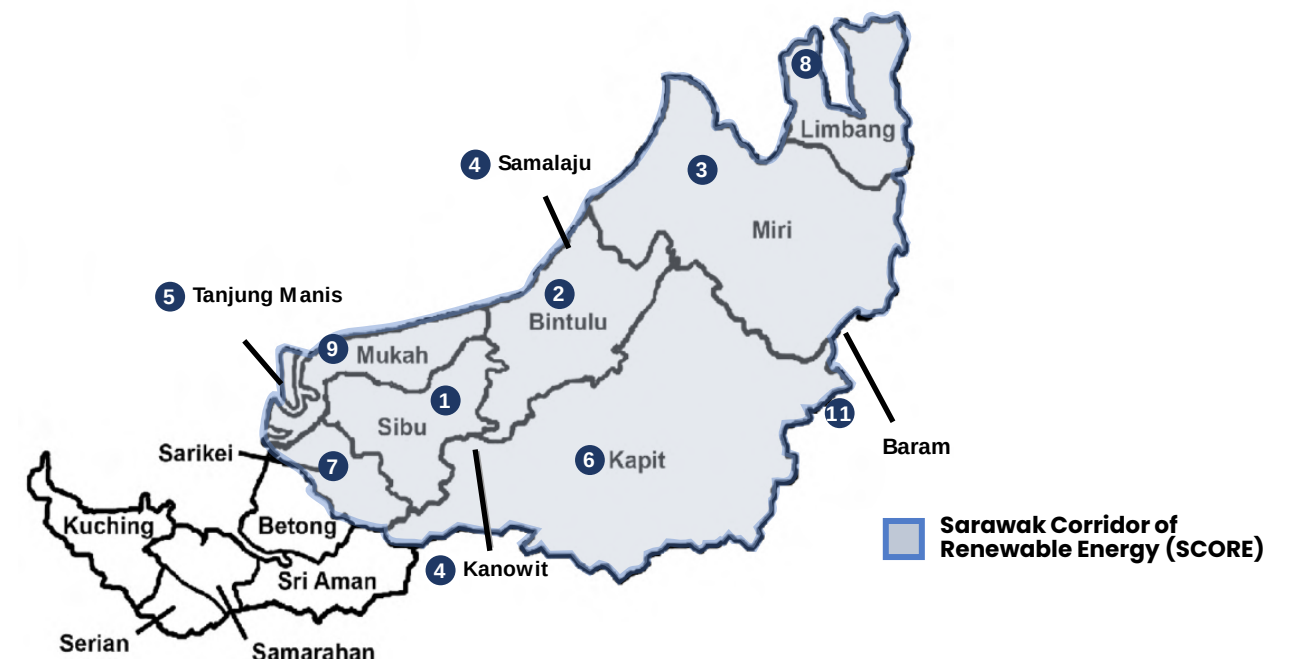


Dr Hazland Abang Hipni

Deputy Minister of Energy and Environmental Sustainability, Sarawak

2.4 SARAWAK CORRIDOR OF RENEWABLE ENERGY (SCORE)

The Sarawak Corridor of Renewable Energy (SCORE) is a comprehensive development initiative that aims to leverage the region's vast renewable energy resources to drive industrialization, economic growth, and socio-economic development. The initiative aims to create job opportunities, improve infrastructure, and contribute to the overall development of Sarawak while adhering to environmental sustainability practices.



Miri's strategic location and well-established infrastructure allows it to assume a pivotal role in this transformative initiative. As a key urban centre and economic hub within SCORE, Miri contributes significantly to the corridor's objectives of fostering sustainable development and economic growth.

Rank*	Growth Node	No. of Projects	Investment (RM Million)
1	Sibu	104	1,309.8
2	Bintulu	93	6,535
3	Miri	45	610.6
4	Samalaju	39	54,471.9
5	Tanjung Manis	22	2,470.1
6	Kapit	17	53.1
7	Sarikei	12	904
8	Limbang & Lawas	9	56.2
9	Mukah	8	2,094.2
10	Kanowit	3	73.9
11	Baram	2	0.5
		354	94,149.1

2.5 MIRI BACKGROUND

Miri City Background

Situated in the northern region of Sarawak, Miri is a coastal city known for its strategic position as an economic gateway. Historically rooted in the oil industry, Miri has evolved into a vibrant urban centre that combines its industrial heritage with modern amenities. Miri also boasts a diverse cultural scene, hosting various festivals and events throughout the year. Its proximity to natural attractions, including beaches, rainforests, and the renowned UNESCO World Heritage Site, Gunung Mulu National Park, makes Miri a hub for eco-tourism and adventure enthusiasts. As a crucial player in the Sarawak Corridor of Renewable Energy (SCORE), Miri contributes significantly to regional development, with a focus on sustainable growth and economic diversification.



Miri achieved city status on May 20, 2005, marking a significant milestone as Malaysia's tenth city and the first non-state capital to attain such a distinction.

Miri's developmental trajectory aligns with its ambition to transform into a Green, Smart, and Most Liveable International Resort City by 2030. This aspiration is in line with Sarawak's Post-Covid Development Strategy (PCDS2030) and the national and state adoption of the UN's Sustainable Development Goals (SDGs).



Miri City Council

Miri City Council (MCC) is the local administrative authority for Miri City. In addition to Miri City, MCC's jurisdiction also encompasses the Bario Sub-District, covering a total area of over 5,000km2. MCC, under the purview of the Ministry of Local Government and Housing, Sarawak, is the main organization in charge of managing the development of Miri City and its surrounding area.



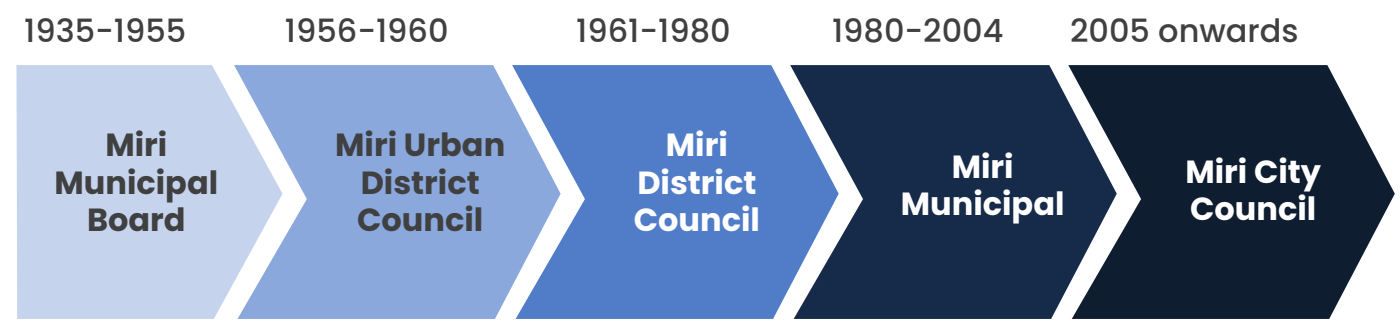
The council, which started out as the Miri Municipal Board in 1933, became the Miri City Council in 2005 when Miri was elevated to city status.

The main function of MCC is to provide the public services and manage the events and affairs of Miri City. The services provided by Miri City Council include rubbish collecting, provision of street lighting, maintenance of roads and drains, management of the disposal and conservancy system, collection of assessment rates and bills, and other activities under the authority of Miri City Council.

Miri City Council Functions

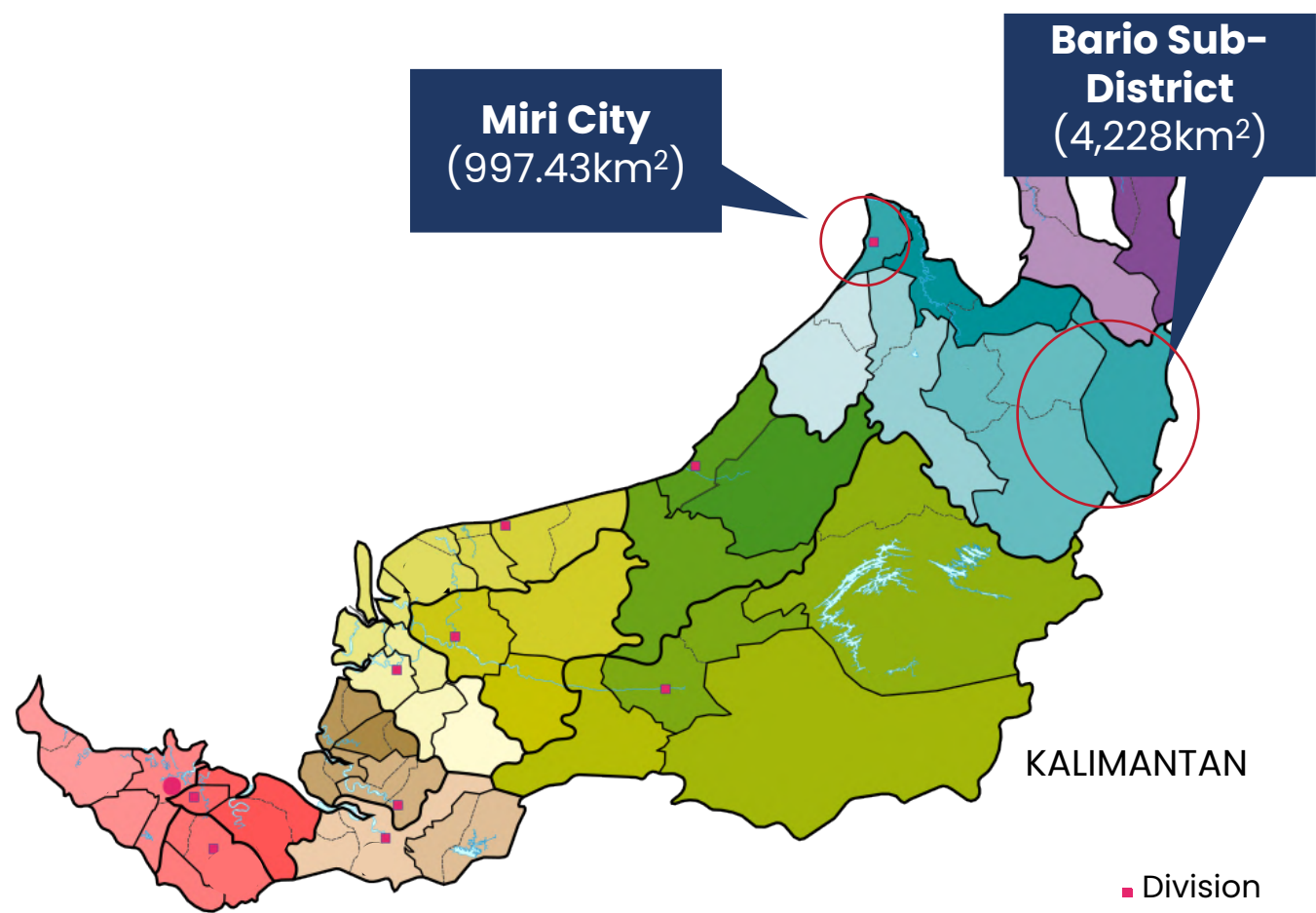
- Provide reliable and efficient public services
- Provide and upkeep infrastructure, public amenities, and facilities
- Ensure orderly development of the building industry
- Promote and safeguard public health
- Complement efforts to preserve the environment
- Promote harmonious community relationships

Services to businesses and residents of Miri City are provided by Miri City Council, which have evolved from Miri Municipal Board upon Miri’s conferring of city status



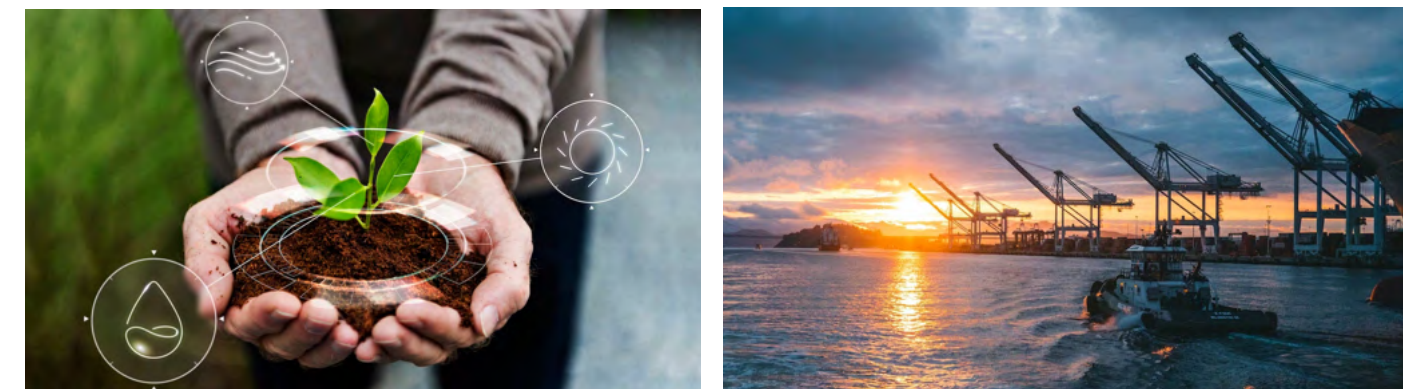
The responsibility of the council has become more important when Miri was recognised as a city on 20th May 2005, the first non-state-capital city to be bestowed such status.

MCC’s jurisdiction covers both Miri City and the Bario Sub-District which in total encompasses an area in excess of 5,000km²



2.5.1 CASE FOR CHANGE

The need for Miri to shift from its reliance on traditional economic sectors such as oil & gas, agriculture and manufacturing and move towards becoming a sustainable smart city is underscored by a series of interconnected and compelling challenges that necessitate this transformation.

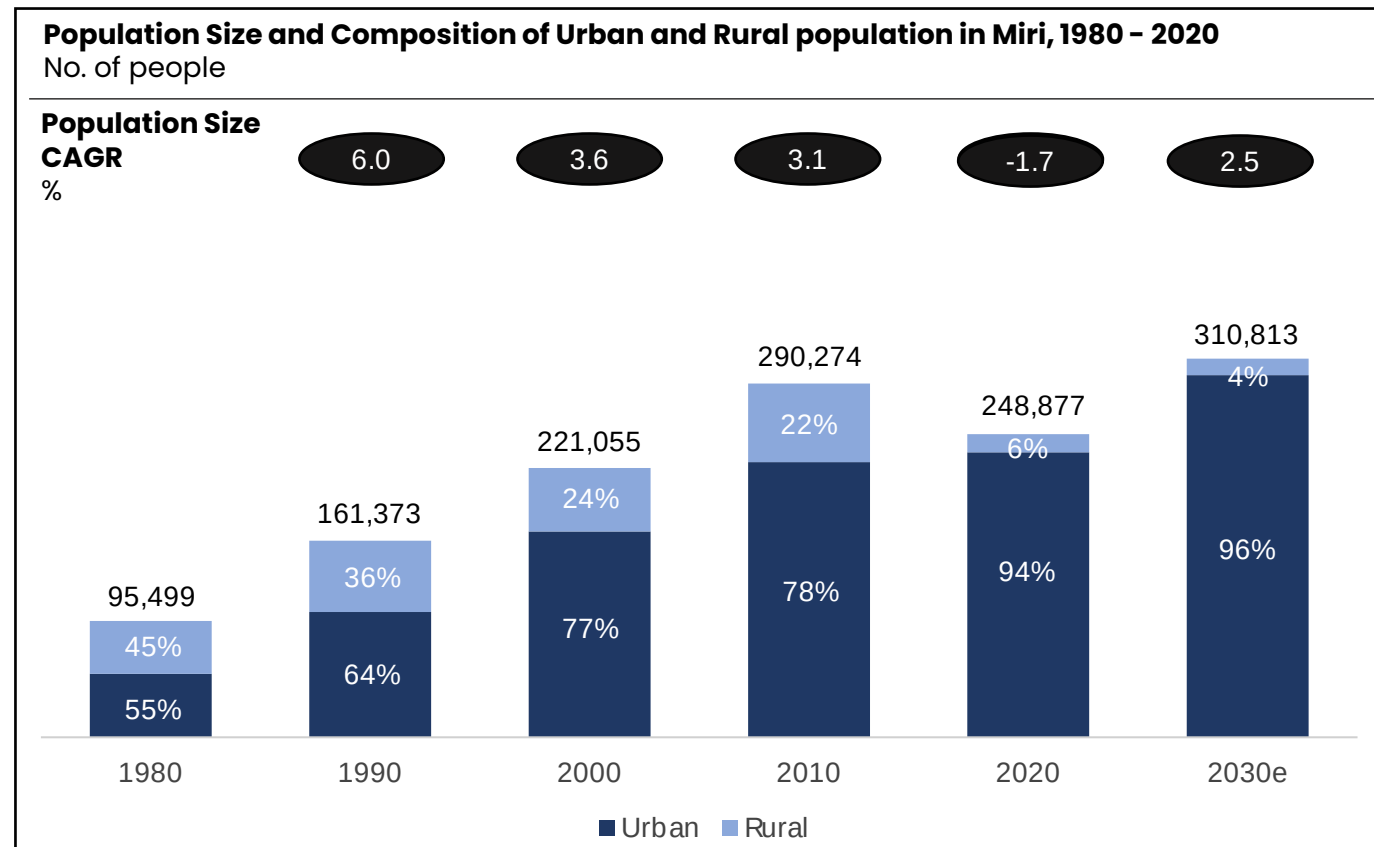


Miri is grappling with a declining population, compounded by the gradual sunset of the oil and gas industry – a sector that has historically been central to its economy. Concurrently, data reveals that Miri’s household income experienced the lowest growth rate among Sarawak’s Top 5 districts between 2016 and 2019, potentially indicating economic stagnation. These indicators collectively highlight the urgency for diversification and innovation in economic development.

Furthermore, shifting trends and evolving demographics require adaptation. The global momentum towards sustainability and smart technologies has reshaped the trajectory of urban development. In this context, Miri’s pivot towards becoming a sustainable smart city aligns with the changing demands of modern society and the imperative to embrace greener, technologically advanced practices.



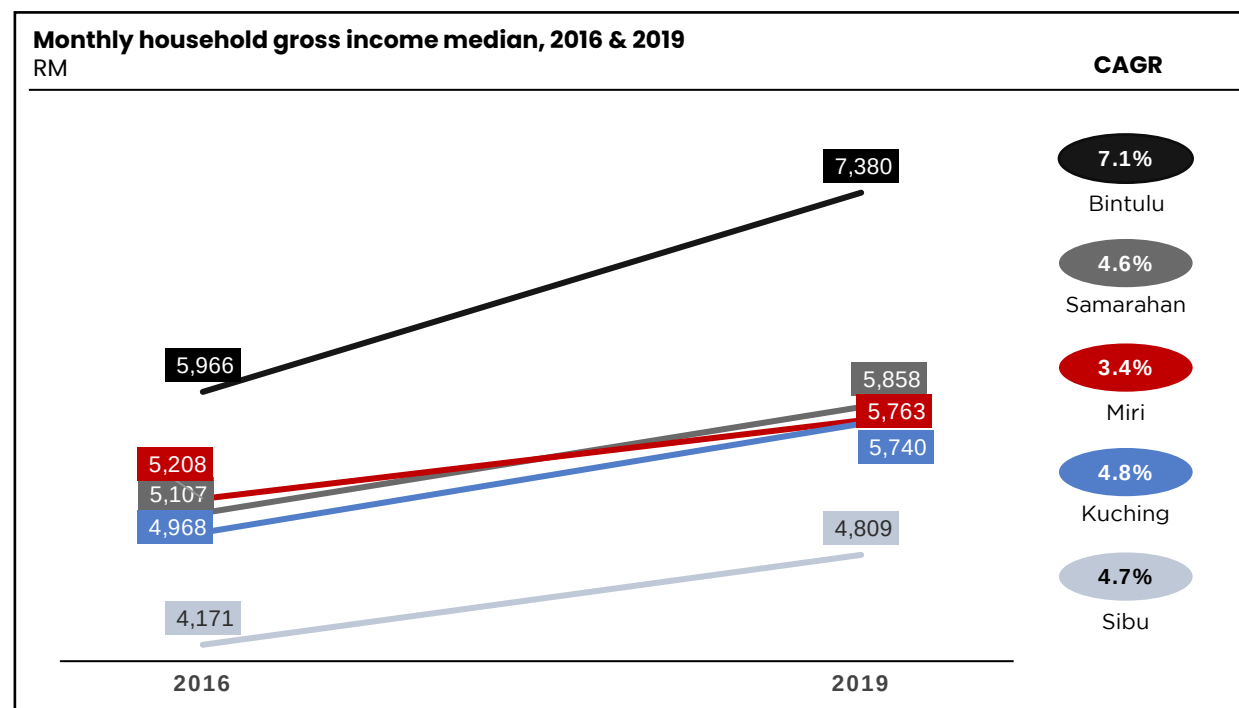
Miri's population declined by 100,000 due to the pandemic, and even if pre-pandemic growth rates are regained, reaching 2019 levels remains unattainable by 2030



Note: 2030e figures are calculated based on the CAGR growth for population size and urban population between 2010–2019 at 2.5% and 2.8% respectively.

Source: IBettencourt, Luis. *Urban Growth and The Emergent Statistics of Cities*, 2020.

Household income in Miri registered the lowest growth rate among Sarawak's Top 5 districts between 2016–19



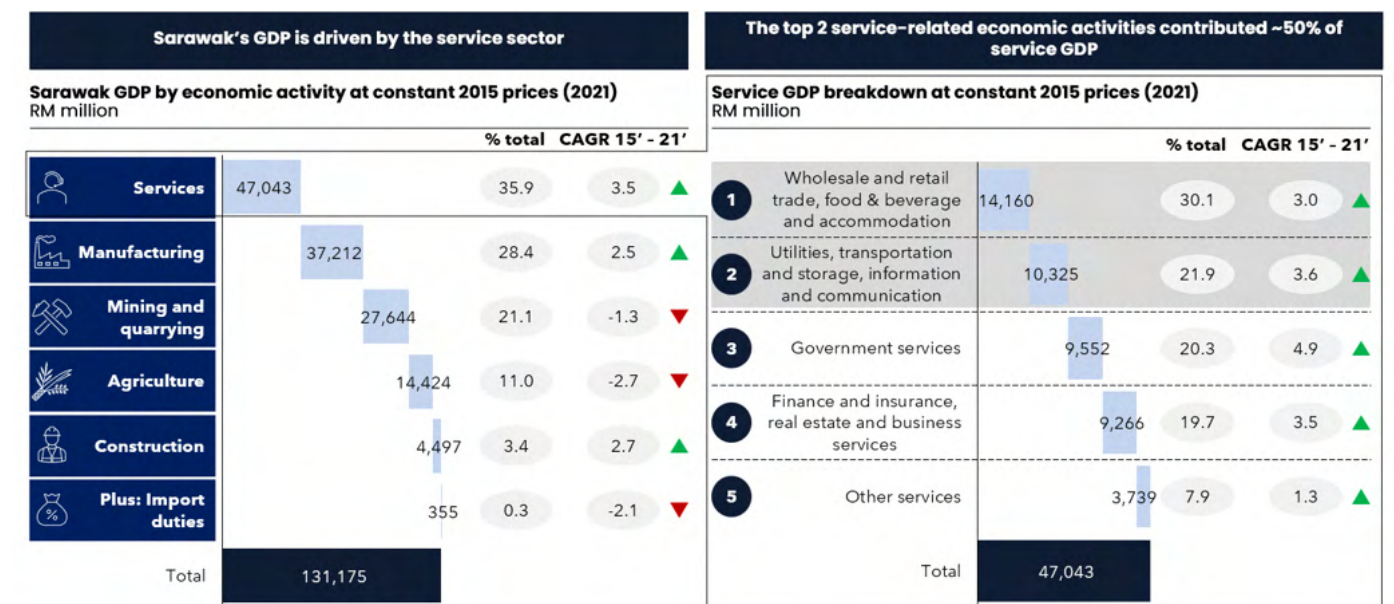
Source: Department of Statistics Malaysia

Coupled with changing trends and demographics, Miri must update the focus of its main economic activities to ensure sustainable growth

Based on Malaysia's economic and demographic trends...

