

Penang Island embark on the collective journey that pledge that Leave No One Behind by promoting goals and achievement of SDGs to strengthen action for people, planet and prosperity.

Teluk Bahang Batu Batik Balik Balik Balik Dulau Balik Dulau Bajan Bajan

SEBERANG PERAI Area : 748 sqkm Population : 946,092





<u>PENANG</u> Area : 1,049 sqkm Population : 1,740,405







POPULATION GROWTH AND SUSTAINABLE HUMAN RESOURCE PLANNING BY DISTRICT

- □ Balanced Distribution Of State Population.
- Increase The Number Of Knowledgeable, Skilled And Semi Skilled Workers.

STRENGTHENING THE FOUNDATION AND PROSPECTS OF STATE'S ECONOMY

Basic Achievements And Economic Prospects Is Based On Indicators Of State GDP, GDP Per Capita And The Average Household Income.

VALUE ADDED AND COMPETITIVE INDUSTRIAL DEVELOPMENT

Achievement In Industrial Development Refers To Indicators Of Industrial Land Development And Type Of Industries And Its Evolution.

PENANG AS A MAJOR TRADING CENTER

Achievement As The Primary Trade Centre Refers To George Town's Floor Space And Its Function As The Indicator.

STRENGTHENING THE TOURISM SECTOR

The Achievement In Tourism Development Is Reflected Via The Number Of Tourists Arrives In Penang.

MODENIZATION OF AGRICULTURE AND THE DEVELOPMENT OF FARMING INDUSTRY

□ Agricultural Land Use And Crop Production.







BALANCED LAND USE DEVELOPMENT AND ENVIRONMENTAL CONSERVATION

- Percentage Of Built Up Area
- Population Density
- □ Water Quality Of River Basin
- □ Marine Water Quality
- □ Recycling Rate To Reduce Solid Waste Disposal

BALANCED URBANIZATION AND RURAL SETTLEMENTS

□ Urban Hierarchy And Numbers Of Villages.

IMPROVED PROVISION OF QUALITY HOUSING AND COMMUNITY AMENITIES

Number Of Housing Units, Affordable Housing Units, Hospital Beds Ratio, Health Clinics, Primary Schools And Secondary Schools.