1 Sarawak's services sector increasingly prominent

Service-related economic activities contribute the most to Sarawak's GDP and have historically outpaced others



Source: Department of Statistics Malaysia

2 Oil and gas sector is sunsetting

Malaysia's petroleum reserves at a glance

6.9

Billion boe

~61%

of total in Sarawak

Reserves to last 15–40 more years, time is running out

15

Years left, BAU

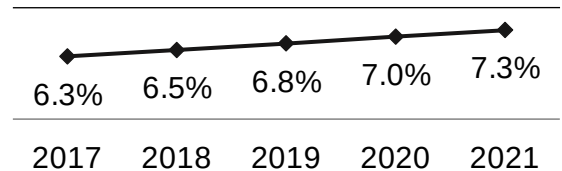
40

Years left, optimised

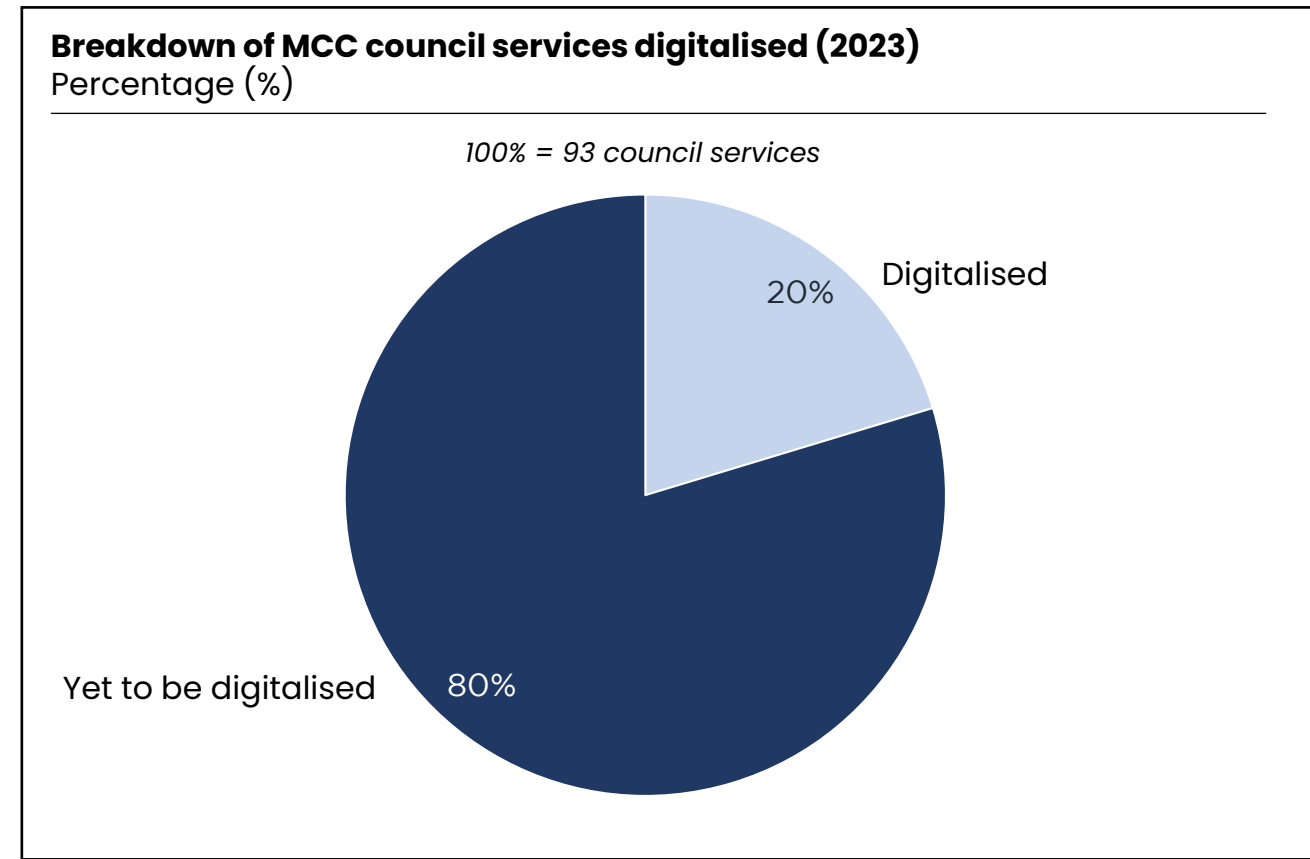
3 Rapidly ageing population

Malaysia achieved "ageing nation" status in 2020

Elderly as % of total population



In addition to that, Miri lags behind in digitalisation of service delivery which is key for efficient use of resources given limited budget



Source: MCC Transformation and Innovation Unit

Key Insights

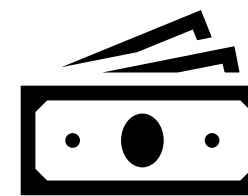
- MCC has embarked on digitalisation of its council services
- However, to date only 19 out of 93 council services have been digitalised
- With only 20.4% of services digitalised, the majority of services still require in-person transactions with physical documents submitted

The Importance of being a Green, Smart, and Most Liveable International Resort City



Being a smart, green and liveable city is important for Miri to ensure the people's satisfaction and well-being, attract talent and increase the city's competitiveness

The importance of being a liveable, smart and green city



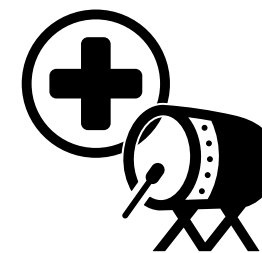
Economic Competitiveness and Job Creation

- Economic Vibrancy – Industries focused on knowledge, innovation, quantity of startups, e-commerce revenue/GRDP
- Economic Competitiveness – gross income, unemployment rate, internet access, average internet speed, travel time
- High-income jobs – talent pools that are eligible



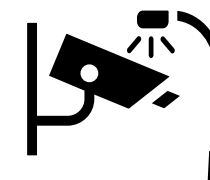
Environmental Health and Sustainability

- Environmental Sustainability – GHG emissions, rate of deforestation, electricity generated from renewable energy, enforcement of environment regulation
- Environment and biodiversity preservation



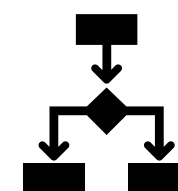
Well-being (Health, Culture, Education)

- Socio-cultural conditions – access to heritage, cultural events
- Access to quality education for all – tertiary enrolment rate, expenditure on education
- Access to quality healthcare – density of hospital beds, life expectancy, density of physicians,
- Access to basic sanitation services and infrastructure



Safety and Security

- Physical security – crime rates, built and design of
- environment surveillance Environmental security – 10 year moving average natural disaster death toll



Effective Governance

- Prudent management of tax revenue/government revenue
- Quality of e-government
- Quality of service delivered
- Transparency and integrity of decision-making

The Malaysia Smart City Framework provides a clear guide for Miri City to emulate

The Malaysia Smart City Framework Defines Smart City as ‘cities that use ICT and technological advancement to address urban issues including to improve quality of life, promote economic growth, develop sustainable and safe environment and encourage efficient urban management practices.



Key Success Criteria

At its core, smart cities initiatives have been successfully when:

- Comprehensive primary and basic infrastructure are in place, referring to fundamental physical facilities such as roads and bridges
- Connected and modern digital infrastructure allow for correlation of data from multiple sources to generate new value and efficiencies
- Initiatives are aligned with the needs of the city based on identified urban challenges



Smart Government

- Gender and vulnerable group friendly
- Open data and information disclosure



Smart Economy

- High productivity
- Innovation in all sectors of the economy
- Utilisation of ICT
- Competitive economy and attractive investment opportunities



Smart People

- Low carbon city and green lifestyle
- Empowered community
- Talented human capital with high digital skills



Smart Living

- Urban safety and security
- High quality healthcare



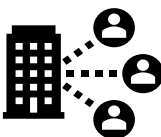
Smart Mobility

- Inter-governmental data sharing
- Seamless and efficient connectivity
- Integrated, safe and reliable roads and public transport
- Sustainability /green as a core principle



Smart Environment

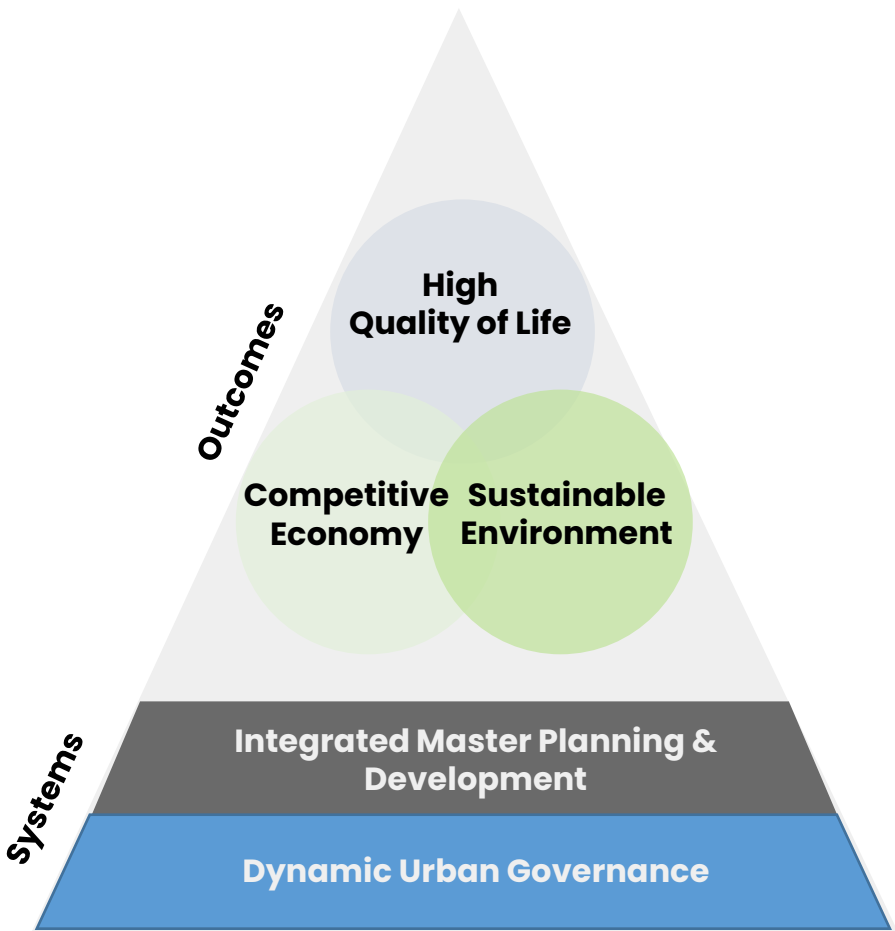
- High quality of life in housing areas
- Environmental protection
- Clean environment
- Sustainable resource management
- Readiness towards disaster resilient cities



Smart Digital Infrastructure

- Flexible and affordable modes of transport
- Comprehensive network coverage
- Widespread adoption of high-speed internet

Miri can reap the benefits of being a smart, green and livable city through a holistic framework ensuring a balance between the environment, quality of life and economic competitiveness



Source: ICentre for Liveable Cities Singapore; ACI Global Liveable and Smart Cities Index (GLSCI)

Detailed Objectives		Potential Indicators
 Enhance economic vibrancy & competitiveness	Monthly household gross income median, hotel occupancy rates, e-commerce revenue, quantity of startups	
 Promote environmental friendliness & sustainability	Electricity generated from renewable energy, enforcement of environment regulations, % of recycled waste	
 Improve socio-cultural conditions	Density of hospital beds, tertiary enrolment rates, mortality caused by road traffic injuries, length of pedestrian walks	
 Maintain security & stability	Number of homicide cases, crime index	
 Strengthen governance	Local tax revenue/gov revenue, quality of e-government	

Smart Cities incorporate the use of digital solutions for a more efficient and environmentally-friendly city, leading to economic growth and enhanced quality of life

Smart City Definition by OECD and IMD



Organisation for Economic Cooperation and Development (OECD)

Initiatives or approaches that effectively leverage digitalisation to boost citizen well-being and deliver more efficient, sustainable and inclusive urban services and environments as part of a collaborative, multi-stakeholder process.



International Institute for Management Development (IMD)

An urban area that has become more efficient and/or more environmentally friendly and/or more socially inclusive through the use of digital technologies.

Main Goals and Objectives of Smart Cities

The main goal of a smart city is to optimise city functions and promote economic growth while also improving the quality of life for citizens by using smart technologies and data analysis.

Global Examples of Smart City Solutions

- Common Data Platform allowing big data to be used to optimise operations and maintenance of infrastructure
- Smart Sensors to reduce overflow waste
- Data driven traffic management to improve air quality
- Consolidation of multiple data sources in automatic leakage management
- Full scale energy savings through data analytics software
- Energy-efficient Smart Store Supermarket
- Digitalisation of district heating
- Outdoor lighting and smart city living lab
- Smart Air Quality Sensors
- Smart Traffic Control Systems
- Gunshot Detection Technology
- Smart Waste Management Systems

A Green City is a method of city planning that focuses on the cleanliness of its air, water and land, and is people-centric by design

Definition of Green City by ADB



Asian Development Bank (ADB)

Green cities are cities where the cleanliness of the air, water and land are placed at the forefront and ideas on public spaces are considerate and inclusive of all residents of a city including families, children, the elderly and the poor.

Main Goals and Objectives of Green Cities

- Improve air, land and water through management of the environment
- Improve economic competitiveness
- Promote equity

Elements of a Green City in Asia

Low impact on the environment and climate change

Recycle and manage waste in innovative ways, and utilise renewable energy resources to mitigate their impact on the environment

Inclusive development and engaged residents

Include all residents, including the poor and disadvantaged, and provide mechanisms for people to participate in decision making on how a city is developed and managed

Resilient against disasters and other shocks

City planning and development considers and anticipates the impact of natural hazards, ensuring residents are safe and infrastructure remains intact

Green space and walkability

Do not concentrate its development on roads and automobile traffic, but rather move towards vehicle-free areas

Liveable cities assess quality of life through 3 areas: economic competitiveness, high quality of life and sustainable environment

Definition of Liveability by CLC



Global Liveability Index by Centre for Liveable Cities

- CLC defines liveability based on Mercer's definition, which centers around an individual's quality of living. Specifically, it is an appraisal of an individual's subjective emotional state and personal life.
- One can live in a city that ranks high in terms of quality of living and still suffer from a low quality of life because of unfortunate personal circumstances (illness, unemployment or loneliness, etc).

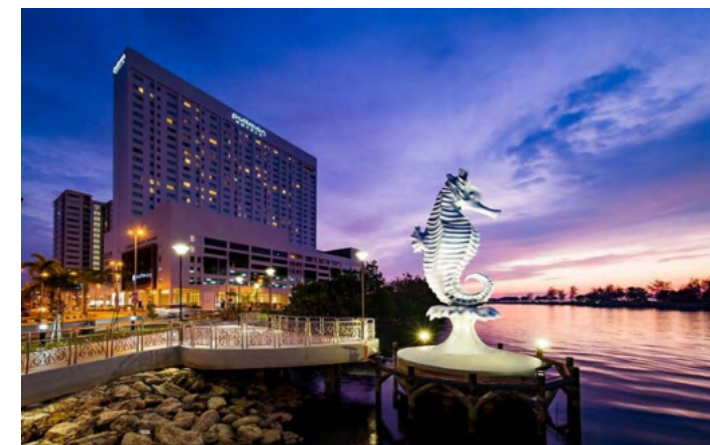
Main Goals and Objectives of a Liveable City

There are three desired outcomes of a liveable city – competitive economy, high quality of life, and sustainable environment.

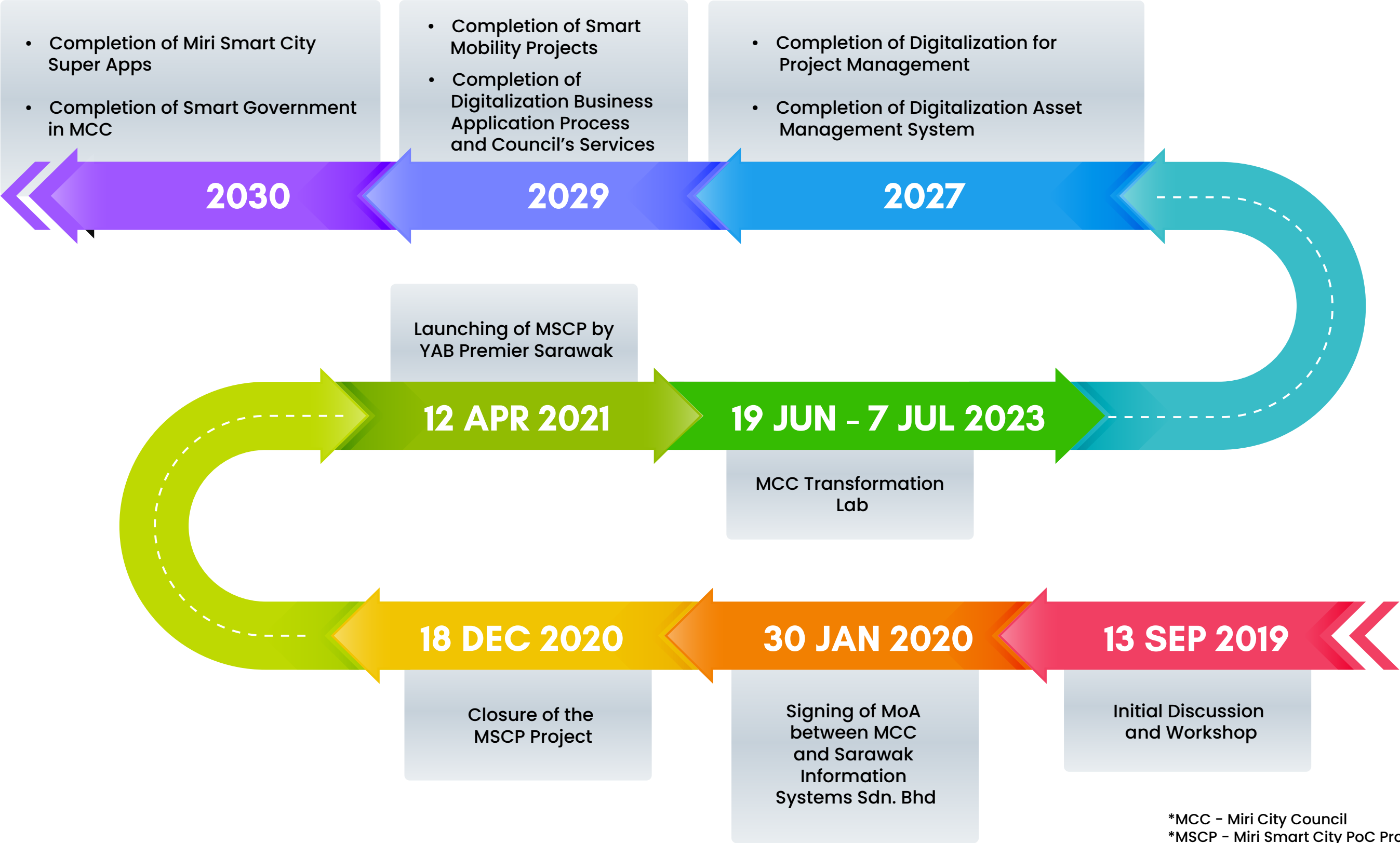
Global Example of a Liveable City Solution



- Seamless integration of the Mass Rapid Transit (MRT) station, bus interchange and public residential housing in Singapore
- The public transport system allows access to employment, allowing for economic opportunities and attracting talent
- It also provides a low carbon means of mobility, allowing citizens to avoid using private vehicles



2.5.2 MIRI SMART CITY ROADMAP



3 SMART CITY PROOF OF CONCEPT

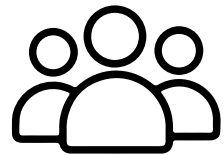
The Miri Smart City Proof of Concept Project (MSCP) was undertaken as an exercise to determine the practicality of transforming ideas into reality and to verify that ideas would function as intended. The main objective of the initiative was to demonstrate the feasibility of the Smart City Concept while working within the constraints of the resources, budget and time.



The project officially began on January 17, 2020, with the signing of the Memorandum of Agreement between Miri City Council (MCC) and the primary project implementer, Sarawak Information Systems Sdn. Bhd. (SAINS), and was officially completed on 18th December 2020.

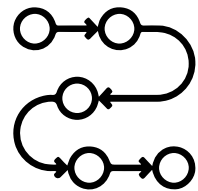
Design Principle

The MSCP was designed to address the requirements and challenges faced by stakeholders in Miri City, through the use of innovative and creative strategies. The design process was centered around three core components: People, Process, and Technology.



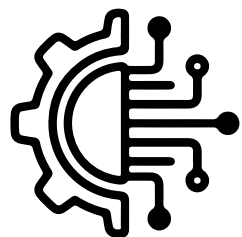
People

To ensure the project's success, the project team took into account not only the personnel managing backend systems but also the general public using these systems. To increase acceptance and the likelihood of success, information sharing, engagement, and promotional activities were conducted throughout the project implementation cycle. User training and acclimatization were also provided to ensure that the newly introduced systems were viewed as beneficial rather than burdensome.



Process

Optimizing processes was another pivotal aspect of the MSCP. Ensuring well-defined processes was essential to eliminating redundancy, bridging gaps, and avoiding single points of failure. The establishment of Standard Operating Procedures played a pivotal role in process optimization, outlining operational details and enabling the Smart City Command Centre to respond efficiently and systematically to various events.



Technology

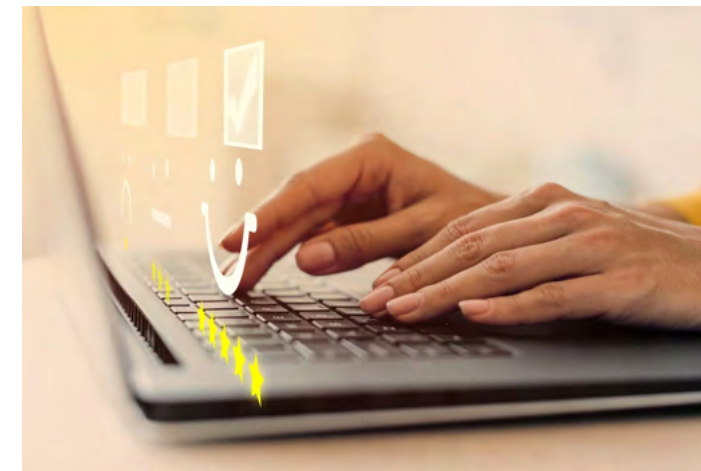
Selecting appropriate technologies was a critical consideration. The selected technologies needed to be relevant, cost-effective, sustainable, and manageable and were chosen based on their capacity to address long-standing issues. Consequently, the focus was on technologies that streamlined repetitive, laborious, and potentially hazardous tasks.

MSCP Engagement and Workshops

Between September 2019 and January 2020, three workshops were conducted to identify problems, needs, and initiatives for the MSCP. These workshops brought together City Councillors, representatives from Government Agencies, Service Providers, and the project team from SAINS. The workshops facilitated the exchange of ideas and informed prioritization decisions.



Public Engagement



Public participation was a crucial aspect of the MSCP. Input from the public was sought to ensure project outcomes were inclusive, representing various segments of the community. Public viewpoints were channeled through Councillors and Community Leaders during workshops. Feedback from students and the youth was also solicited through publicity programs conducted in cooperation with various educational institutions.

MSCP Initiatives

Twelve initiatives, were selected for the MSCP.



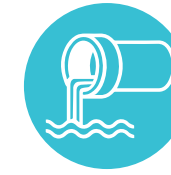
Digital Signages



Smart Bus



Smart Truck



Smart Drain



Safe City



Safe Parks



Smart Tourism



Miri CARES



Digital Council



Smart Parking



Smart Traffic



Smart City App

The initiatives were selected to achieve a balance between internal operations of MCC and matters concerning the general public.

3.1 SMART CITY INITIATIVES

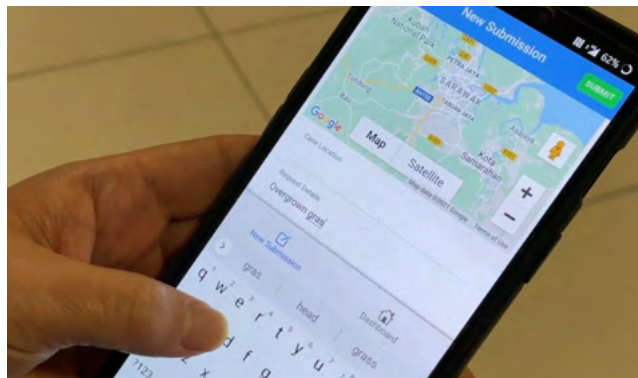


MIRI CARES

Miri CARES is a comprehensive digital platform that serves as a single point of interaction for the public with the council. As a comprehensive call-tracking solution, Miri CARES has the ability to handle complaints from diverse channels such as phone, email, mobile apps, messaging apps, including WhatsApp and WeChat, and social media. All calls are directed to the Command Centre.

Main Components

Miri CARES for the General



- The public can log in using their Sarawak ID to lodge complaints or make requests, with attached map locations and attractions.
- The public can also check the real-time status of their submitted cases at any time.

Miri CARES for Miri City Council



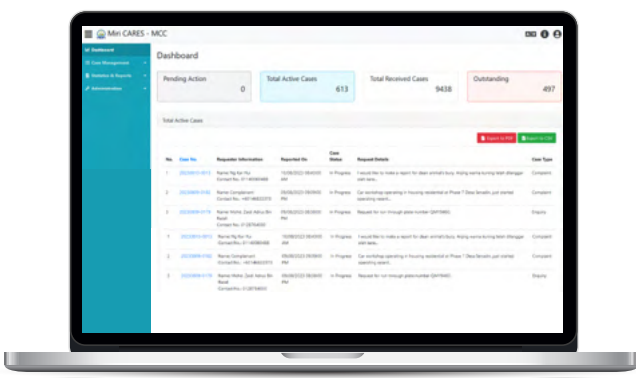
- Upon logging in with their office ID, MCC personnel can access cases that have been assigned to them.
- MCC staff members can update case progress while mobile.
- MCC may delegate cases to contractors and assess their subsequent progress.

Miri CARES for Contractors



Contractors will be notified upon assignment of a task to them. They are required to provide progress updates once the task has been successfully completed.

Miri CARES Desktop System



Upon receipt of a phone call from the public, the Command Centre can input cases into the system and subsequently allocate them to designated MCC personnel. MCC Management and the Command Centre can then generate case statistics and reports using the Miri CARES Desktop System, with the option of exporting these statistics and reports for future reference.

Benefits

- Enhances the operational efficiency of the council
- Provides MCC with better monitoring and oversight of case resolution by different service providers
- Provides the public with multiple, easy channels of communication with MCC
- Elevates the level of public satisfaction with the services offered by MCC



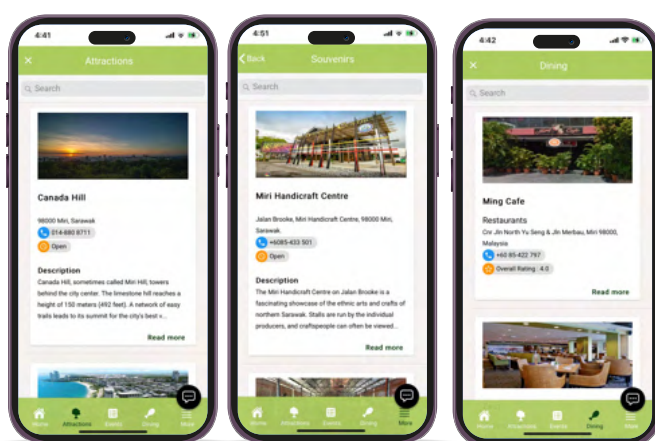
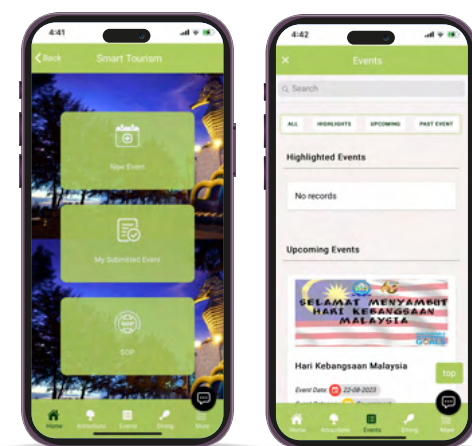
SMART TOURISM INITIATIVE

The Miri Tourism App provides tourists with a one-stop information centre for activities and locations of interest as well as ongoing and upcoming local events in Miri, introducing tourists to Miri via a mobile application.

Main Components

Event Publishing

The Miri Tourism App allows Mirians and event organizers to publish social events which are held in Miri on the app. This provides Mirians with a consolidated platform for event promotion while allowing tourists and locals alike to easily discover local events and happenings. All submitted events are approved by MCC before publishing.



Miri CARES for Miri City Council

The Miri Tourism app consolidates information on Miri attractions, providing tourists with an easy-to-use resource that lets them explore:

- Attraction spots
- Accommodations
- Local food

Emergency Information

The app publishes emergency hotline numbers allowing the public and tourists to quickly get help during emergency situations.

Benefits

- Allows event organizers to quickly and easily submit and promote local events.
- Consolidates scattered online tourism information such as events, attractions, accommodation, travel and food in Miri City onto one easy to navigate source
- Showcases the full diversity and range of attractions available in Miri City instead of the usual tourist traps.
- Provides tourists with an all-in-one app that allows them to better navigate the City



Miri Tourist Spots

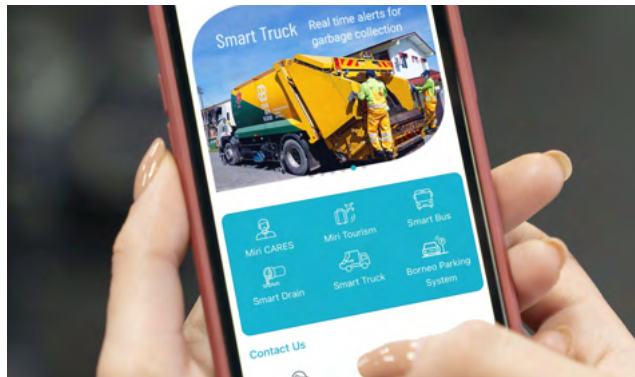


SMART TRUCK INITIATIVE

The Smart Truck initiative allows MCC to collect data on domestic solid waste and waste capacity to improve Miri's waste management service. Onboard cameras monitor collection activities and a centralized platform collects data for more optimized collection planning.

Main Components

Smart Truck App



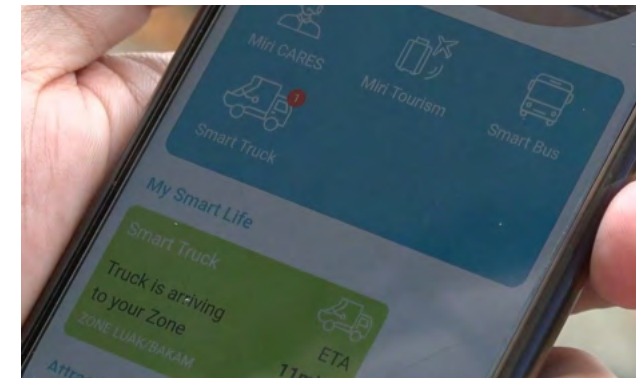
The Smart Truck App provides the public with useful, up-to-date information such as collection schedules and truck ETAs for collection zones.

Onboard Cameras & Vehicle Tracking



Various onboard cameras are installed in the truck to monitor waste collection. A camera at the back of the truck monitors the bin of the garbage truck, while a dashboard camera monitors the resident bin placements during the waste collection activity. Vehicle tracking also records the movement of the truck allowing the council and public to track truck ETAs.

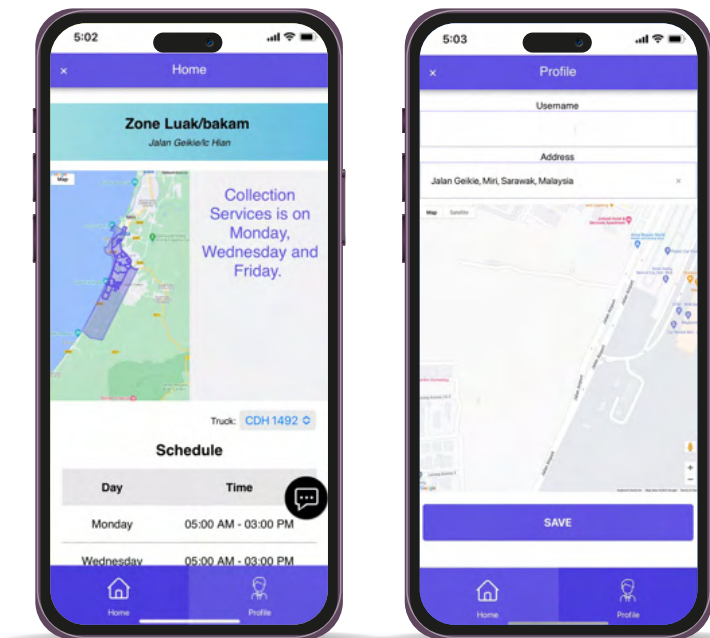
Centralized Platform



The centralized platform consolidates data from various truck operators and acts as a source of information for MCC to monitor the performance of the waste collection company. The platform also provides MCC with information for waste collection zone planning.

Benefits

- Enable MCC to analyse the data collected to plan more efficient waste collection zoning and optimized waste collection frequency.
- Allow MCC to monitor the contractor performance on rubbish collection.
- Panic button to allow the garbage truck driver to trigger the Command Centre in case of emergency.



Smart Truck App

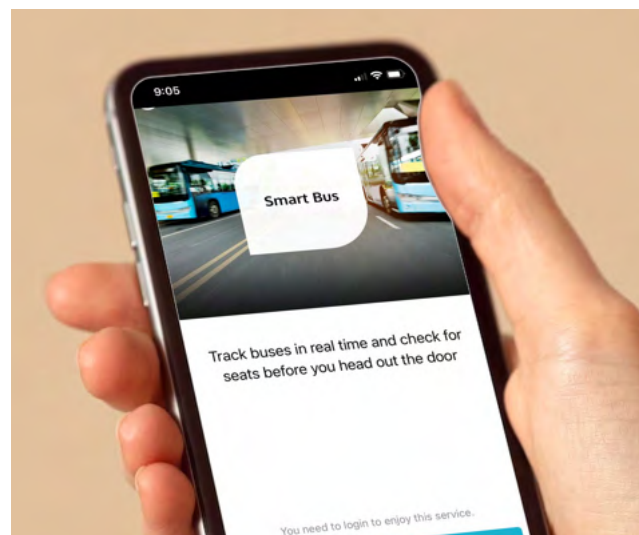


SMART BUS INITIATIVE

The Smart Bus initiative serves to improve the Miri public transportation service through digitalization and the use of the Smart Bus mobile app. The initiative enables the general public to more easily plan trips and access the City Bus Service.

Main Components

Smart Bus App



The app allows the public to plan their city bus journeys more efficiently by allowing them to save their favourite planned routes, and view a bus's current location as well as the number of seats currently available on the bus. Users can also pay for their fare using their eWallet (SarawakPay).

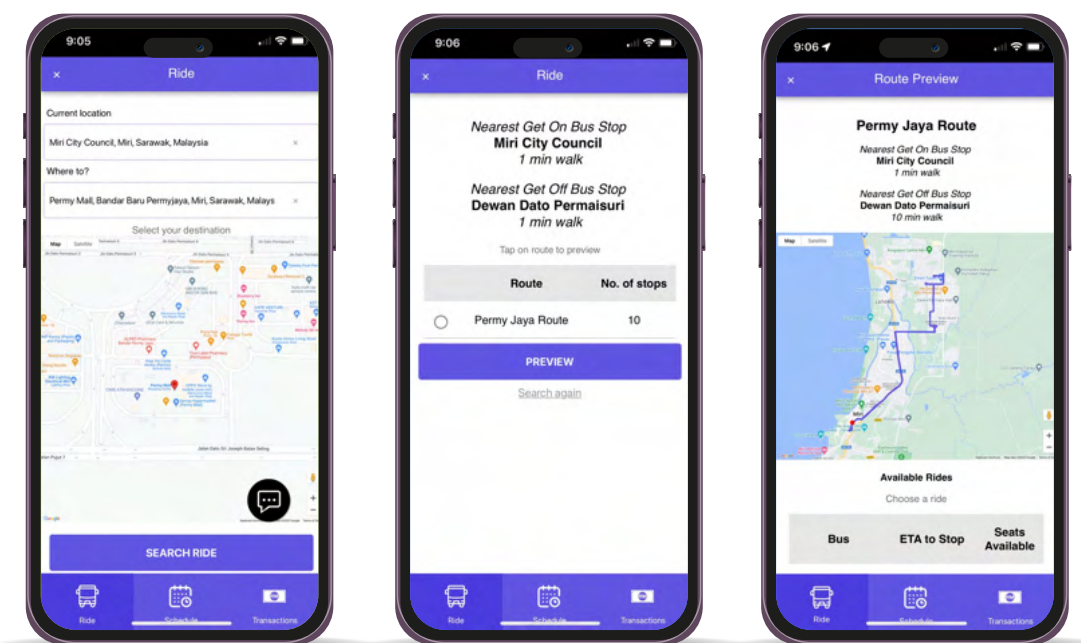
Centralised Platform



The centralized platform consolidates data from the various bus operators and acts as a source of information for MCC to maintain and upgrade relevant bus stops. It also allows MCC to provide faster and more accurate responses to the public based on the information on the platform.

Benefits

- Enables the public to access the City Bus Service through a mobile app
- Allows the public to plan their journeys more efficiently
- Provides real-time arrival information and decreases the perceived and actual wait times for passengers, improving satisfaction
- Allows the public to make informed decisions about alternative routes or transport modes by providing information about delays or cancellations of bus service
- Enables MCC to monitor the number of passengers and popularity of routes for planning purposes such as facility upgrading
- Provides a panic button that the bus driver can trigger during emergencies



Smart Bus App



SAFE CITY AND SAFE PARK INITIATIVES

The Safe City and Safe Park initiatives combine multiple technologies including visual surveillance, intelligent recognition technology, and public emergency alarm poles to maintain public security, improve emergency service response, and improve traffic conditions in the City Centre and Community Parks.

Main Components

Surveillance Camera and AI Technologies



The technologies deployed in the city areas and parks under the programme include general visual surveillance, Face Recognition and Vehicle Tracking. The Face Recognition surveillance technology assists law enforcement officers identify and track suspected individuals in a crowd, while the Vehicle Tracking surveillance technology assists in the tracking and recovery of missing or blacklisted vehicles.

Smart Poles



Smart poles integrate panic buttons, sirens, strobe lights and surveillance cameras, allowing members of the public to immediately call for help in an emergency, increasing public safety.

Command Centre



The Command Centre is the core operational centre and is manned by a team of agents 24/7/365. It acts as the front line of Council's public facing service. The Command Centre is tasked with monitoring general surveillance, receiving and responding to MiriCARES calls and feedback, receiving and responding to emergency calls from the emergency poles, and liaising with hospitals, enforcement agencies, the fire brigade, etc.

Locations Implemented



Safe City covers the Wireless Walk area and the Handicraft Centre; while Safe Park covers Taman Bulatan, City Fan, and Taman Awam

Benefits

- Provides the public with a direct line of contact to the command center during emergencies
- Improves city and park safety and security
- Allows authorities to more easily identify crimes and criminals

Outcome

Based on statistics from Royal Malaysia Police, Miri Division, property crimes decreased from 349 in 2020 to only 161 in 2021 and snatch thefts decreased from 4 cases in 2020 to 0 cases in 2021.



SMART COUNCIL INITIATIVE

Smart Council digitizes the council's manual processes for better business processing and more streamlined public service delivery. The initiative focuses on several areas, including digitalization of submission and approval of building plans, digitalization of valuation of rate-able properties, and an executive dashboard for council finances and accounts, human resources, property rates, and licenses.

Main Components

Digitalization of Building Plans



The manual submission and approval of building plans is both time consuming and costly for the Quality Submitting Persons (QSPs) due to the need to manually print, and submit each plan and amendment required, as well as the need to wait for feedback and comments from councils for any amendment of the building plan, if needed.

Digitizing the submission and approval process speeds up the approval process and reduces costs through:

- Online submission of building plans
- Online payment of fees
- Digital feedback/comment on building plans with annotations
- Digital workspace/dashboard to manage progress of approval for council officers

Digitalization of Valuation of rate-able property

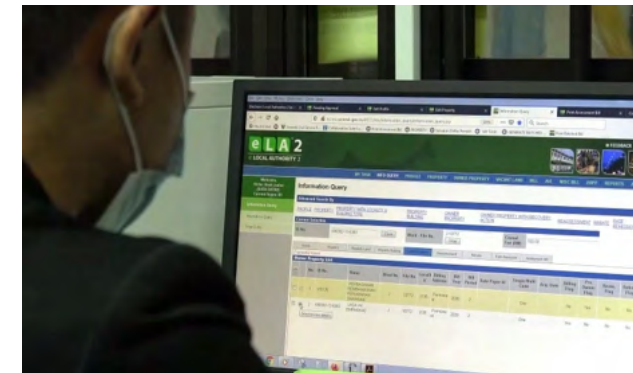


The valuation of rate-able properties is a tedious and time-consuming process that involves the manual calculation and recoding on floor areas based on the building floor plan as well as the determination of property value based manual valuation methods. Site information is also stored in paper files.

Digitization speeds up the valuation process by:

- Adopting digital floor plans
- Allowing calculations of floor area based on the digital floor plans
- Allowing easy access to nearby property information for quick valuation comparisons
- Integrating with the Rating and Billing System in eLA2

Executive Dashboard for Finance and Accounts, Human Resources, Rate-able Property, and Licenses



In order to obtain an executive summary of financial and accounting, human resource, property, and license information, each Department of the council must manually submit the summary information. This takes considerable time, and does not allow for timely decision making.

Digitizing the process allows:

- Information to be automatically collated from eLA2 digital warehouses and SmartCity apps to a digital dashboard

Benefits

Digitalization of building plans:

- Reduce the submission time for online submissions
- Reduce the cost of printing building plans
- Reduce the cost of plan storage for councils
- Allow QSPs to submit plans anytime, anywhere

Digitalization of valuation process:

- Reduce the time needed to calculate floor area
- Reduce the time needed to search for relevant and compatible property nearby the valuated property for valuation
- Eliminate the need for manual data entry

Digital executive summary dashboard:

- Provide prompt and timely information to management for better decision making

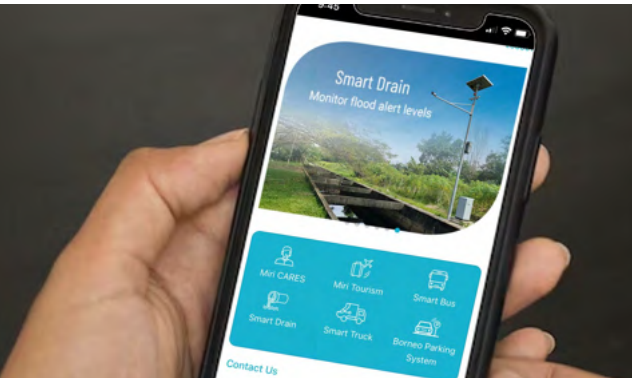


SMART DRAIN INITIATIVE

The Smart Drain Initiative makes use of smart sensors to collect water level data and project the underlying cause of any changes. This allows authorities to more efficiently manage the maintenance of drains as well as gather data for earlier flood prevention and warning.

Main Components

Smart Drain App



The Smart Drain App allows the public to view the current water levels of designated areas and provides a flood warning system when water level thresholds are breached. The app also provides users with flood relief centre information during flood situations.

Sensors & Cameras



Smart sensors and cameras are located at strategic locations along the main water channels and rubbish trap areas to capture water level information in real time which is relayed back to the command centre for preventative action or early warnings.

Smart Pole



Smart Poles placed in strategic areas are equipped with sirens and strobe lights that will automatically activate if the water level rises above a certain threshold.

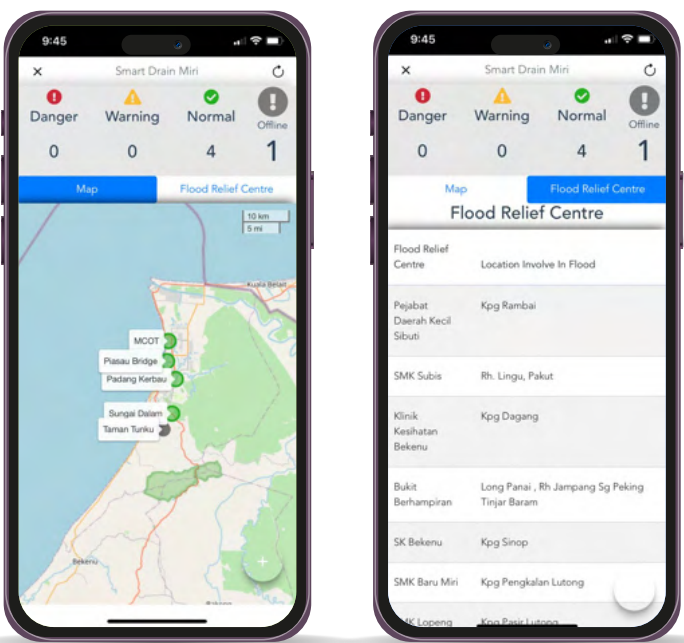
Centralised Platform



The centralised platform consolidates data from the various sensors and acts as a source of information for MCC to manage the maintenance and upkeep of drains along the Main Water Channel. It also provides MCC with information for more sustainable and holistic planning and upgrading works for better city planning.

Benefits

- Allows early detection of rising water levels and lets the Command Centre take flood preventive measures, when possible, to prevent the issue from escalating
- Provides the public with a flood warning system and flood relief centre information
- Allows local council to monitor the cleaning of drains and maintenance work done by the contractor to ensure the drain is free from siltation
- Reduces flash flood occurrence due siltation
- Reduces flood damage to public property through the provision of an early detection and warning system.



Smart Drain App



DIGITAL SIGNAGE INITIATIVE

The Digital Signage initiative allows prompt, accurate and effective information to be disseminated through online digital multimedia channels to improve public information delivery. All content is centralized and standardized, making it easier and more convenient for the council to manage, while allowing the general public to receive up-to-date information.

Main Components

LCD Screens



Highly selected outdoor rated LCD screens with customized mounting structures are strategically positioned at public eateries and pedestrian walkways to disseminate information to the public. The implemented locations for the Digital Signage were determined after a thorough discussion between the Council and related stakeholders, and careful selection based on certain set criteria.

Content Platform



The platform centralizes the management of content, allowing the council to easily publish the latest news and topics of interest to the public through the various screens located throughout the city.

Locations Implemented



The installation sites include Wireless Walk, Handicraft Centre, Centre Market, Medan Saberka, Old Man Street, Tamu Muhibbah and UTC building.

Benefits

- Improves public information delivery
- Creates a direct information channel from the council to the public



SMART PARKING INITIATIVE

The Smart parking initiative improves the parking experience for motorists, providing them with a streamlined app that allows them to pay for parking on their mobile phone. In addition, it provides the council with in-depth information for better parking planning and enforcement.

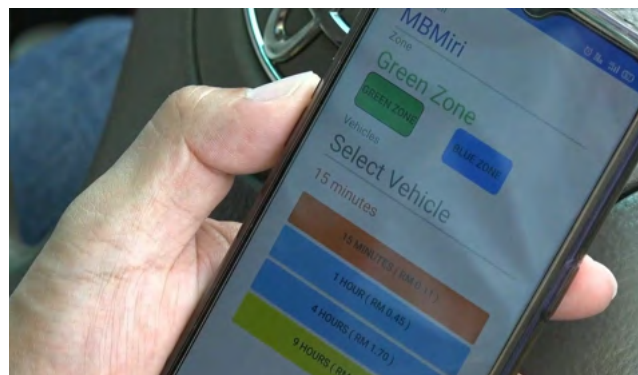
Main Components

Gated Parking Systems with License Plate Recognition



The systems use cameras, image processing, and database management to identify and track vehicles entering and exiting parking areas based on license plates. This allows the council to more easily identify parking offenders and deter unauthorized parking to minimize parking issues and traffic congestion.

Smart Parking App



The smart parking app allows users to pay their parking fees over the app, providing users with a fast, convenient and cashless parking payment process for both ad hoc and season parking. The app also provides MCC with data on vehicle numbers and revenue collection to optimizing pricing and revenue generation.

Digital Map of Parking Lots



This involves the digitalization of parking lots to replace drawn paper records to ensure more accurate parking lot data after resurfacing works, improved accuracy of parking lot location information, and the ability to generate analytical reports for better planning activities.

Benefits

- Enhances parking management, streamlines parking operations and improves enforcement capabilities for MCC
- Provides MCC with more accurate parking data for better parking solutions and city planning
- Reduces parking compound notices, deters unauthorized parking, and reduces traffic congestion

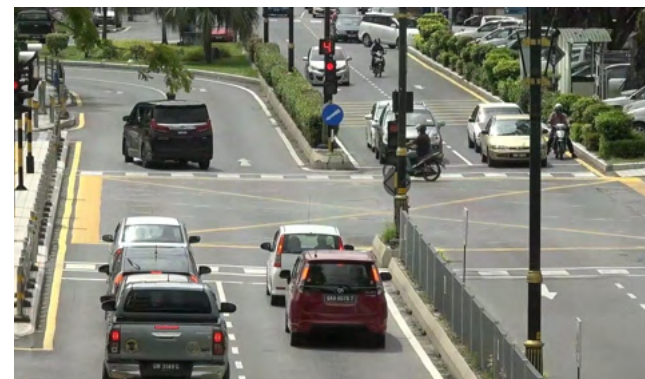


SMART TRAFFIC INITIATIVE

The Smart Traffic Initiative is an intelligent real time traffic management platform that monitors, controls and optimises the movement of traffic and people in the city. The system manages the dynamic timing of traffic lights, adapting light cycle times to ensure a smooth traffic flow.

Main Components

Sensors



Sensors at each traffic signal detect vehicles in each traffic lane as well as pedestrians waiting to cross. Information collected from these sensors allows the smart parking system to calculate and adapt the timing of traffic signals in the network to reduce wait times for both vehicles and people.

Centralised Platform



The centralised platform consolidates information from the traffic sensors installed at multiple traffic signals and uses advances algorithms to make intelligent decisions based on current traffic conditions to optimise traffic flow.

Implemented Locations

Miri City CBD, Jalan Sylvia, Jalan Brooke, Jalan Kingsway, Jalan North South Yu Seng , Jalan Nakhoda Gampar, Jalan Sri Dagang, Jalan Bulan Sabit, Jalan Aster, Jalan Piasau Utara, Jalan Datuk Edward Jeli

Benefits

- Reduces travel times for pedestrians and motorists
- Improves traffic flow and reduces traffic stops and congestion
- Reduces overall production of vehicle emissions



MIRI COMMAND CENTRE

The Miri Command Centre is the overall monitoring centre for all the Miri Smart City Applications. It acts as MCC’s first line of contact for the public, receiving and responding to MiriCARES calls and feedback, as well as receiving and responding to emergency calls from emergency poles, Smart Trucks and Smart Buses. In addition, it monitors the surveillance systems for the Smart City and Smart Park initiatives.

Way Forward– Miri Operation Command Centre



MOCC is the successor to the existing Miri Command Centre. It will improve the overall process for monitoring, controlling and managing Miri Smart City Operations.

Benefits

- Capable of instantaneously collecting reports and data (real-time or near real-time) from various sources including web services and sensors for analysis to improve town planning and disaster prevention planning.
- Able to analyze data from Miri Cares, Smart Bus, Smart Drain, Smart Truck, Smart Parks, Digital signage, Traffic Management Control, Smart Parking, and other smart city systems to provide business intelligence and decision-making inputs.
- Provides sufficient space and facilities for multiple use cases for analytic capabilities. It will increase the number of command centre personnel and be designed to allow off-site operations, similar to the design principle of the Sarawak Integrated Operation Centre (SIOC).
- Provides a space that can function as an acting war room and a place for authorized agencies to coordinate critical operations including disaster management with Miri City Council and Residents.

Integration with SIOC
Share critical data for future data analytic

Smart Parking
Mobile application to digitalise vehicle parking process

Smart Traffic Control
Smart systems to enhance traffic management

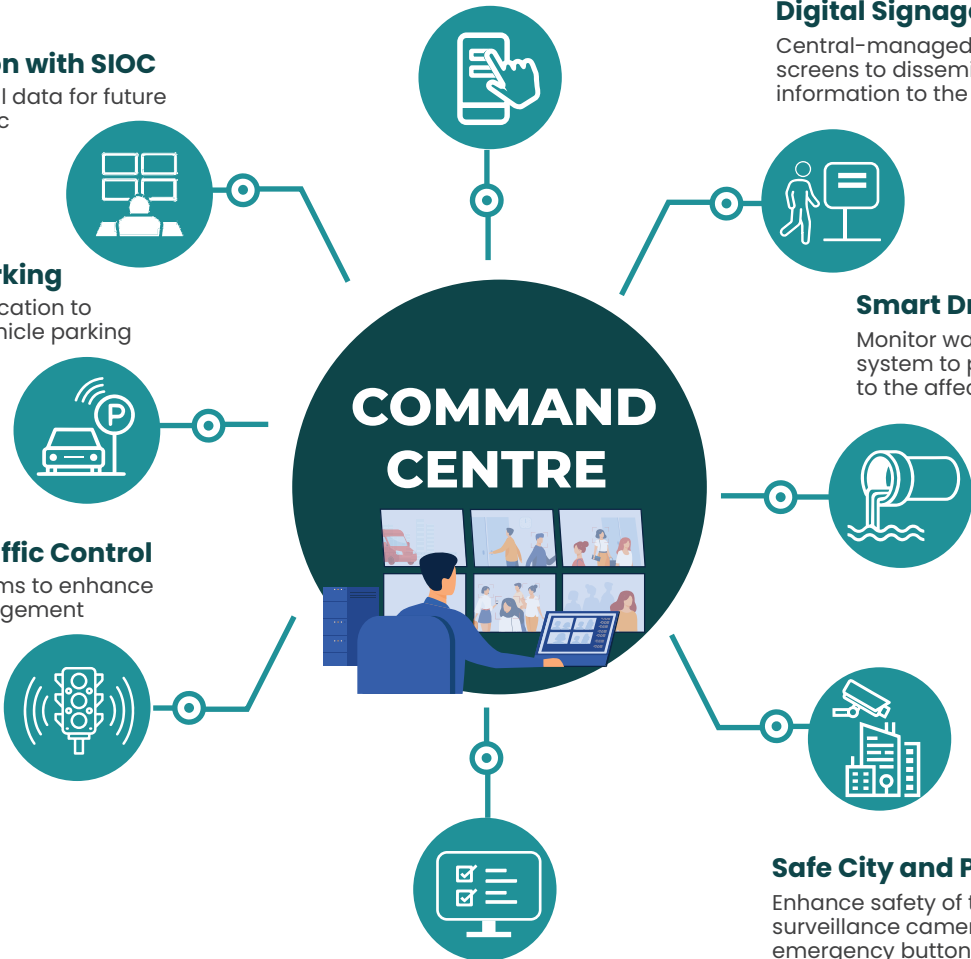
Smart City App
Mobile application to improve the operations of MCC (Miri CARES, Smart Drain, MSCC WhatsApp, Smart Bus, Borneo Parking System, Smart Truck)

Digital Signage
Central-managed outdoor screens to disseminating information to the general public

Smart Drain
Monitor water levels and alert system to provide early warning to the affected neighbourhood

Safe City and Park
Enhance safety of the city with surveillance cameras and emergency buttons to seek assistance during emergency

Smart Council
Local authority backend operations systems for MCC





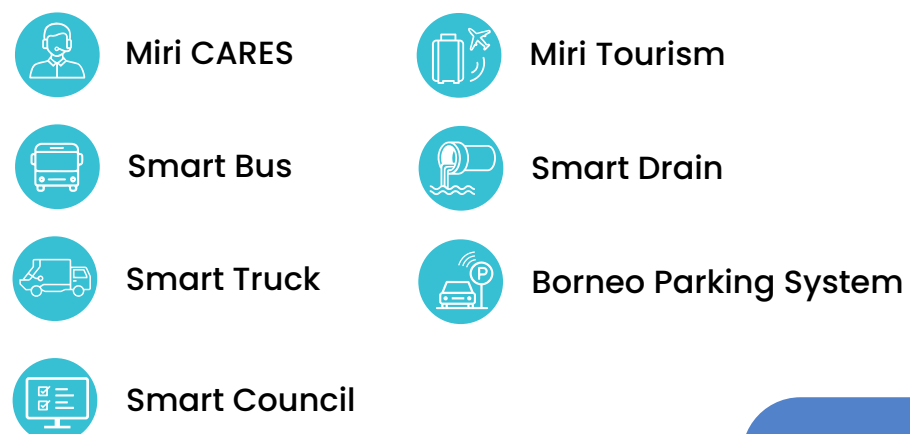
SMART CITY APP

Developed to simplify the daily life of Miri residents, the Sarawak Smart City App seamlessly integrates advanced technology and convenience into a single mobile app, enhancing the overall urban living experience and streamlining day-to-day activities.

The Sarawak Smart City App serves as a super app, encompassing the collection of Smart City software applications managed by the Miri City Council, making services easily reachable to the public.

Centralizing these mobile apps boosts service quality, allowing residents to manage everyday tasks such as bill inquiries and payments, obtaining public service information, and making incident reports through one single app. This efficiency improves the public's experience and satisfaction.

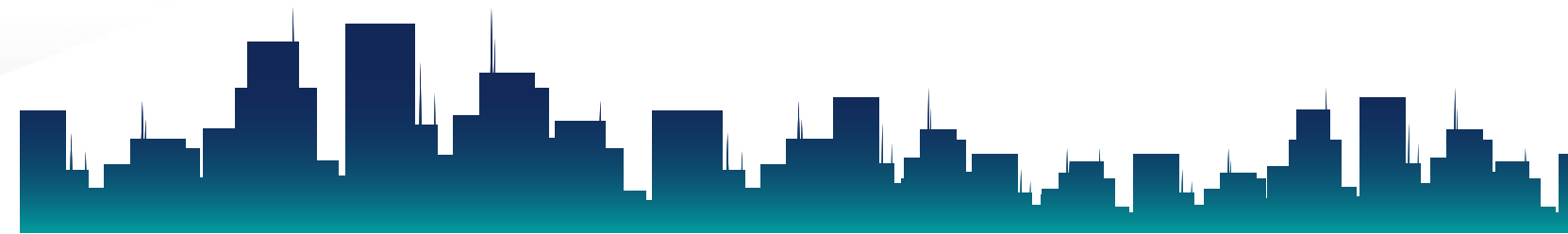
Consolidated Apps



3.2 MSCP OUTCOME

A public survey was conducted on June 2022 by RiAMTEC Institute of Technology on the solutions implemented under Miri Smart City Proof of Concept Project. Questionnaires were distributed randomly to 200 members of the public, Command Centre Officers at MCC and MCC Officers.

- 01**  **Digital Signage**
54.5% of respondents had a positive opinion of the digital signage
- 02**  **Safe City, Safe Park & Command Centre**
68.2% of respondents felt safer under the safe city initiative
53.4% of respondents agreed that the Command Centre team had answered their enquiries promptly
50.6% of respondents agreed that the Miri Smart City Command Centre (MSCC) was easily contactable
54.5% of respondents who had contacted MSCC had a positive perception of the services
- 03**  **Smart Drain**
NIL
- 04**  **Smart Bus**
68.5% of respondents agreed the Smart Bus initiative had improved the quality of bus services in Miri City
- 05**  **Smart Truck**
54.5% of the respondents were satisfied with the Smart Truck mobile app



06

**Smart MCC (eLA2)**• **HRPay System**

90.91% of respondents agreed that the Human Resource and Payroll System (HRPay) helped improve their work function

42.67% of respondents indicated that the HRPays system brought improvements to the service delivery.

28.0%saves
time**14.67%**save
manpower**6.67%**reduces
expenses• **MCC Dashboard**

94.74% of respondents agreed that the MCC Dashboard helped with better planning and decision-making

53.85% of the respondents agreed that the MCC Dashboard improved service delivery.

21.54%saves
time**12.31%**save
manpower**6.15%**reduces
expenses• **Miri CARES**

88.24% of respondents agreed that Miri CARES (Call Tracking System) effectively managed matters raised by the public

51.92% of the respondents agreed that Miri CARES improved service delivery.

25%saves
time**13.46%**save
manpower**7.69%**reduces
expenses• **Building Control System**

87.5% of the respondents agreed that the Building Control System improved the efficiency of processing and managing Building Plans submissions for approval

55.56% of respondents agreed that the Building Control System improved service delivery.

20.64%saves
time**7.94%**save
manpower**9.52%**reduces
expenses• **Valuation System****95.0%**

of respondents agreed that the Valuation System made carrying out valuations more effective and efficient

50.73%

of respondents agreed that the Valuation System improved service delivery. Meanwhile, it also brought about other benefits.

21.74%saves
time**11.59%**save
manpower**8.7%**reduces
expenses• **Map Production Systems****84.0%**

of respondents agreed that the Map Production Systems improved the floor area calculation based on the provided digital floor plan synchronized with Valuation System pass the floor area calculation to valuation

52.24%

of the responses indicated that the implementation of the Map Production Systems improved service delivery. Meanwhile, it also brought about other benefits.

16.42%saves
time**10.45%**save
manpower**7.46%**reduces
expenses

07

**SMART MIRI (Sarawak Smart City App)****67.0%**

of respondents were satisfied with the services provided by and through the Miri smart city platform.

08

**Smart Tourism****NIL**

09

**Miri CARES****50.6%**

of respondents were satisfied with the timeliness of responses received for cases lodged in Miri CARES

54.7%

of respondents would recommend Miri CARES to others

56.0%

of respondents were satisfied with their latest experience with Miri CARES

*Based on RiamTec Survey Report

4

WAY FORWARD

4.1 MIRI CITY COUNCIL TRANSFORMATION LAB AND TRUE NORTH

As Miri City Council moves forward in the wake of the COVID-19 pandemic, a key challenge lies in the alignment of its strategic aim for Miri City to be a Green, Smart and most Liveable International Resort City by 2030, or "True North," with the PCDS2030. An important undertaking for Miri City Council involves the comprehensive integration and alignment of robust metrics with True North in order to ensure proper measurement and attainment of the objectives.



To accelerate the implementation progress for existing initiatives and establish new ways of working, the Miri City Transformation Lab was held from 19th June 2023 to 7th July 2023 with the goal of identifying and outlining initiatives that align towards Miri becoming a Green, Smart and most liveable International Resort city by 2030.



More than 100 participants from the public and private sectors attended the 3-week Lab where daily discussions were held to develop concrete initiatives to align with True North.

The Lab was divided into 3 workstreams (WS), Tourism, Digitalisation, and Green & Liveability. A total of 32 initiatives and 5 enablers were identified for development from 2024 – 2030. The identified investment is RM1.73 bil and 2,732 jobs from Workstream 1 whilst the budget required for initiatives is RM273 mil for Workstream 2 and RM800 mil for Workstream 3.



Workstream 1

Workstream 1 developed 10 initiatives across 3 Focus Areas (FAs): Eco/Heritage/Sport, Landmark and Medical Tourism, supported by 3 enablers: establishing the Miri Tourism Development Authority (MTDA), improving air/sea/land international connectivity and introducing an integrated tourism pass.

Workstream 2

Workstream 2 developed 9 initiatives across 4 FAs: Smart Government, Smart Digital Infrastructure, Smart Living, and Smart Mobility, supported by capacity building and skills development to significantly enhance service delivery through digitalisation.

Workstream 3

Workstream 3 identified 13 initiatives across 3 FAs: Urban Environment, Urban Infrastructure, and Community Engagement and 1 enabler to establish a Carbon Emissions Inventory.

True North – A Green, Smart and most Liveable International Resort City by 2030

- RM1.73 billion in investment identified; 2,732 jobs created
- 100% of council services digitalised; 100% of total projects and property files digitalised by 2027; reduction in feedback response time by average of 3 working days;
- 10,000 new users registered for complimentary Wi-Fi by 2030; reduction in crime rates by 5% per year until 2030; reduction of 30% in average travel time by 2030
- 36.8 km of pedestrian and cycling path; 187.47 additional acres of green spaces; 80% waste diverted from landfill; 56% reduction in WM cost; 40% of reduction in public lighting electricity bill;
- 70% increase in community engagement participants

Spurring Economic Growth through Miri's Unique Tourism Offerings

- FA1:
Eco/Agriculture/Heritage Tourism
- FA2:
Landmark Tourism
- FA3:
Aged Healthcare and Medical Tourism

Enabler – Governance

Enhancing Service Delivery through Digitalisation

- FA1:
Smart Government
- FA2:
Smart Digital Infrastructure
- FA3:
Smart Living
- FA4:
Smart Mobility

Enabler – Promotion and Branding

Green Initiatives to Improve Livability

- FA1:
Urban Environment
- FA2:
Urban Infrastructure
- FA3:
Community Engagement

Enabler – Innovative Funding Mechanism

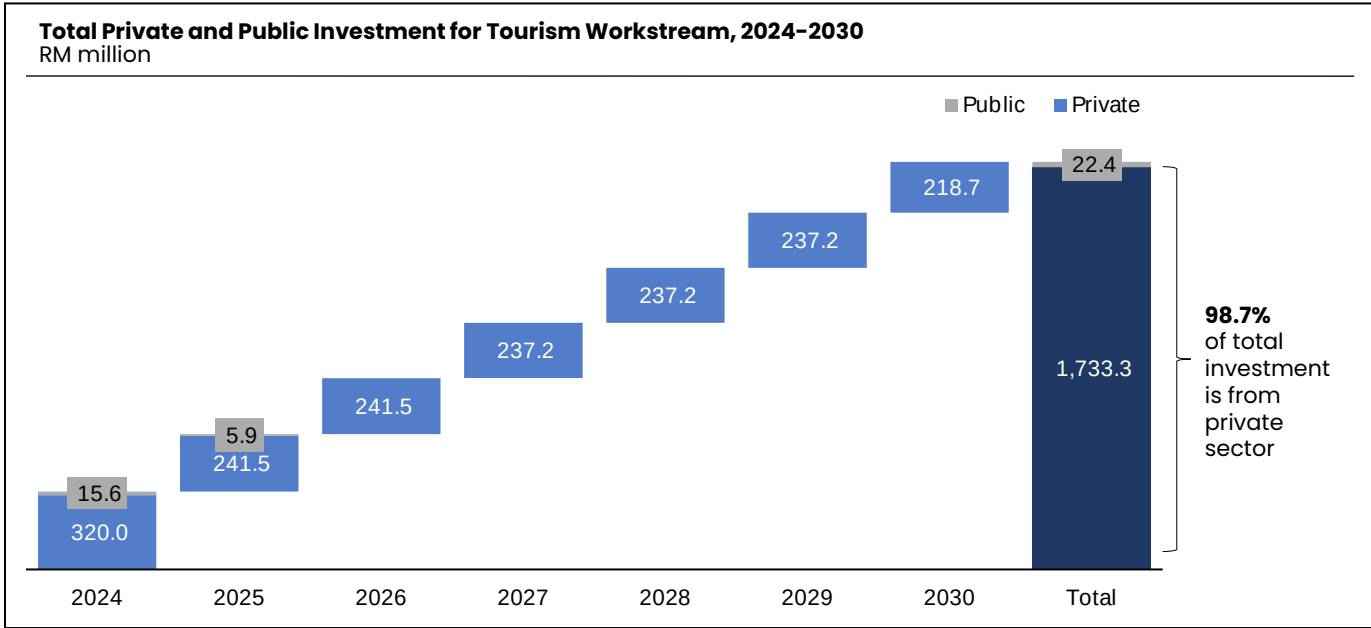
Daily discussions were held to strengthen business cases, identify robust targets, and develop detailed implementation plans.



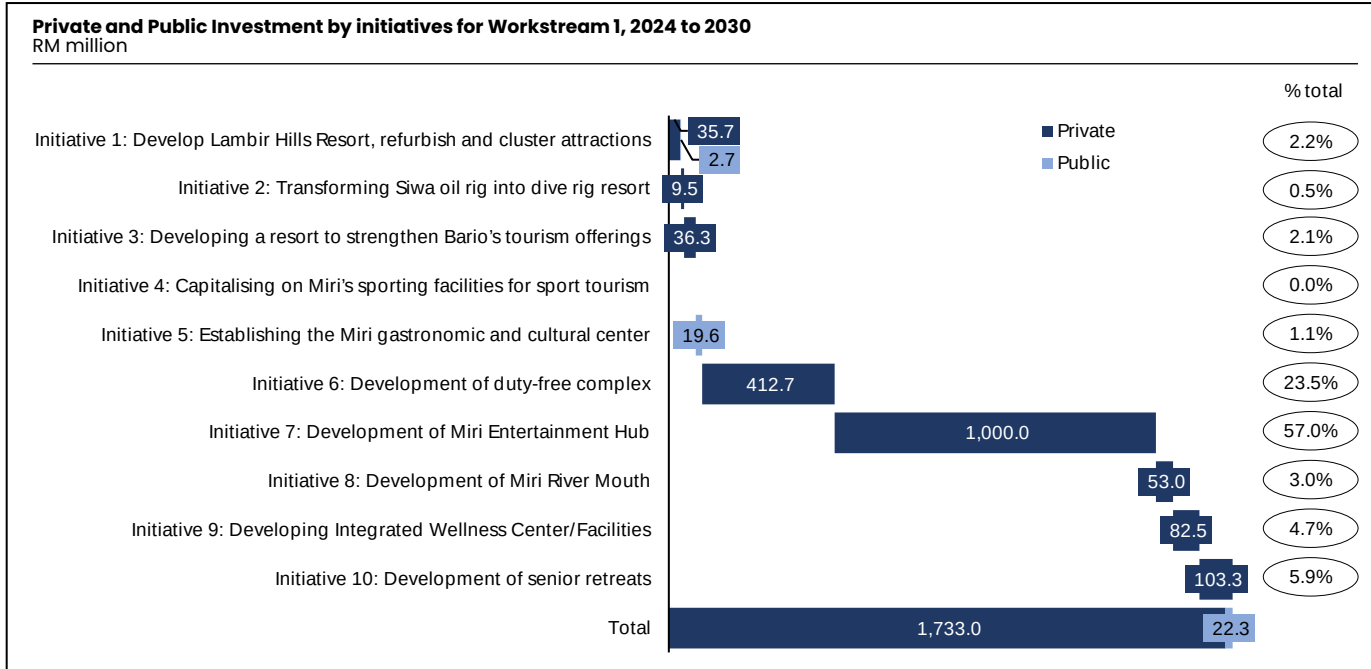
Feedback from decision makers provided during Mid-Lab Syndication was also taken onboard to refine the initiatives



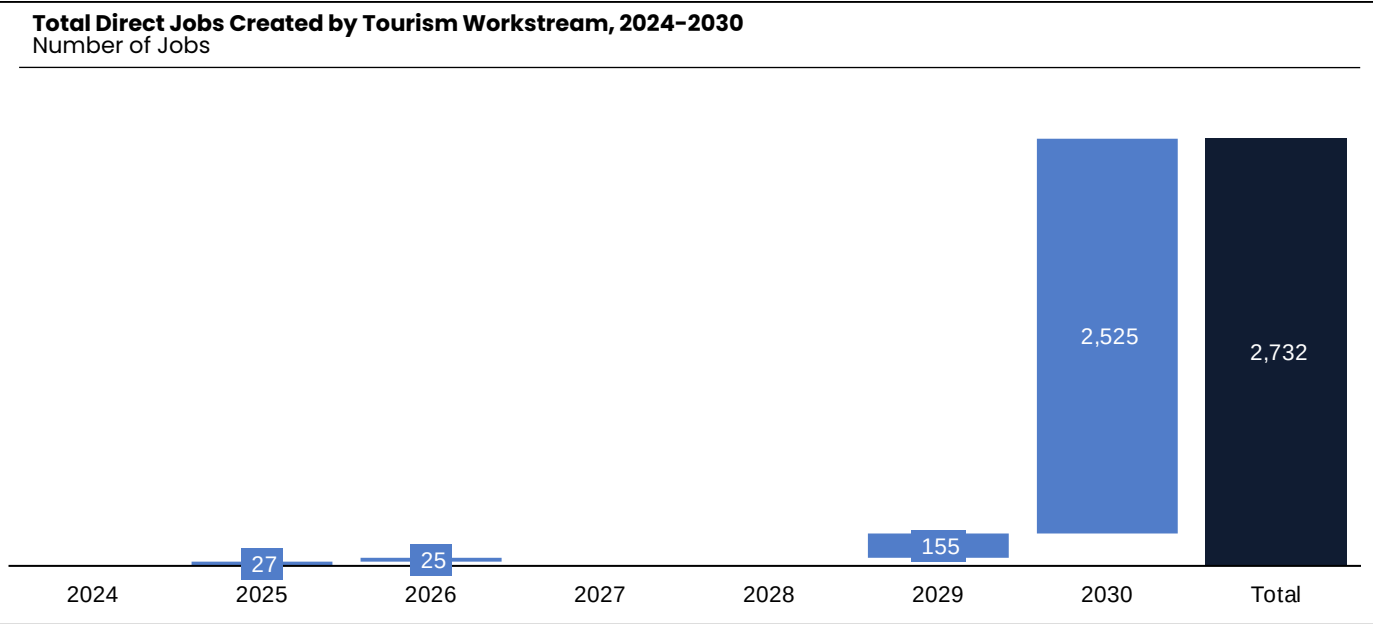
The Lab identified RM1.73bil in potential private sector investments from 10 initiatives and 3 Enablers from the Tourism workstream, to be realised between 2024 – 2030



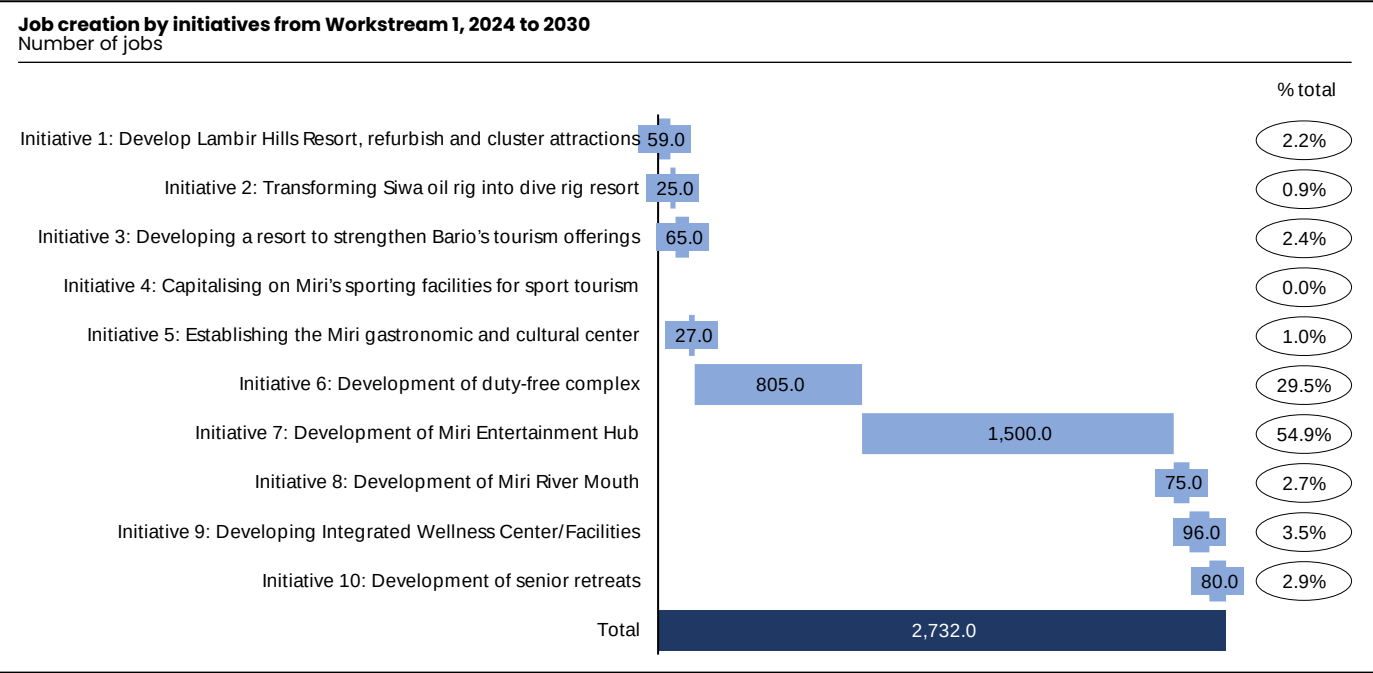
The 10 initiatives under Tourism sector are expected to attract RM1.73 bil of investments as below



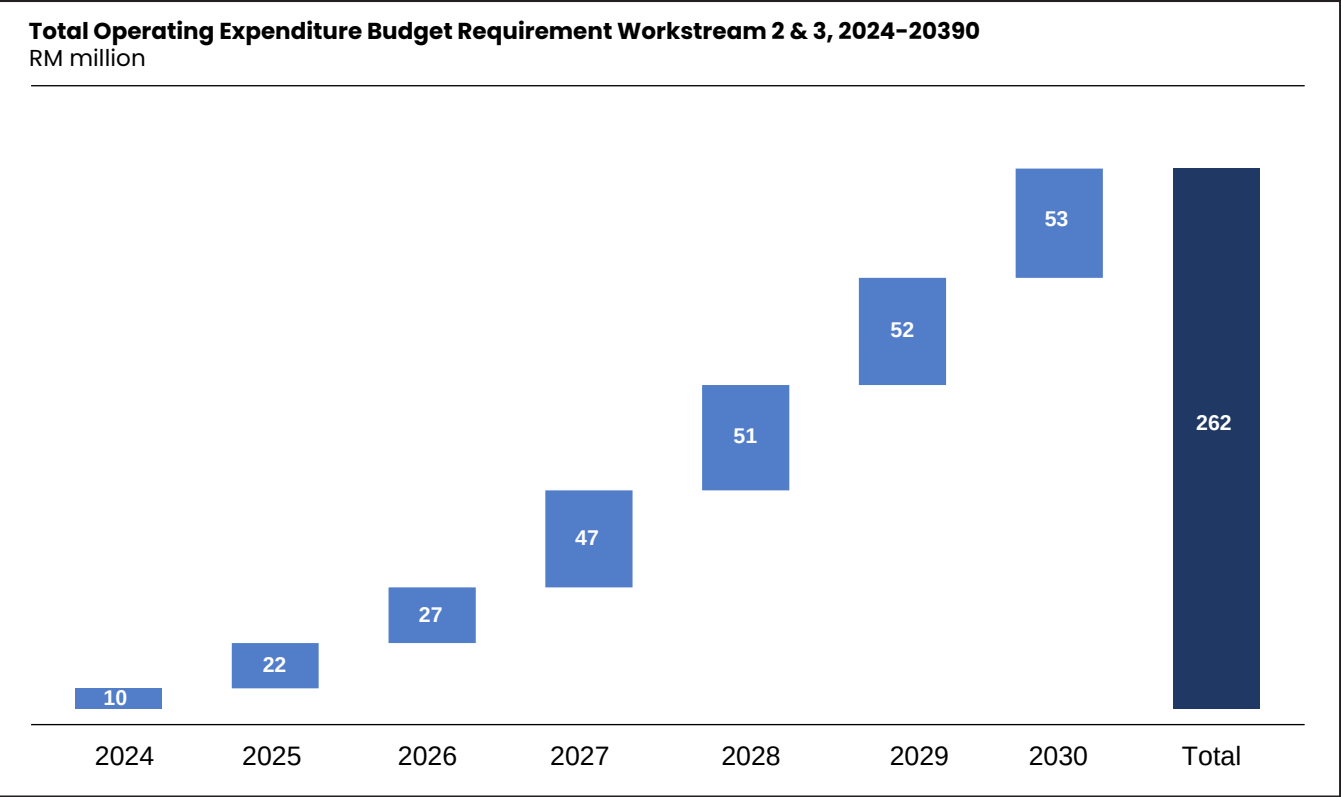
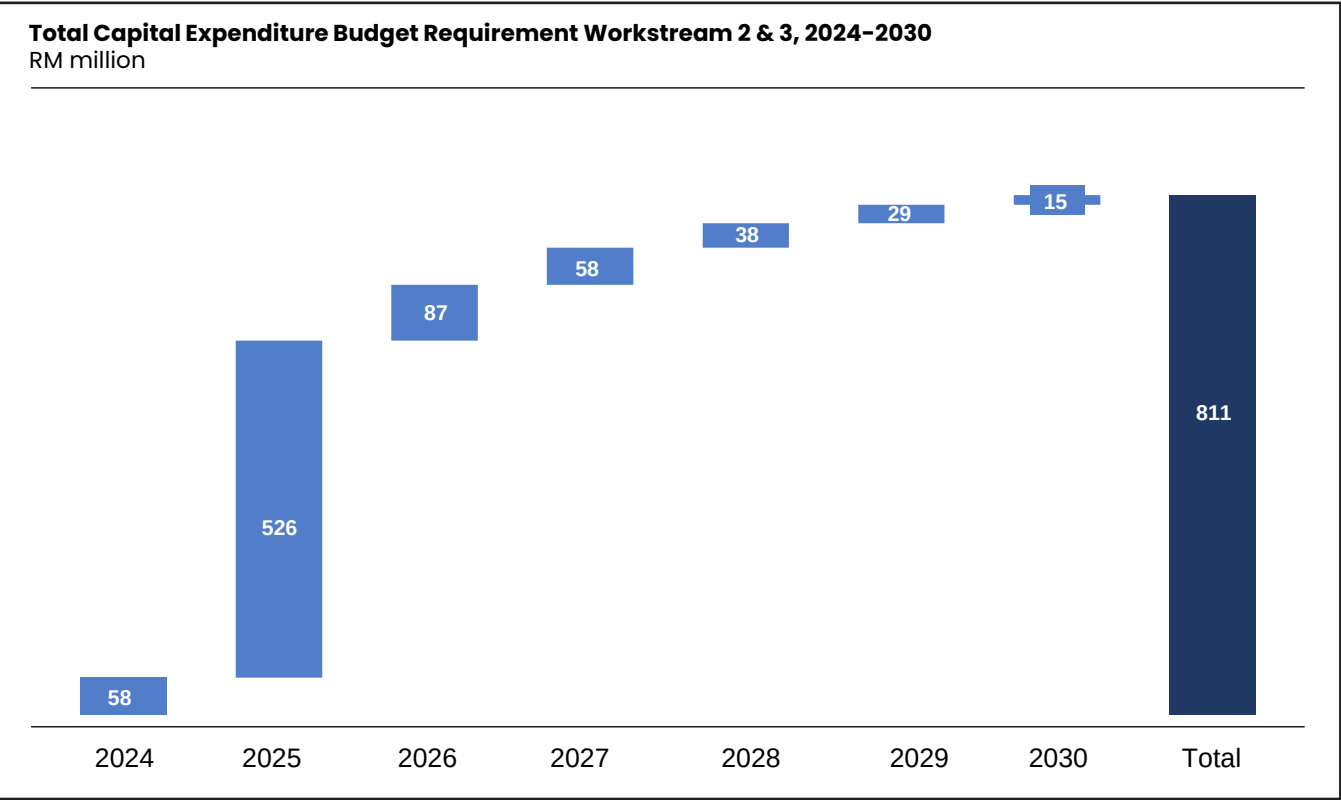
The Lab identified RM1.73bil in potential private sector investments from 10 initiatives and 3 Enablers from the Tourism workstream, to be realised between 2024 – 2030



Breakdown of jobs created across the 10 initiatives under Tourism sector



Smart and Green initiatives from Workstream 2 and 3 will require RM1.07 bil for 22 initiatives and 2 enablers from 2024 – 2030



4.2 SPURRING ECONOMIC GROWTH THROUGH MIRI'S UNIQUE TOURISM OFFERINGS

Miri holds significant potential as a tourism destination. As the home to some of Sarawak's most unique tourism sites, as well as a wealth of attractions including scenic coastlines, lush national parks, diverse cultures and heritage, the city offers diverse natural and cultural experiences for tourists. The region's indigenous heritage, accompanied by various festivals, also contributes to its unique character. Miri's tourism potential can be expanded by introducing novel attractions, development of luxury accommodations, and refining its shopping options.

Miri is home to some of Sarawak's most unique tourism sites, positioning it as a potential medical, heritage, and leisure tourism hotspot



Lambir Hills National Park (~32km)



Miri – Sibuti Coral Reefs National Park (~86km)



Piasau Nature Reserve (~7km)



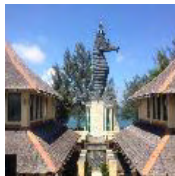
Gunung Mulu National Park (~100km)



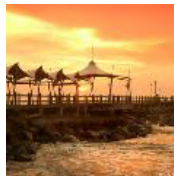
Niah National Park (~100km)

Miri’s many landmarks and rich heritage make it an attractive choice to host cultural events and festivals

Miri Landmarks and Tourist Attractions



Coco Cabana



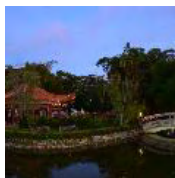
Tanjong Lobang Beach



Luak Esplanade



Tamu Muhibbah



Miri City Fan Recreation Park



Miri Times Square

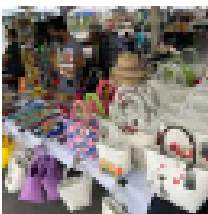


Canada Hill – Grand Old Lady

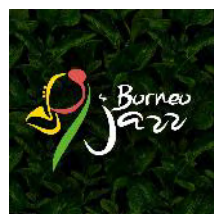


Tua Pek Kong Temple

Events previously held in Miri



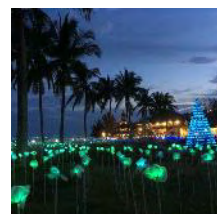
Gawai Dayak Bazaar



Borneo Jazz Festival



Miri Street Auto Fest



Coco Cabana Lightfest



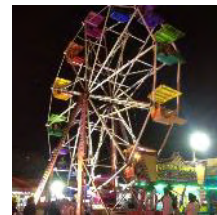
CNY Bazaar



Times Square Christmas



Food Festival



Fun Fair



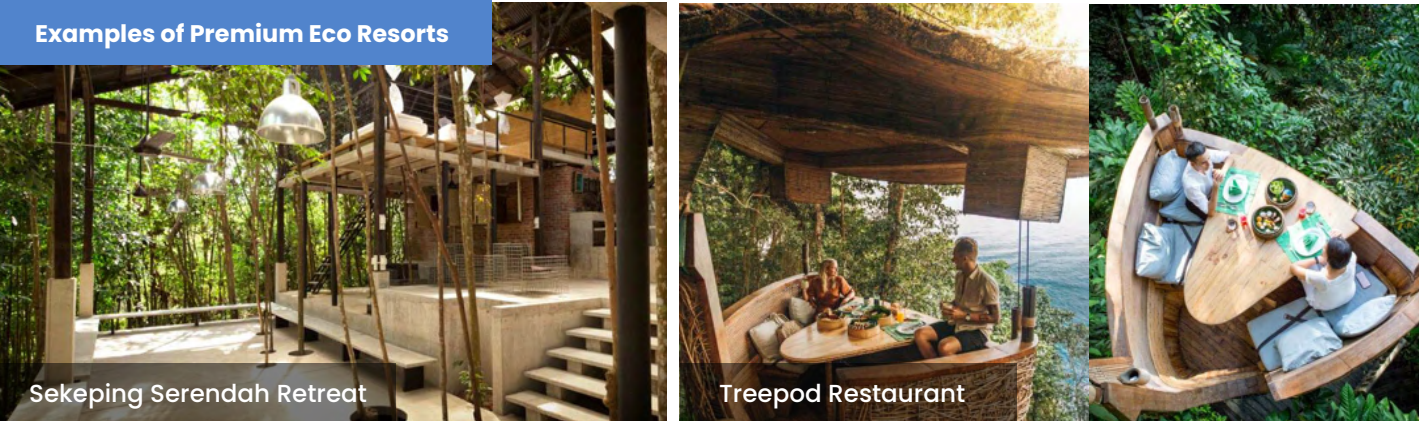
Miri Marathon

4.2.1 FOCUS AREA 1:
ECO / AGRO / CULTURAL / SPORTS TOURISM

Miri must play to its strengths and leverage on existing natural and manmade assets such as rainforests, coral reefs, fresh local produce, indigenous culture and sports infrastructure / facilities around it to form the solid foundation needed for its tourism ecosystem. Some of Miri’s best sites may not be tourist-friendly enough, lacks regular maintenance, some may even need rejuvenation to increase its appeal to tourists.

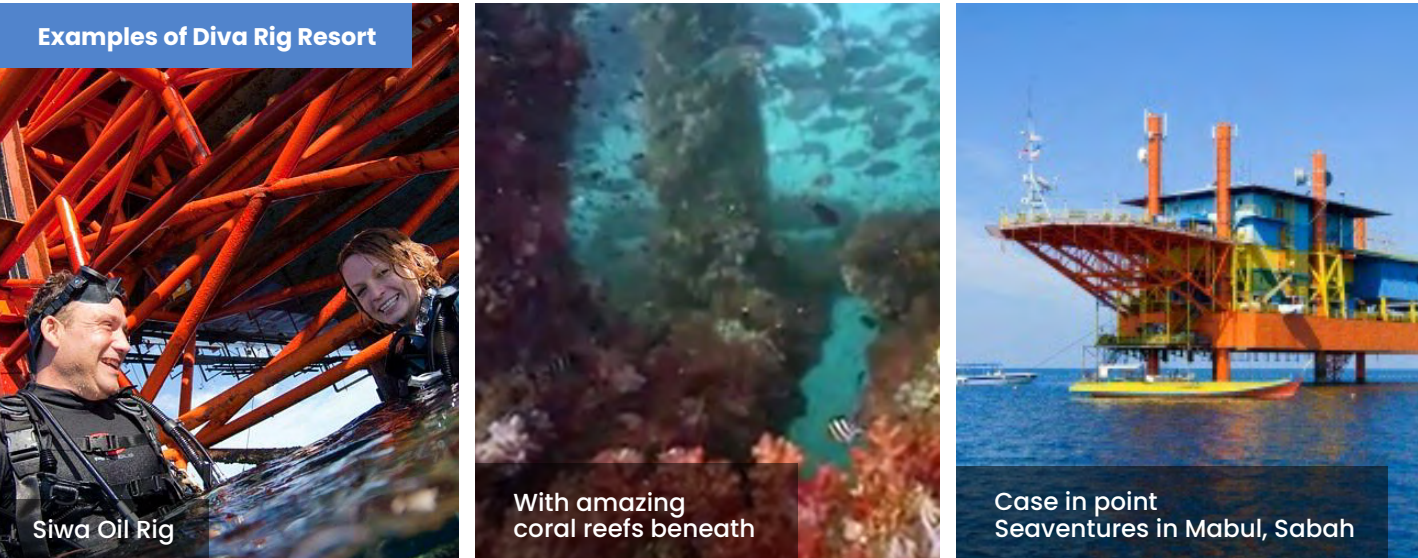
WS1 : TOURISM FA1 : ECO/AGRO/HERITAGE/SPORT

Initiative 1	 Premium Eco Resort
Objective	Develop a new premium resort at Lambir Hills and refurbish and cluster tourist attractions
Elaboration	Relative to other notable tourism destinations regionally, Miri's overall tourism ecosystem may not be as appealing to tourists. This is mainly due to the geographically fragmented nature of attractions as well as a lack of refurbishment, development and maintenance. The development of a premium eco resort as well as refurbishment and clustering of other tourist attractions will improve tourist friendliness and encourage visits to multiple sites
Initiative Details	- Develop a Rainforest Resort at Lambir Hills and rejuvenate the National Park - Refurbish and improve the basic tourism infrastructure for various tourist attractions to make them more tourist-friendly - Cluster Miri's best attractions based on category and respective proximity to encourage visits to multiple sites
Targeted Outcome	RM35.7mil investment identified, 59 jobs created
Initiative Owner	- Developer - Miri City Council
Key Stakeholders	- Malaysian Association of Hotels - Sarawak Tourism Board - Jabatan Kerja Raya - Land and Survey Department, Sarawak - Ministry of Finance - Resident Office
Implementation Timeframe	2023-2029



WS1 : TOURISM FA1 : ECO/AGRO/HERITAGE/SPORT

Initiative 2	 Dive Rig Resort
Objective	Transform Siwa oil rig into a dive rig resort
Elaboration	Siwa oil rig is an aged oil rig around 15 minutes away from Miri that will soon be decommissioned. This initiative aims to partner with the right stakeholders to transform the rig into a dive rig resort, the first of its kind in Sarawak. It can serve as a diver's hub to explore the reefs hidden beneath it, attracting more tourism ringgit as well as ensuring the marine habitat surrounding the rig is preserved
Initiative Details	- Develop an oil rig resort and new tourist attraction - Boost the diving tourism industry with new dive offerings - Protect Miri-Sibuti Coral Reefs National Park - Develop marine research centre to help study and conserve marine environment
Targeted Outcome	RM9.5mil investment identified, 25 jobs created
Initiative Owner	- Developer - Operator
Key Stakeholders	- Miri City Council - Government of Sarawak - Sarawak Forestry Corporation - PETRONAS - Sarawak Tourism Board - Curtin University - Resident Office
Implementation Timeframe	2023-2026



WS1 : TOURISM FA1 : ECO/AGRO/HERITAGE/SPORT

Initiative 3	 Bario Resort
Objective	Development of luxury a resort to strengthen Bario's tourism offerings
Elaboration	Bario Highlands is a serene location with a rich indigenous culture of tradition and food. However, there are limited accommodation options in Bario with most being lodges and homestays, which may not appeal to some tourists. A premium rainforest resort can attract higher spending tourist that can provide economic benefits to the local community while preserving the Bario culture.
Initiative Details	- Build a luxury rainforest resort situated near Pulong Tau National Park - Act as the access point to Bario's best attractions - Promote selected tourism attractions at Bario
Targeted Outcome	RM36.3mil investment identified, 65 jobs created
Initiative Owner	Developer
Key Stakeholders	- Miri City Council - Malaysian Association of Hotels - Sarawak Tourism Board - Jabatan Kerja Raya - Land and Survey Department, Sarawak - Ministry of Finance - Resident Office
Implementation Timeframe	2023–2024

Some of Bario's attractions



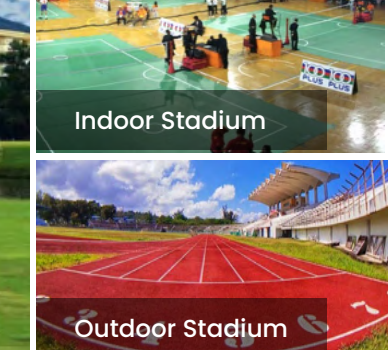
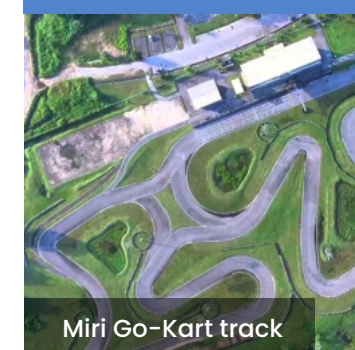
Examples of The Datai's traditional-contemporary resort



WS1 : TOURISM FA1 : ECO/AGRO/HERITAGE/SPORT

Initiative 4	 Promote Sporting Facilities
Objective	Capitalise on Miri's sporting facilities to bring in more international sports tourism
Elaboration	Miri has various sporting facilities that are in great condition, but are currently underutilised. An authority focused on spearheading the development of the tourism sector can implement marketing campaigns and promotion activities with sports bodies to boost Miri's sports tourism and strengthen the foundation required for Miri's overall tourism ecosystem.
Initiative Details	- Create a sole, leading authority to spearhead the development of the tourism sector - Align with relevant ministries on MTDA's destination marketing role, including sports tourism - Highlight Miri facilities to relevant ministries to attract international sports events - Collaborate with local sports facility operators to attract locals to utilise facilities by consolidating all key sports facilities packages on MTDA platforms
Targeted Outcome	Increase marketing and promotion activities that boost sports tourism
Initiative Owner	Miri Tourism Development Authority (MTDA)
Key Stakeholders	- Miri City Council - Sarawak Tourism Board - Business Events Sarawak - Operators of sports facilities - Ministry of Youth and Sports Sarawak
Implementation Timeframe	2023–2024

Examples of Sports facilities available in Miri





4.2.2 FOCUS AREA 2 : LANDMARK TOURISM

Miri has some of the best food and indigenous cultures in Malaysia but has been underrepresented in the gastronomy and cultural worlds due to the lack of a proper, well-maintained gastronomic and cultural centre, which could also be treated as a public square for communities to mingle. Miri also aims to be an international resort city by 2030, thus attractions and places that add life and vibrancy must be considered.

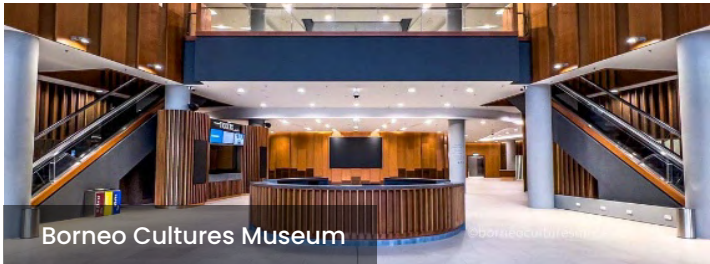
WS1 : TOURISM FA2 : LANDMARK TOURISM

Initiative 5	 Gastronomic and Cultural Centre
Objective	Redevelopment of Miri Civic Centre into the Miri Gastronomic and Cultural Centre
Elaboration	Miri is home to 31 indigenous tribes, each with its unique cuisine and culture but these are gradually disappearing due to the lack of preservation, and visibility. Miri also lacks a public square and community hub for social events. Redeveloping Miri Civic Centre into a vibrant community hub with a strong emphasis on gastronomy, culture and art can provide an avenue to exhibit the distinctiveness of Miri's tribes while rejuvenating the heart of Miri.
Initiative Details	• Redevelop Miri Civic Centre into the Miri Gastronomic and Cultural Centre • Emphasize gastronomy, culture and art with a theater and event space, culture and arts museum, and gastronomic centre • The 1st phase of a comprehensive city transformation program
Targeted Outcome	RM19.6mil public investment identified, 27 jobs created
Initiative Owner	Owner of Miri Civic Center
Key Stakeholders	• Miri City Council • Sarawak Tourism Board • Ministry of Tourism, Arts and Culture • Resident Office
Implementation Timeframe	2023-2025

Example of Gastronomic and Cultural Centre



Sarawak Cultural Village



Borneo Cultures Museum

WS1 : TOURISM FA2 : LANDMARK TOURISM

Initiative 6	 Duty-Free Complex
Objective	Develop a luxury duty-free complex to attract high spend tourists
Elaboration	The global duty-free market is expected to grow 11% CAGR from now until 2031. Miri's retail landscape is underdeveloped with its malls carrying limited international brands. An international duty-free complex offering international luxury brands can contribute to an increased average stay length and spend per tourist.
Initiative Details	- Develop a 3-floor duty-free shopping complex - Emphasize premium / high-end duty-free international and domestic offerings
Targeted Outcome	RM412.7mil investment identified, 805 jobs created
Initiative Owner	Developer
Key Stakeholders	- Ministry of Finance - Office of the Premier of Sarawak - Economic Planning Unit of Sarawak - Miri City Council - Sarawak Tourism Board - Royal Malaysian Customs Department - Resident Office
Implementation Timeframe	2023-2030



WS1 : TOURISM FA2 : LANDMARK TOURISM

Initiative 7	 Miri Entertainment Hub
Objective	Develop Miri Entertainment Hub to position Miri as an International Resort City
Elaboration	Miri may lack tourism appeal and vibrancy to some tourists. The addition of an Entertainment Hub can help attract a more diverse range of international tourists. The positive economic spillover can also stimulate the economy as well as growth in other sectors.
Initiative Details	- Develop Miri Entertainment Hub - Consolidate various luxury resort-centric leisure activities such as amusement park, entertainment shows, and casino in the hub to enhance internationality and vibrancy
Targeted Outcome	RM1bil minimum investment, 1,500 jobs created
Initiative Owner	Developer
Key Stakeholders	- Ministry of Finance - Office of the Premier of Sarawak - Economic Planning Unit of Sarawak - Miri City Council - Sarawak Tourism Board - Resident Office
Implementation Timeframe	2023-2030



WS1 : TOURISM FA2 : LANDMARK TOURISM

Initiative 8	 Miri River Mouth Development
Objective	Develop Miri River Mouth into a main Miri landmark and luxury resort area
Elaboration	The Miri river mouth area is an estuary, where the river meets the ocean. This location has the potential to become the “Venice of the East”. Development of the area into a low-density, low-rise resort with cafes has to potential to transform the area into a prime tourism location in Miri.
Initiative Details	- Develop the land area along Sungai Baong and around the river mouth into a low-density, luxury resort or residence with restaurants and cafes - Beautification to turn the waterfront area into Miri’s main landmark - Redevelopment via concession model
Targeted Outcome	RM53.1mil investment identified, 75 jobs created
Initiative Owner	Developer
Key Stakeholders	- Miri City Council - Current landowner - Resident Office - Sarawak Tourism Board - MTDA
Implementation Timeframe	2023-2030

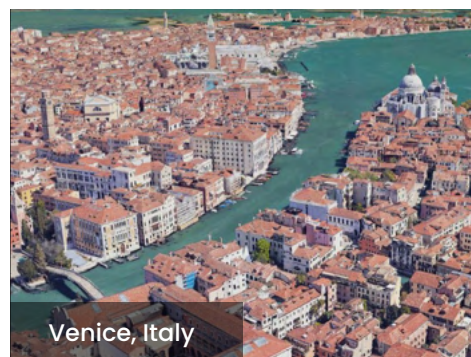
Examples of Iconic landmark with picturesque sceneries



Burano, Italy



Phu Quoc, Vietnam



Venice, Italy



Ayla Oasis, Jordan



Clarke Quay, Singapore

4.2.3 FOCUS AREA 3 : MEDICAL TOURISM AND AGED HEALTHCARE

Malaysia’s medical tourism industry has been growing at 16% CAGR due to growing demand from neighboring countries, attributed to its strong healthcare system. Malaysia is also a rapidly ageing population and needs to have proper facilities and infrastructure to address the surge in aged population and provide them with the appropriate attention and care.

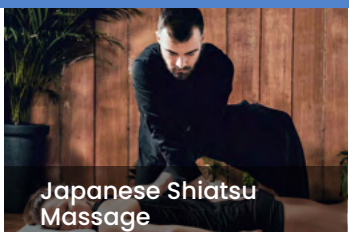
WS1 : TOURISM FA3 : MEDICAL TOURISM

Initiative 9	 Integrated Wellness Centres
Objective	Development of premium integrated wellness centres & facilities focusing on the preventative segment
Elaboration	Malaysia's medical tourism industry has been growing at 16% CAGR due to the growing demand from neighbouring countries. In East Malaysia, there is a gap in the wellness / preventive healthcare market. Miri can take advantage of this gap to provide premium wellness services for medical tourism through an Integrated Wellness Centre.
Initiative Details	- Develop an Integrated Wellness Centre which blends the healing concepts of the East and West - Focus on preventive care and general wellness with little to no emphasis on treatment - Consolidation the best brands and wellness centres services 'under one roof' - Bundle wellness programs with leisure activities
Targeted Outcome	RM82.5mil investment identified, 105 jobs created
Initiative Owner	Developer
Key Stakeholders	- Malaysia Healthcare Travel Council - Non-Government Organisations - Ministry of Health - Various preventive, wellness players in the industry - Resident Office
Implementation Timeframe	2023-2029

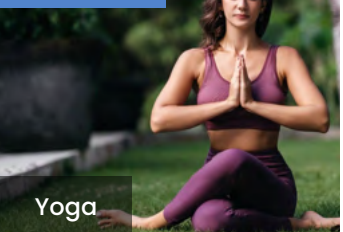
Example of Services that the Integrated Wellness Center could offer



Acupuncture



Japanese Shiatsu Massage



Yoga



Ayurveda Massage



Aromatherapy Massage



Rehabilitation / Gym Centers



Premium Health Screening

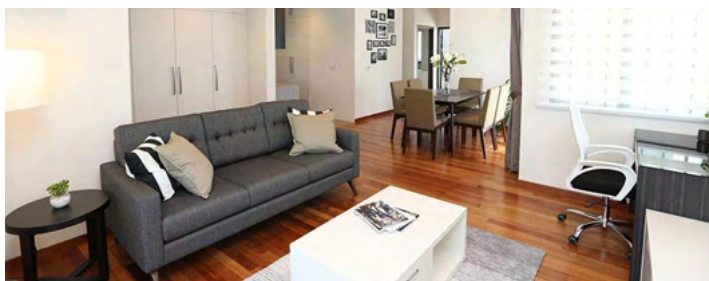


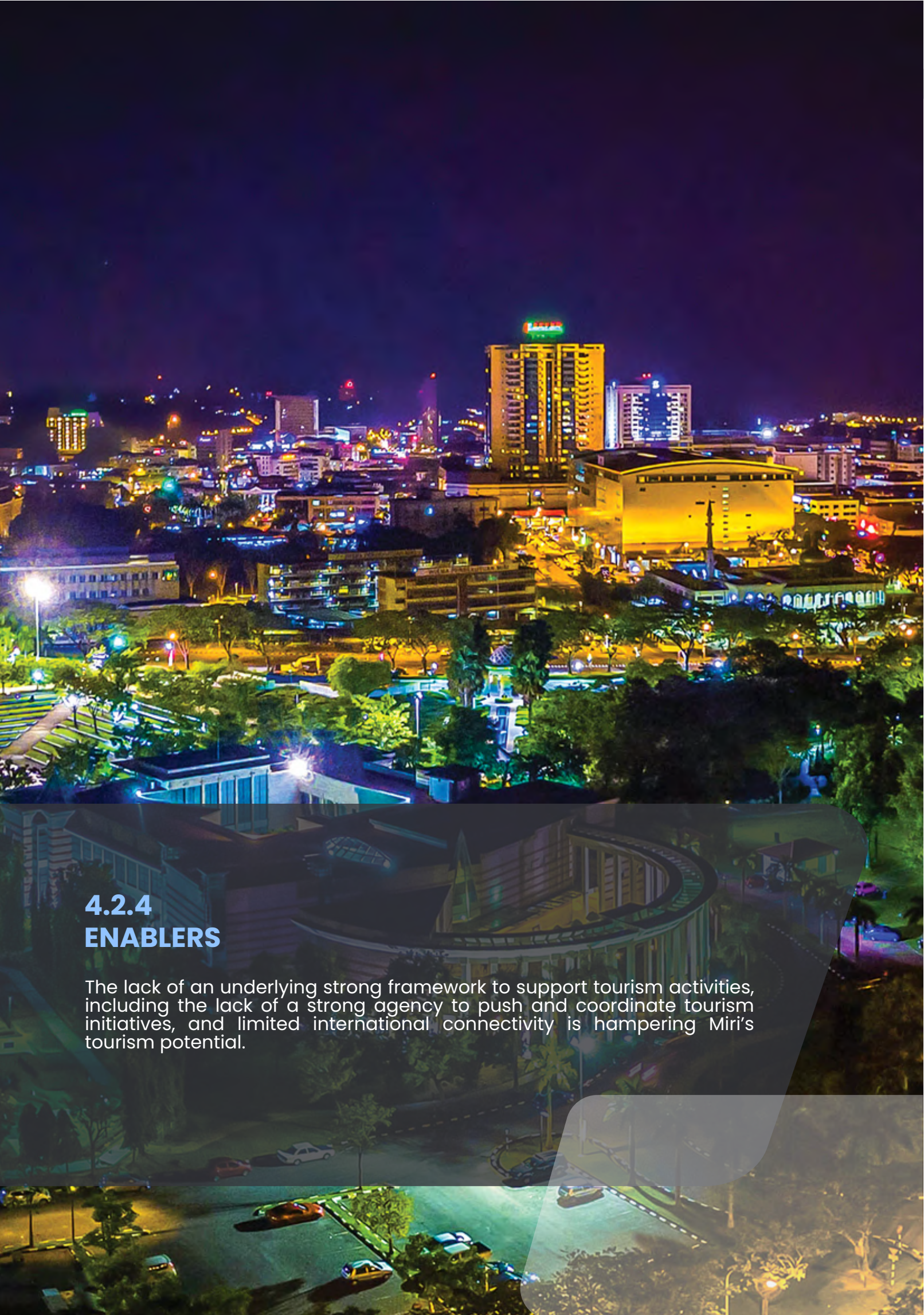
Aesthetics Surgery

WS1 : TOURISM FA3 : MEDICAL TOURISM

Initiative 10	 Senior Retreats
Objective	Development of luxury senior retreats for the M40/T20 segment
Elaboration	Malaysia's population is rapidly ageing and there is a need for proper facilities and infrastructure to address the increasing demands of this population segment. Miri can address these needs by developing affordable and luxury senior retreats catering to the upper market segment of this population.
Initiative Details	- Develop a retirement village that caters to M40/T20 retirees - Provide exclusive modern features and facilities designed to accommodate senior residents - Provide 24/7 security and medical support - Provide entertainment and leisure activities
Targeted Outcome	RM117.5mil investment identified, 20 jobs created
Initiative Owner	Developer
Key Stakeholders	- Miri City Council - Malaysia Healthcare Travel Council - Non-Government Organisations - Ministry of Health - Resident Office
Implementation Timeframe	2023-2030

Example of GreenAcres Retirement Village in Ipoh





4.2.4 ENABLERS

The lack of an underlying strong framework to support tourism activities, including the lack of a strong agency to push and coordinate tourism initiatives, and limited international connectivity is hampering Miri's tourism potential.

WS1 : TOURISM ENABLERS

Enabler 1	 Miri Tourism Development Authority
Objective	Establish a new Tourism Development Authority to oversee new tourism initiatives and coordinate with stakeholders
Elaboration	Miri's tourism sector lacks a leading, central coordinator to oversee the planning and development of key projects, resulting in lack of project facilitation and alignment between key stakeholders. Establishing a dedicated tourism authority will create a dedicated focal point in pursuing the tourism initiatives identified for Miri in order to realise intended investments and job creation.
Initiative Details	Establish Miri Tourism Development Authority (MTDA) to: • Oversee implementation of strategic projects • Oversee marketing and promotion • Oversee strategy and planning
Targeted Outcome	Establishment of an agency dedicated to pursuing Miri tourism initiatives
Initiative Owner	Miri City Council
Key Stakeholders	• Ministry of Tourism, Creative Industry & Performing Arts Sarawak (MTCPI) • Office of the Premier of Sarawak • Sarawak EPU • Sarawak Tourism Board
Implementation Timeframe	2023-2024

Case study of Langkawi Development Authority (LADA)



- Was setup by the federal government officially on 15 March 1990 under the Langkawi Development Authority Act 1990 (Act 423), also an agency under MoF
- Its vision is to become the spearheading agency in developing Langkawi as a world-class tourism destination
- It aims to develop Langkawi's tourism industry in ways that benefit the community, state and country via strategic planning and effective governance

WS1 : TOURISM ENABLERS

Enabler 2	 Transport Connectivity
Objective	Improve Miri's international transport connectivity to boost tourism potential
Elaboration	Miri suffers from limited connectivity due to airport overcapacity, the lack of a dedicated cruise ship terminal and, congestion at the immigration checkpoint at Sg. Tujoh. Improving the international air, sea and land entry points into Miri will remove bottlenecks and increase international arrivals into Miri.
Initiative Details	- Construct new international airport to service both Miri and Bintulu, with connecting rail link - Construct cruise jetty to accommodate cruise ships - Expand Sg Tujoh check point with new immigration counters and more car lanes
Targeted Outcome	Improved international connectivity to serve tourism and business travellers to Miri
Initiative Owner	Ministry of Transport
Key Stakeholders	- Miri City Council - Malaysia Airport Holdings Berhad - Miri Port Authority - State Immigration Department - Potential investors - Resident Office
Implementation Timeframe	2023-TBD

Example of Cruise Jetty



- Construction of cruise jetty to accommodate cruise ships that carry up to 1000 pax
- Cruise jetty could attract the most prominent vessels / cruise companies here e.g., Genting Dream Cruise by Resorts World Cruises, Spectrum of the Seas by Royal Caribbean Cruises

WS1 : TOURISM ENABLERS

Enabler 3	 Integrated Tourism Pass(MTDA)
Objective	Introduce integrated tourism passes to encourage increased tourist numbers at Miri attractions
Elaboration	As tourism sites in Miri are geographically fragmented, tourists frequently visit only one to two key attractions, lowering the average stay length and amount spent per tourist. An integrated tourism pass will encourage tourist to visit more tourist sites, allowing them to get the full Miri experience and increasing visitor numbers to all Miri attractions.
Initiative Details	- Develop integrated tourism passes based on 3-4 popular customer segments - Bundle attractions to encourage tourists to see more attractions at a lower price - Link tour guides and tourists via consortium of travel agents to align itinerary with tourism passes
Targeted Outcome	Boost tourist visits to all Miri attractions and sites
Initiative Owner	Sarawak Tourism Board
Key Stakeholders	- Miri City Council - Sarawak Tourism Federation - Resident Office
Implementation Timeframe	2023-2024

Key takeaways from Dubai's tourism passes should be adopted in Miri to encourage tourists to visit more sites and keep them within the ecosystem



- Length of stay
- Tourist attractions
- "Value-added" passes

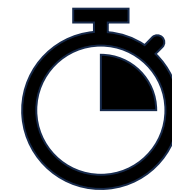
Passes should cluster / bundle the best attractions to encourage tourists to see more attractions at a significantly lower price, so they stay in the tourism loop longer, increasing average spend per tourist

4.3 ENHANCING SERVICE DELIVERY THROUGH DIGITALIZATION

Digitalization holds the promise of significantly enhancing the overall quality of life for Miri residents. By modernizing essential services, increasing access to information, and facilitating effective communication, digitalization offers the potential to elevate convenience and connectivity within the city. From improved municipal services to optimised traffic management, the integration of digital technologies into Miri's landscape can enhance quality of life by fostering a more inclusive, efficient, and interconnected urban environment.

Digitalization of service delivery allows city councils to deliver services more efficiently, reduces cost and increase customer satisfaction

Efficiency



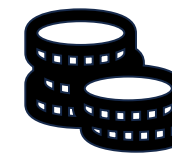
Streamlining Process

By implementing digital platforms and automation tools, city councils can streamline their service delivery processes and eliminate manual tasks, leading to increased operational efficiency.

Faster Response Times

Digital communication channels allow for quicker interactions with residents, enabling prompt resolutions to their complaints and service requests.

Cost Reduction



Operational Cost Savings

By eliminating the need for physical paperwork, printing, and storage, city councils can significantly reduce operational expenses associated with traditional service delivery.

Resource Optimisation

Data analytics tools can be employed to analyse service usage patterns, enabling councils to allocate resources more effectively and identify areas for cost savings.

Enhanced Accessibility



Enhanced Accessibility

Digitalisation provides residents with convenient self-service options, such as online applications and service portals, enabling them to access council services at anytime.

Convenient Communication

Digital communication channels facilitate faster and more efficient interactions, ensuring that residents' concerns and inquiries are addressed promptly.

Miri is Progressing Towards the Realization of the Smart City Framework

75% of MCC's initiatives fulfill certain criteria of the Malaysia City Framework

Malaysia Smart City Framework Components	MCC Initiatives	Enhancement of financial management - Increase revenue	Operational process rationalisation and improvement	Implementation of SMART City Initiatives	Compliance to Services Level Agreement Management (SLA)	Establishment of large-scale composting programme	Yearly Collection of Assessment Rates	Utilisation of ICT among staff	Enhancement of traffic management system
	Smart Government								
	Smart Economy								
	Smart People								
	Smart Living								
	Smart Mobility								
	Smart Environment								
	Smart Digital Infrastructure								

-  Will be covered in Workstream 3
-  Fulfills certain criterion
-  Fulfills component

4.3.1
FOCUS AREA 1 : SMART GOVERNMENT

The current manual processes and limited digitalisation in license and permit application, bill payment, project management, and document handling within the MCC result in inefficiencies, delays, and inconvenience to the general public.

WS2 : DIGITALISATION FA1 : SMART GOVERNMENT

Initiative 1	 Smart License Application
Objective	Digitalise business processes for application and approval for licenses, permits and services, and facilitate online payments for processing fees
Elaboration	Currently, the application and approval processes for 42 licenses and permits in MCC are not yet digitalised. The current system lacks a centralised and automated data management solution. MCC aims to digitalise all licenses and permits to streamline processes, enable faster processing, and address the challenges associated with manual operations.
Initiative Details	• Computerise the license application process • Develop an application that allows the public to apply for licenses online and track the status of their application • Provide online access to license information from licensees, council, others • Carry out business process reengineering (BPR) to simplify the license application and approval process • Enhance the user experience, streamline internal processes, and improve communication channels for business owners
Targeted Outcome	100% of council processes, 42 licenses and permits, and 25 miscellaneous services digitalised
Initiative Owner	Miri City Council
Key Stakeholders	• SAINS Sarawak • Sarawak Civil Service Digitalisation Unit (SCSDU)
Implementation Timeframe	2023-2030



WS2 : DIGITALISATION FA1 : SMART GOVERNMENT

Initiative 2	 Online Bill Register
Objective	Implementation of online bill register with bill presentment and payment in Miri Smart City mobile app and MCC official website
Elaboration	Currently, there are limited online payment options for MCC services, licenses, and permits. This inconveniences the public, decreases customer satisfaction and leads to operational inefficiencies. A standard bill register will allow users to view all fees payable and make payments through integrated payment gateways.
Initiative Details	• Develop bill register with bill presentment for MSCP mobile app and MCC official website • Allow online payments for selected bills through app/ website • Allow assessment statements to be viewable and downloadable through app/ website • Allow council compounds to be viewable and payable through app/ website • Integrate with ISM, Service Sarawak, and State payment channels
Targeted Outcome	100% completion of development of bill register for both MSCP app and MCC website. Targeting 800,000 online users per year.
Initiative Owner	Miri City Council
Key Stakeholders	• SAINS Sarawak • Sarawak Civil Service Digitalisation Unit (SCSDU)
Implementation Timeframe	2024-2026



WS2 : DIGITALISATION FA1 : SMART GOVERNMENT

Initiative 3	 Project & Asset Management System
Objective	Development of an integrated computerised system encompassing project management, asset management, and eDigital document functionalities
Elaboration	MCC currently lacks internal use systems that can effectively streamline project and initiative operations. A project database and monitoring system will enhance project tracking and management, improve asset inventory management, and establish a reliable database of projects for efficient referencing.
Initiative Details	- Implement a computerised system that includes project management, asset management, digital document management, and progress reports - Implement online contract and procurement system - Facilitate asset inventory tracking and management for efficient project management - Enable online payment of contract work done online, and viewing of progress of payments or claims - Create databases for council contract register, contractor evaluations and project information repository
Targeted Outcome	100% completion of project management system, asset management system and eDigital document system, 100% of total property files converted, 100% transition of MCC's projects into project management system, 100% transition of MCC's assets into asset management system
Initiative Owner	Miri City Council
Key Stakeholders	- Engineering Department - Landscape Department - Public Cleansing & Maintenance Department - Treasury Department
Implementation Timeframe	2024-2030



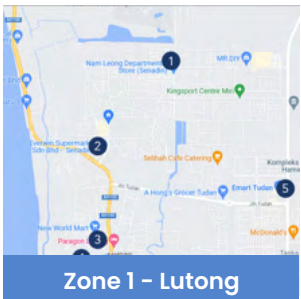
4.3.2 FOCUS AREA 2 : SMART DIGITAL INFRASTRUCTURE

The current limitations and lack of access to information within the Miri Smart City app hinder residents and visitors from efficiently utilising its features. Limited availability of public Wi-Fi hotspots across Miri City also restricts connectivity and accessibility to services.

WS2 : DIGITALISATION FA2 : SMART DIGITAL INFRASTRUCTURE

Initiative 4	 Application & Website Enhancement
Objective	Enhance the Miri Smart City application and website, develop new features and provide real time information to improve the user experience
Elaboration	The limited features within the Miri Smart City app pose a challenge for residents and visitors, hindering their ability to utilise the app. Enhancing the app and website will improve access to city services, streamline processes, and create a more connected smart city environment.
Initiative Details	Smart City App  Add a chatbot to Miri Cares for frequently asked questions (FAQ)  Improve the SMART Bus and Miri Tourism user interface and provide more information of interest  Add permit/license application & online bill registers  Add Miri Green Initiative features and facilities booking MCC Website - Enable online claims submission for MCC staff and councillors - Integration with Sarawak Services Portal & Miri Smart City app
Targeted Outcome	4 features enhanced in Miri Smart City app, 6 new features added in Miri Smart City app, 3 features enhanced in Miri City Council website; 30% increase in Miri Smart City App user registrations, 10% increase in 5-star ratings for Miri Smart City App
Initiative Owner	Miri City Council
Key Stakeholders	- SAINS Sarawak - Sarawak Multimedia Authority - Ministry of Public Health, Housing and Local Government - Engineering Department - Rating & Valuation Department - Public Health Section
Implementation Timeframe	2024-2030

WS2 : DIGITALISATION FA2 : SMART DIGITAL INFRASTRUCTURE

Initiative 5	 Expand WiFi network coverage
Objective	Expand free WiFi network coverage and accessibility to new areas within Miri City
Elaboration	Currently, there is only 1 public Wi-Fi hotspot, which is available in Miri Airport. An expansion of free WiFi network coverage across Miri City will address the absence of existing complimentary Wi-Fi service and enable residents and visitors to stay connected, access online services, and conduct business transactions seamlessly.
Initiative Details	- Expand complementary WiFi Services areas to 22 locations across 3 zones: Zone 1 – Lutong, Zone 2 – CBD, Zone 3 – Taman Tunku    - Enhance the internet speed connectivity with a security layer and a minimum backhaul speed of 5gbps - Improve Miri City Council's digitalised communications and transactions with the public - Provide free WiFi with advertising capabilities to allow MCC to channel information and commercial advertisements effectively as a complimentary initiative to the public - Attract investors, in terms of advertising, by allowing most Smart City Initiatives to be easily accessed
Targeted Outcome	22 Wi-Fi locations expanded; 10,000 new users registered for Wi-Fi network by 2030
Initiative Owner	Miri City Council
Key Stakeholders	- Sarawak Multimedia Authority (SMA) - Sacofa Sdn Bhd - Sarawak Civil Service Digitalisation Unit (SCSDU) - SAINS Sarawak - Malaysian Communications and Multimedia Commission (MCMC)
Implementation Timeframe	2024-2030

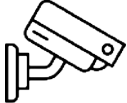
WS2 : DIGITALISATION FA3: SMART LIVING

Initiative 6	 Miri Smart City App Enhancement
Objective	Incorporate municipal services into the Miri Smart City app for effective management and monitoring
Elaboration	The current method of receiving feedback for municipal services through the Miri Smart City app has limitations, particularly in the areas of fixed schedules and addressing pressing matters. This results in follow-up complaints and unmet resident requirements. Integrating municipal services into the Miri Smart City app can greatly enhance service efficiency and improve communication with the public by providing a streamlined and accessible platform for residents to request and track municipal services.
Initiative Details	- Integrate 5 municipal services into MSC App  Grass CuttingDrain ClearingStreet SweepingWaste CollectionRoad Maintenance - Integrate city services into the MSC App: Real-Time Monitoring, Enhanced Resident Engagement, Data-Driven Decision Making, Data Analytics and Performance Evaluation - Implement zoning approach to ensure that services are distributed evenly and address residents' specific needs - Implement colour coding in the online reporting system based on contract zones to improve visual clarity and simplify project management
Targeted Outcome	5 municipal services added to Miri Smart City app; reduction in feedback time from 10 working days to 7 working days for grass cutting, drain clearing and road maintenance; reduction in feedback time from 3 working days to 1 working day for street sweeping
Initiative Owner	MCC – Services Department
Key Stakeholders	Vendors
Implementation Timeframe	2023–2030

4.3.3
FOCUS AREA 3 : SMART LIVING

Miri City is facing major challenges in managing and enforcing municipal services, which has led to more complaints from residents. In addition, crime rates have been increasing, putting public safety at risk.

WS2 : DIGITALISATION FA3 : SMART LIVING

Initiative 7	 Expand Safety Network
Objective	Expand safety network across Miri City to ensure public safety by reducing crime rates, enhancing emergency response, and improving reporting and analysis
Elaboration	Due to an increase in crime rates in recent years, safety measures, such as CCTVs and panic buttons, are essential. Currently, the surveillance systems implemented through the Smart Park and Smart City initiatives, are limited in their coverage. Extending the safety measures city-wide will allow the centralised command center to oversee city safety measures through a real-time monitoring system and improve data collection for public safety analysis and planning.
Initiative Details	• Install surveillance cameras in residential areas to deter crime and enhance safety for residents • Extend surveillance coverage to educational institutions and healthcare facilities • Install cameras in and around public transportation hubs such as bus stations and taxi stands • Upgrade street lighting to incorporate motion-sensing technology to help conserve energy, while improving visibility and enhancing safety
Targeted Outcome	1,263 surveillance cameras to be installed; reduction of crime rates by 5% per year until 2030
Initiative Owner	• Engineering Department, Miri City Council • Public Affairs Unit, Miri City Council
Key Stakeholders	• Miri City Council • Vendors • Polis Diraja Malaysia • Sarawak Energy Berhad • Kementerian Kesihatan Malaysia (KKM) • Pejabat Pendidikan Daerah Miri
Implementation Timeframe	2023-2030



4.3.4
FOCUS AREA 4 : SMART MOBILITY

The current state of traffic management and parking facilities in Miri City under MCC's jurisdiction poses significant challenges, leading to congestion, parking issues, and a lack of centralised parking solutions.



WS2 : DIGITALISATION FA4 : SMART MOBILITY

Initiative 8	 Improve Traffic Management
Objective	Improve traffic management to optimise traffic flow and reduce congestion
Elaboration	Miri city is dealing with persistent traffic congestion issues at key locations. These congestion problems are further compounded by traffic violations. Implementation of smart pedestrian crossings and smart traffic lights will improve traffic management, optimise traffic flow, and reduce congestion citywide.
Initiative Details	- Implement smart pedestrian crossings with auto-detection, face recognition, light sensors, indicators, and detectors - Upgrade remaining traffic lights under MCC jurisdiction to smart traffic lights - Synchronise all unsynchronised smart traffic lights to decrease average travel time and reduce traffic congestion
Targeted Outcome	Installation of Smart Pedestrian Crossings for 19 junctions, Installation of Smart Traffic Lights for 21 junctions, synchronisation of 32 traffic lights, 30% reduction in average travel time by 2030
Initiative Owner	Miri City Council
Key Stakeholders	- Ministry of Transport (MOT) - Jabatan Kerja Raya (JKR) - Polis Diraja Malaysia (PDRM)
Implementation Timeframe	2023-2029

Intelligent Road Studs (IRS)

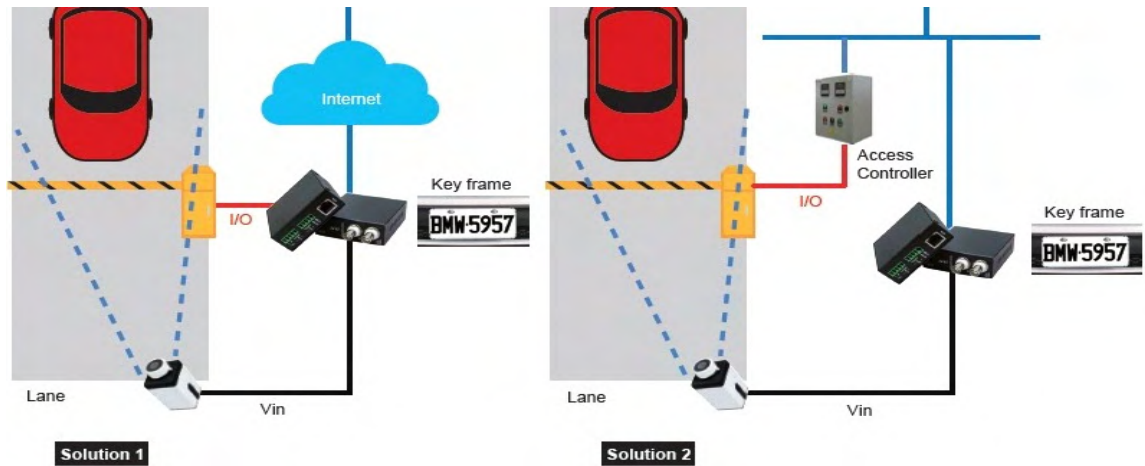


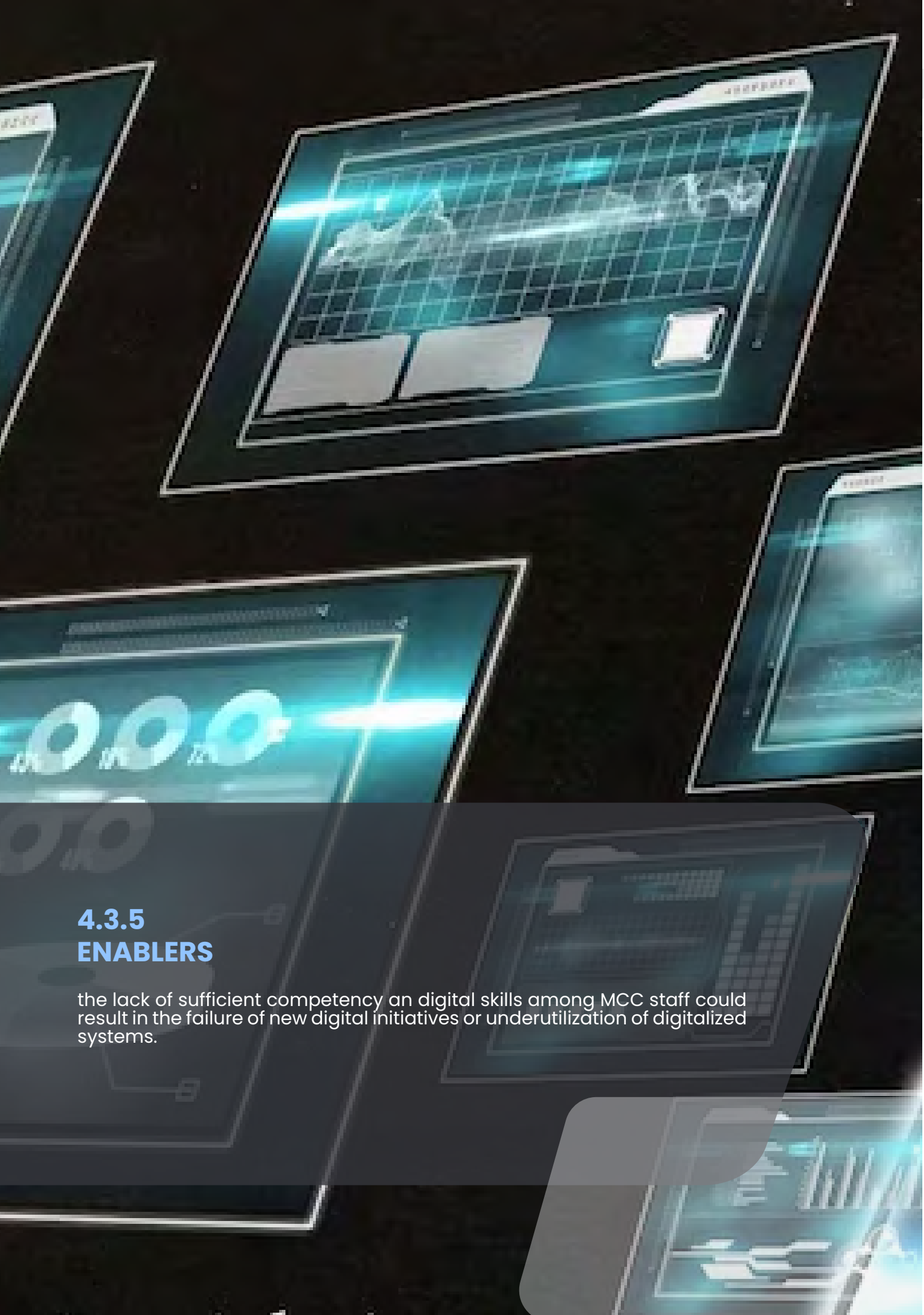
Contactless Buttons



WS2 : DIGITALISATION FA4 : SMART MOBILITY

Initiative 9	 Smart Parking Systems
Objective	Implement smart parking systems and facilities to optimise parking space utilization and fee collection
Elaboration	Currently, Miri City Council is facing difficulties in collecting outstanding parking compounds. Enhancing the smart parking systems by improving gated parking systems and implementing a unified parking app will reduce the parking compound issue in Miri.
Initiative Details	- Enhancing the smart facilities for gated parking systems by incorporating IoT sensors and providing real-time parking availability information - Centralise and standardise the Smart Parking Apps platform for all PBT under one app - Show available parking lots in Smart parking apps - Provide MCC with dashboard information such as collection of parking/compound and number of motorists compounded - Digitise the parking lot maps to replace the maps kept on paper.
Targeted Outcome	Implementation of Gated LPR parking systems completed for 11 commercial areas, 100% reduction parking compound notices issues in the gated parking area
Initiative Owner	Miri City Council
Key Stakeholders	- Borneo Parking Systems Sdn. Bhd. - Vendor
Implementation Timeframe	2023-2030

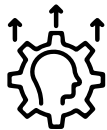
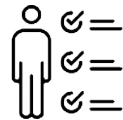




4.3.5 ENABLERS

the lack of sufficient competency an digital skills among MCC staff could result in the failure of new digital initiatives or underutilization of digitalized systems.

WS2 : DIGITALISATION ENABLERS

Enabler 1	 Capacity Building and Skills Development
Objective	Develop digital training platforms to cultivate skills, competence and knowledge among MCC staff
Elaboration	The current system for tracking and analysing training attendance and monitoring staff progress at MCC is ineffective, hindering the development of effective training programs for staff. A digital training platform will improve data collection for better training implementation.
Initiative Details	Develop digital training platform Conduct training needs assessment to identify skill Continuously gather feedback and evaluate training Upgrade training facilities for more effective training
Targeted Outcome	100% completion of development of digital training platform; Achieve annual average of 24 hours of staff training for MCC staff
Initiative Owner	Miri City Council - Human Resource Unit
Key Stakeholders	Vendor
Implementation Timeframe	2024 (On going)

4.4 GREEN INITIATIVE TO ENHANCE LIVEABILITY

Miri stands to gain numerous advantages that positively impact its residents and the environment alike by embracing the concept of a green liveable city. Through the promotion of green spaces, greenification of the urban infrastructure, and the adoption of renewable waste management, Miri can achieve reduce carbon emissions, increase renewable resources, and enhance the quality of life for its citizens. Such sustainable practices contribute to the health and well-being of Miri's residents, while also fostering economic growth and showcasing a synergy between urban development and environmental preservation that is essential for Miri's long-term prosperity.

Green cities are linked to the quality of their environment supplemented by low carbon approaches in urban activities

Low Carbon City Framework (LCCF)

4 Elements for GHG Reductions in Cities and Townships



Urban Environment

- Site selection
- Urban form
- Urban Greenery and Environmental Quality



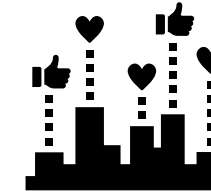
Urban Transport

- Shift of Transport Mode
- Green Transport Infra
- Green Vehicles
- Traffic Management



Urban Infrastructure

- Infrastructure Provision
- Waste
- Energy
- Water



Building

- Low Carbon Building
- Community Service

For the Diamond Recognition, each of the following element will be individually rated:



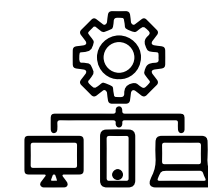
Energy

Indicator:
Electricity bill



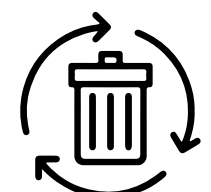
Water

Indicator:
Water bill



Mobility

Indicator:
Traffic count or fuel consumption



Waste

Indicator:
Waste to landfill or recycle



Greenery

Indicator:
Size of green area or tree counting

Recognition Rating

1% Reduction

5% Reduction

10% Reduction

25% Reduction

45% Reduction

Miri's LCCF Strategic Themes



Government effort is visible & motivates people to value the environment



Reduction of municipal waste



More green spaces and green connectors



Plant more high sequestration trees



Improve standard of living in Miri



Low carbon building by implementing GBI

4.4.1

FOCUS AREA 1: URBAN ENVIRONMENT

Miri's urban connectivity lacks proper pedestrian and cycling paths and a strategic plan to set the direction for its urban landscape which prevents the city from attaining low carbon connectivity and improving public health .



WS3 : GREEN & LIVABILITY FA1 : URBAN ENVIRONMENT

Initiative 1	 First and Last-mile Connectivity
Objective	Enhance first and last-mile connectivity in Miri City to introduce flexible urban connectivity
Elaboration	Miri's pedestrian paths and cycling lanes are currently undermaintained, unsafe, and disconnected from public transport stations and popular areas in the city. Enhancing cycling and pedestrian paths across Miri by integrating universal safety features and connecting with first and last-mile service providers will improve accessibility and walkability.
Initiative Details	- Improve cycling paths along popular cycling routes - Improve pedestrian paths that connect primary schools and popular public spaces in Miri City Centre - Develop Development Control Standard to: i. Align future first and last-mile infrastructure development ii. Ensure pedestrian and cycling lanes integrate intentional architecture standard safety designs iii. Syndicate with private sector service providers to introduce first and last-mile vehicles to Miri
Targeted Outcome	Establish an additional 11.5km of pedestrian walkways and 25.3km of cycling path
Initiative Owner	Engineering Department, MCC
Key Stakeholders	- Landscape Department, MCC - MPHLG - MUDeRN - Land and Survey Department - MOE - JKR - MOT - JLN - Service Providers (Eg. Beam)
Implementation Timeframe	2023–2027



WS3 : GREEN & LIVABILITY FA1 : URBAN ENVIRONMENT

Initiative 2	 Miri City Landscape Masterplan
Objective	Develop new Miri City Landscape Masterplan to drive the aesthetic direction of Miri's landscape
Elaboration	The city's poor landscape aesthetic, improper maintenance, and poor performance by 3rd party contractors has resulted in numerous complaints by residents. A new, updated Landscape Masterplan, integrating new landscape designs and introducing penalties for underperforming contractors can transform the urban landscape and act as a unique selling point to boost tourism and enhance quality of life.
Initiative Details	- Introduce new landscape zones across Miri with specific landscape themes - Integrate child-friendly landscapes - Introduce policies and standards to ensure compliance by contractors - Outline specific talents and manpower required for all future landscaping projects
Targeted Outcome	Increase area of green spaces and parks by 187.47 acres across Miri City
Initiative Owner	Landscape Section, MCC
Key Stakeholders	- Engineering Section, MCC - Parking Section, MCC - Public Health Section, MCC - PCM Section, MCC - Enforcement Section, MCC - Jabatan Landskap Negara - MOTAC - STB - MPHLG
Implementation Timeframe	2023–2030

Examples of Prominent Urban Landscape



Gardens by the Bay



Philosopher's Path



Tivoli Gardens

WS3 : GREEN & LIVABILITY FA2 : URBAN INFRASTRUCTURE

Initiative 3



Solid Waste and Public Cleanliness By-Laws

Objective

Engage with other local authorities (LA) to draft Solid Waste and Public Cleanliness By-Laws to empower LAs to enforce appropriate waste management strategies

Elaboration

Currently, there are no regulations governing the separation and recovery of solid waste as well as public cleanliness in Sarawak. A new Solid Waste and Public Cleanliness Ordinance will give local authorities and MCC the authority to enforce the separation and recovery of waste to reduce the generation of waste.

Initiative Details

- Recommended new provisions to be amended under the Protection of Public Health Ordinance Sarawak 1999:
- That local authorities be provided the power to direct for controlled solid waste to be separated, handled and stored
 - That the Minister may require any solid waste generator to reduce the generation of controlled solid waste in any manner or method
 - That the Minister may require that specified products and goods shall be taken by the manufacturer and that the cost shall be absorbed by the manufacturer
 - Integrate child-friendly landscapes
 - Introduce policies and standards to ensure compliance by contractors

Targeted Outcome

Implementation of Solid Waste and Public By-Laws by 2024

Initiative Owner

Legal Officer, MCC

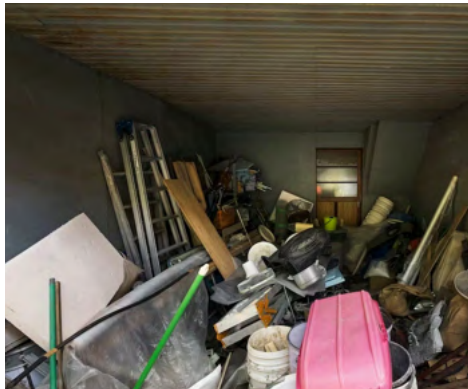
Key Stakeholders

- Public Health Section, MCC
- SDG Section, MCC
- Public Cleaning & Maintenance Section, MCC

Implementation Timeframe

2023–2024

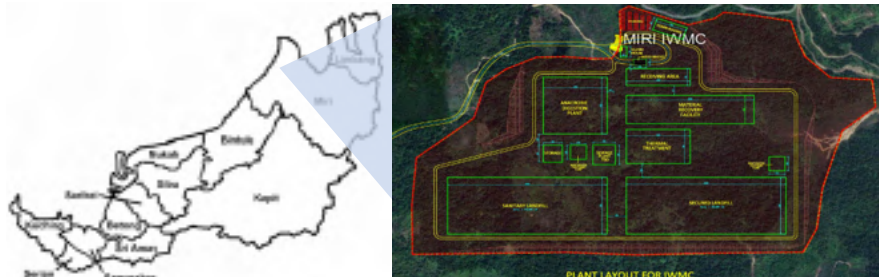
Examples of Solid Waste



4.4.2
FOCUS AREA 2 : URBAN INFRASTRUCTURE

With MCC spending a total of RM22 million annually on waste management, MCC needs to identify ways to minimise waste while shrinking its waste management costs. As Miri aims to become a low carbon city by 2035, it also need to address its building codes to adopt green building standards as well as reduce energy consumption on public lighting.

WS3 : GREEN & LIVABILITY FA2 : URBAN INFRASTRUCTURE

Initiative 4	 Integrated Waste Management Complex
Objective	Establish an Integrated Waste Management Complex (IWMC) to process waste efficiently and reduced environmental impact       Material Recovery Facility Thermal Treatment Plant Anaerobic Digestion Plant Power Generation Facility Raw Water Treatment Plant Secured & Sanitary Landfill
Elaboration	MCC spends RM3.5 million annually on transfer fees to transfer the city's waste from Miri to Sibuti Landfill which is 95% utilised and is estimated to be filled by 2024. A state-of-the-art IWMC in Greater Miri will answer Miri's waste processing problem while lowering its total waste footprint. 
Initiative Details	- Build a comprehensive facility composed of state-of-the-art facilities and plants to process waste efficiently including: i. A material recovery facility (MRF) to screen organic material for recyclables ii. A thermal plant to convert remaining organic waste into energy iii. An anaerobic digestion (AD) facility to convert waste-to-resource - Take in waste from Marudi and Sibuti, potentially generating up to RM41 million of revenue per annum - Reduce greenhouse gases, land use and environmental impact
Targeted Outcome	RM3.5 million cost savings by 2030; Potential revenue generated from IWMC system (RM14.4 mil (7%))
Initiative Owner	PCM Section, MCC
Key Stakeholders	- SDG Section, MCC - Legal Officer, MCC - Resident Committees - MPHLG
Implementation Timeframe	2024-2028

WS3 : GREEN & LIVABILITY FA2 : URBAN INFRASTRUCTURE

Initiative 5	 Solid Waste Separation at Source
Objective	Introduce Solid Waste Separation at Source policy to reduce mixed waste and recover recyclable materials
Elaboration	Miri City's dumpsite receives 90,000 tons of mixed domestic waste annually, composed of food waste (40%), plastics (20%), paper (14%) and other waste (26%) which requires RM16.2 million for disposal and treatment. Currently, only a fraction of recyclable materials is recovered. Integrating a waste separation policy and will help reduce the amount of mixed waste going into the landfill.
Initiative Details	- Introduce solid waste separation at source policy to specify the segregation of food waste, paper, plastic and others  - Promote public awareness through campaigns for solid waste segregation - Provided dedicated bins for separation of waste at source for food waste, paper, plastic and others - Increase collection centres and drive thru facilities for separated waste - Include a segregation facility at the IWMC to further divide and treat waste
Targeted Outcome	45,000 tons of food and recyclables reduced; 56% cost reduction (RM9 mil)
Initiative Owner	PCM section, MCC
Key Stakeholders	- SDG section, MCC - Legal Officer, MCC - MCC - MPHLG
Implementation Timeframe	2024-2028

Example of Penang's Waste Separation



WS3 : GREEN & LIVABILITY FA2 : URBAN INFRASTRUCTURE

Initiative 6	 Composting Programme
Objective	Establishment of large-scale composting programme
Elaboration	Organic waste constitutes 40% of the overall waste disposed at the Landfill. Decomposition of the organic waste contributes to the generation & release of methane gas. Through segregation of waste from source, food waste can be composted to minimise dumping of waste and allow the council to generate revenue from the fertiliser created.
Initiative Details	 Provide dedicated bins for the collection of food scraps which will be collected on a regular schedule by waste management trucks  Transport the collected food waste to the dedicated composting facilities at the IWMC  Once processed, the resulting compost will be sold to local farmers, community gardens, landscapers, and other organisations for sustainable use
Targeted Outcome	Reduction of the organic waste in the landfill by 50%. Generation of value-added by-products & promotion of a positive environment and general public health
Initiative Owner	PCM Department, MCC
Key Stakeholders	MPHLG
Implementation Timeframe	2024-2028

Integrated Waste Management Complex (IWMC)

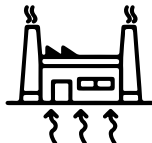


Anaerobic Digestion Plant



Digestate as Organic Fertiliser

WS3 : GREEN & LIVABILITY FA2 : URBAN INFRASTRUCTURE

Initiative 7	 Waste-to-Resource Programme
Objective	Implement waste-to-resource programme to further reduce landfill waste
Elaboration	Waste disposal generates high operation costs due to lost of opportunity to recover recyclable waste amounting 45,000 tons. By utilising the IWMC facilities and recovering materials via the waste segregation policy, MCC can reduce costs and generate a new revenue stream.
Initiative Details	 Process organic waste into energy for thermal treatment plant  Process organic waste into biogas  Process plastic and paper into ecobricks  Process organic waste into fertilizer
Targeted Outcome	Reduction of waste by 56% and generation of RM9,385,063 in revenue through resource recovery by 2030
Initiative Owner	PCM Department, MCC
Key Stakeholders	- SDG section, MCC - Legal Officer, MCC - MPHLG
Implementation Timeframe	2024-2028

WS3 : GREEN & LIVABILITY FA2 : URBAN INFRASTRUCTURE

Initiative 8	 Legislation on Non-biodegradable Pollutants
Objective	Introduce legislation to ban non-biodegradable environmental pollutants (single use plastic and styrofoam)
Elaboration	Between 2017 and 2019, MCC was able to reduce the use of Styrofoam across Miri by 90% however, since the 2020 lockdown, the use of styrofoam has increased, while plastic waste rose by 10% between 2020 to 2023. Legislation will enable MCC to coordinate and collaborate with key stakeholders to ban the use of single use plastic and styrofoam.
Initiative Details	• Draft legislation to ban non-biodegradable environmental pollutants • Collaborate with relevant agencies for effective implementation and enforcement • Create awareness on the dangers of non-biodegradable pollutants
Targeted Outcome	Pass legislation by 2025 leading to 95% reduction in non-biodegradable plastic and Styrofoam
Initiative Owner	Public Health Section, MCC
Key Stakeholders	• SDG Section, MCC • Legal Officer, MCC • Public Cleaning & Maintenance Section, MCC • SAG • MPHLG • PDRM
Implementation Timeframe	2023-2024

Plastic and Styrofoam ban and enforcement efforts in Miri



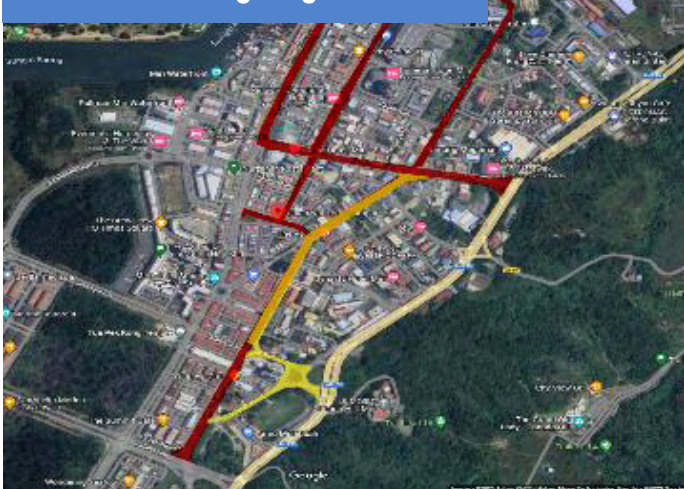
Benchmarks for high-performing cities



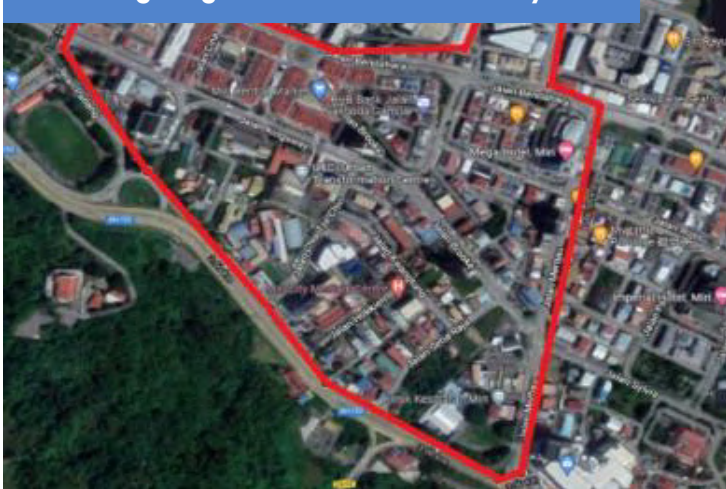
WS3 : GREEN & LIVABILITY FA2 : URBAN INFRASTRUCTURE

Initiative 9	 LED Lighting
Objective	Optimise public lighting energy consumption via conversion to LED
Elaboration	MCC spends RM6.7 million in public lighting electricity bills annually due to the use of inefficient street lighting lamps. Switching to LED lighting will reduce costs, and also reduce carbon emissions from public lighting by 40%, supporting Sarawak's target of 60% reduction of carbon emissions by 2035.
Initiative Details	 Scope and identify all streets requiring conversion  Syndicate with SEB on profit sharing for cost-saving  Switch HPS bulbs for 40,000 streets in Miri City
Targeted Outcome	Realise an estimated RM1.7 million in annual cost-savings for MCC in public lighting bills
Initiative Owner	Department of Engineering, MCC
Key Stakeholders	• Sarawak Energy Berhad • Ministry of Utility and Telecommunication
Implementation Timeframe	2023-2026

Current Streetlighting under MCC



Streetlighting at CBD to be taken over by MCC



WS3 : GREEN & LIVABILITY FA2 : URBAN INFRASTRUCTURE

Initiative 10	 Green Building Policy
Objective	Introduce green building codes through the Miri Green Building Policy
Elaboration	Buildings are a key source of emissions which need to be addressed in order to achieve Sarawak's aspiration of 60% carbon emissions reduction. Aligning incoming development with international and national standards will address this issue and assist Miri become a green, smart and liveable resort city.
Initiative Details	• Develop green building guidelines and incentives for building developers • Apply guidelines to new or renovated non-residential buildings with air-conditioned space • Apply GBI most widely used in green building criteria that assesses building performance in 6 areas • Encourage compliant buildings via mayor's certification for green buildings
Targeted Outcome	Adoption of green building codes by MCC. 100 buildings comply with GBI standards by 2030.
Initiative Owner	Engineering Department, MCC
Key Stakeholders	• SDG Department, MCC • Sarawak Housing And Real Estate Developer Association (SHEDA) • Pertubuhan Arkitek Malaysia (PAM) • Lembaga Arkitek Malaysia (LAM) • MPHLG
Implementation Timeframe	2023-2029

Example of Green Buildings



Apartment in PJ Midtown



KLIA2 Terminal



Vitrox Campus 2.0, Batu Kawan



Suzlon One Earth



Pixel Building



Robinson Tower

4.4.3

FOCUS AREA 3 : COMMUNITY ENGAGEMENT

Community Engagement in Miri requires additional boost to ensure improved continuous social cohesion and data collection to track progress towards sustainability awareness.



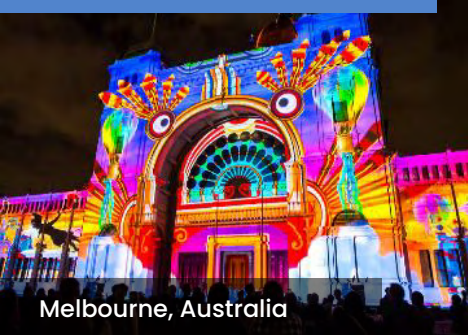
WS3 : GREEN & LIVABILITY FA2 : COMMUNITY ENGAGEMENT

Initiative 11	 Public Survey Participation
Objective	Increase community awareness and public survey participation through utilisation of MURNI net and other platforms
Elaboration	Since joining the Malaysian Urban-Rural National Indicators Network for Sustainable Development (MURNI-net), MCC has underperformed in public statistics gathering due to a lack of public survey participation. Community engagement and more promotion of the public survey will increase public awareness of the initiative and improve MCC's ability to gather statistics to measure sustainability. 
Initiative Details	- Promote the public survey in advance of the due date of public data submission - Include a widget in the Miri CARES app to effectively disperse data - Increase physical engagement with members of the public especially during MCC events paired with participation incentives - Collaborate with resident committees to distribute surveys or identify key community members in advance
Targeted Outcome	Achieve 100% of MURNI-net's public survey requirement by 2024
Initiative Owner	SDG Section, MCC
Key Stakeholders	- Public Health Section, MCC - Legal Officer, MCC - Public Cleaning & Maintenance Section, MCC
Implementation Timeframe	2024

WS3 : GREEN & LIVABILITY FA2 : COMMUNITY ENGAGEMENT

Initiative 12	 Community-led Engagements
Objective	Establish frequent community-led engagements
Elaboration	Community events in Miri are exclusive, sporadic and often focused in specific areas due to a lack of coordination between event organisers, leading to less interaction between communities as well as neglected areas. MCC can build community cohesiveness and enhance public awareness of its green city initiatives by taking on an organiser role and scheduling a clean-up rotation for more neglected beaches and other public spaces.
Initiative Details	- Identify objectives, targeted organisations / communities, types of events (such as clean-ups or carnivals), targets to achieve, and funding required for community clean up programmes - Pre-plan and release schedules for community events to occur on a fortnightly basis, based on monthly themes - Conduct awareness campaigns and promote community-led events to multiple groups for improved community cohesion
Targeted Outcome	Increase frequency of community engagement to twice a month and encourage continuous clean-up efforts for the beaches and public spaces under MCC's purview
Initiative Owner	SDG Section, MCC
Key Stakeholders	- Lembaga Sungai - Natural Resources and Environment Board (NREB) - Curtin University - Ministry of Youth and Sports
Implementation Timeframe	2023-2024

Example of Council-led events



Melbourne, Australia



Vienna, Austria



Vancouver, Canada

WS3 : GREEN & LIVABILITY FA2 : COMMUNITY ENGAGEMENT

Initiative 13	 MCC Library Promotion
Objective	Promotion of MCC Library via introduction of young adult focused events
Elaboration	Public libraries are a key component to increasing the liveability of a city. However, MCC libraries are rarely utilised by young adults in Miri, rendering the libraries underutilised. MCC libraries' proximity to Miri's tertiary education institutions, provides MCC with an opportunity to promote the libraries to young adults via the introduction of young adult focused events.
Initiative Details	• Improve library facilities and digital content such as accessible power ports and WIFI strength • Organise and promote events geared towards engaging university students such as networking events • Collaborate with youth-involved organisations such as universities, youth-focused NGOs and associations • Introduce a takeaway café on the premises to increase university student engagement and generate revenue for MCC via rentals
Targeted Outcome	3,600 young adult library users per year by 2030
Initiative Owner	Library Section, MCC
Key Stakeholders	• MPHLG • NGOs eg. JCI Miri & Lutong • Youth Association, Miri • Tertiary Education Institutions, Miri
Implementation Timeframe	2024-2025

Example of Public Libraries of Melbourne



Cultural Capital



Intellectual Hub



Architectural Landmark

4.4.4 ENABLERS

The inability to measure the effectiveness or success of initiatives will result in issues such as lack of accountability, inefficient resource allocation and unclear progress tracking, hampering the overall success of the initiatives.

WS3 : GREEN & LIVABILITY ENABLERS

Enabler 1	 Carbon Emissions Inventory
Objective	Establish a carbon emissions inventory to determine the effectiveness of initiatives
Elaboration	In order to ensure the success of Miri’s low carbon initiatives, a carbon emissions inventory is necessary to determine the carbon baseline as well as measure the effectiveness of the implemented initiatives.
Initiative Details	• Scope & plan carbon inventory • Collect data & quantify Green House Gas Emissions • Develop GHG Inventory Management Plan • Set GHG reduction target, track & report progress
Targeted Outcome	Establishment of a carbon emissions inventory
Initiative Owner	SDG Department, MCC
Key Stakeholders	• MGTC • MCC Engineering Department • MCC Landscape Department • MuDERN
Implementation Timeframe	2023-2030

MGTC under its Low Carbon City Framework support programme can provide technical assistance to MCC, as well as software solutions for tracking



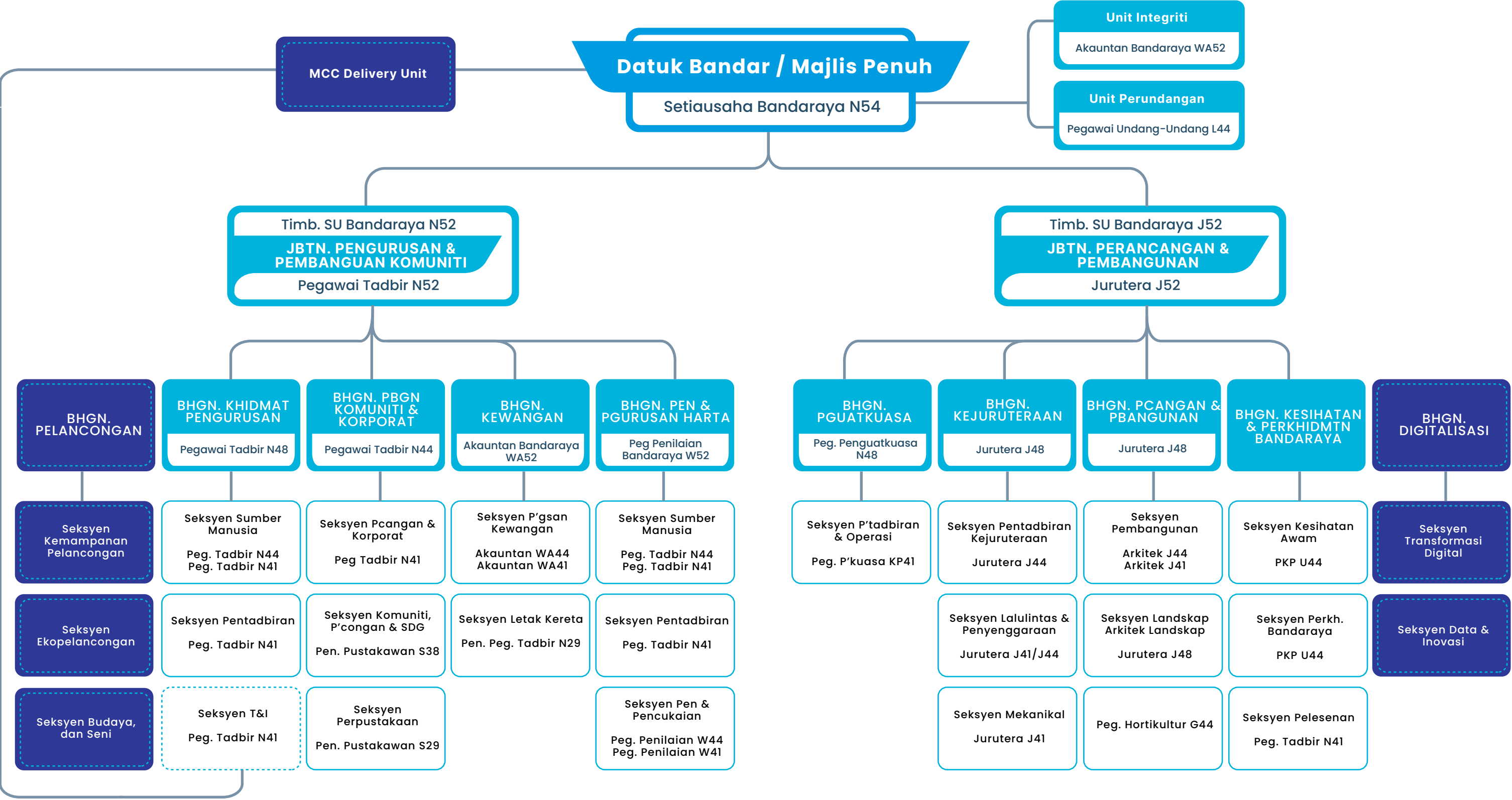
Process Mapping and Data Collection



Software and Reporting Systems

5 GOVERNANCE STRUCTURE

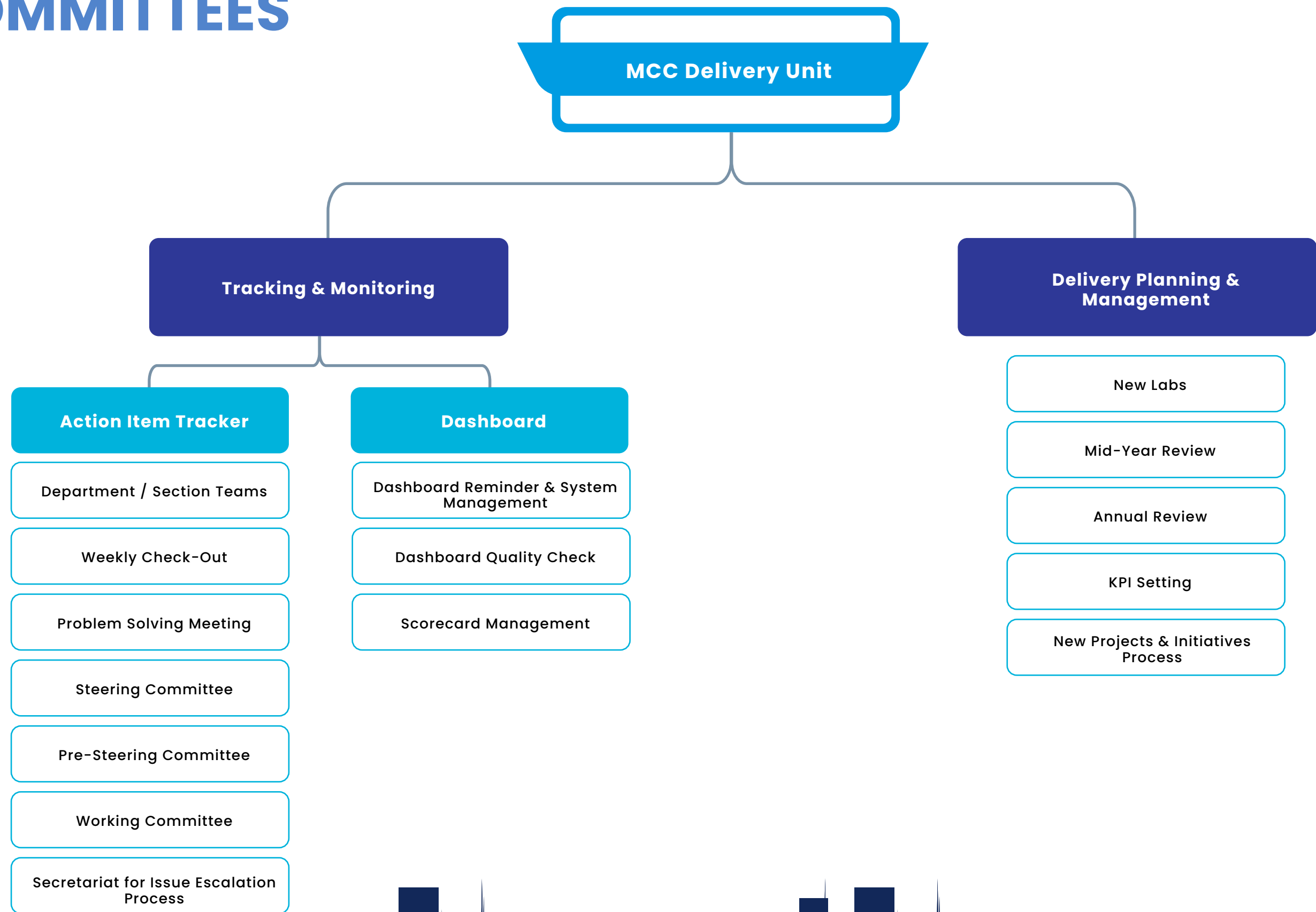
MCC ORGANIZATION CHART



 Proposed addition to City Council structure

 Proposed removal from City Council structure

SCORECARD MANAGEMENT COMMITTEES



MIRI SMART CITY STEERING COMMITTEE (MSCSC) 2023

Chairman

YB Adam Yii Siew Sang
Mayor of Miri City

Vice-Chairman

Cr. Ariffin Bin Mohamad
Deputy Mayor

Secretary

En. Abdul Rahman Taupek
Ag. City Secretary

Members

Cr. Huang Huat Choon
Chairman, MTH SC

Cr. Abdullah Jaini
Chairman, City Infrastructure SC

Cr. Jeffery Phang Siaw Foong
Chairman, PHL SC

Cr. Chin Fook Kim
Chairman, City Services SC

Cr. Ernest Goh Khiok Seng
Chairman, Building Control SC

Cr. Leslie Lau Ik Chie
Chairman, SDG SC

MCC Head of Division/Section/Unit

Ts. Che' Abu Bakar Bin Che' Said
Ag. City Engineer

Pn. Monica Bt. Lenya
City Valuation Officer

Pn. Siti Suhana Rosli
City Treasurer

Pn. Lolita Jaime Nicholas
Senior Assistant Secretary

Pn. Dyg Siti Nurbaya Bt. Awg Kipli
AS Administration

En. Mohd Zaidi Adrus Razali
Assistant Secretary (Corporate)

En. George Gumbang
Assistant Secretary (T&I)

Cr. John Trawe
Chairman, Tourism Development SC

Cr. Rexas Gilum
Member

Cr. Tan Lek Jin
Member

En. Peter Chia Chhau Khiong
Member

Sarawak Information Systems SB
Consultant

En. Liaw Han Siong
Public Health Officer

En. Iskandar Bin Damaimi
Enforcement Officer

Cik Nor Rashidah Bt Nawawi
Senior Executive Engineer

Cik. Zafirah Bt Jahidi
Architect

En. Mohd. Ismail Yusuf
Executive Engineer (C&P)

Pn. Habsah Bt Johor
SDG Officer

En. Thomas Ajun
Assistant Admin Officer (Admin/IT)

En. Roslan Bin Ali
Assistant Secretary (Gen/Licensing)

Cik Cindy Ann Ak Robert Tasser
Legal Officer

Pn. Ranee Mary Richard
Ag. Horticulturist

Pn. Arweena Bt Iskandar
City Services Officer

Secretariat

Pn. Jenifer Leku Balang
Assistant Administrative Officer (T&I)

En. Abdul Hafiz Bin Abdul Rahman
City Librarian

En. Justine Ulok Ak Gana
Assistant Admin Officer (Parking)

En. Mohd Nurhisham Bin Ismail
UTC Manager

Pn. Marissa Joyner Mathew
Assistant Administrative (T&I)

Steering Committee Tasks and Responsibilities

- 01

To act as the highest decision-making body for Miri Smart City (MSC) related matters, and report to the Miri City Council Standing Committee for Finance, Human Resources, General Purpose (FHRGP).
- 02

To serve as the foundation to ensure successful conceptualization and implementation of plans, and sustainment of MSC initiatives, and provide focused support to ensure ongoing emphasis on digitalization and data governance.
- 03

To ensure all allocated funds and other resources, approved plans and programs are tabled at meetings.
- 04

To define objectives, set policy, and strategic directions, identify key activity areas, ensure compliance and address policy related issues
- 05

To form and dissolve subcommittees as needed, and define the functions of the subcommittees, which include but are not limited to, developing and proposing plans, and executing, monitoring and updating progress to SCMSC.
- 06

To coordinate and address issues arising from cross-agency collaborations
- 07

To meet a minimum of once (1) each quarter of each calendar year

6

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The Honourable Dato Sri Prof. Dr Sim Kui Hian

Deputy Premier of Sarawak
Minister for Public Health, Housing and Local Government Sarawak

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Permanent Secretary
Ministry for Public Health, Housing and Local Government Sarawak

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Miri City Council

Heads and Rep of Government Departments/Agencies

Miri Community Leaders

Chairman and Rep of Social Bodies, Major Commercial Houses and Non-Government Organizations

For their active participation, support and contribution in Miri Smart City

We extend our heartfelt appreciation to each of you for your active participation, guidance, and contributions for Miri Smart City Blueprint.

With Sincere thanks.

YBhg. Abdul Rahman Taupek
Ag. City Secretary of Miri City Council



Miri Smart City BluePrint
2020-2030

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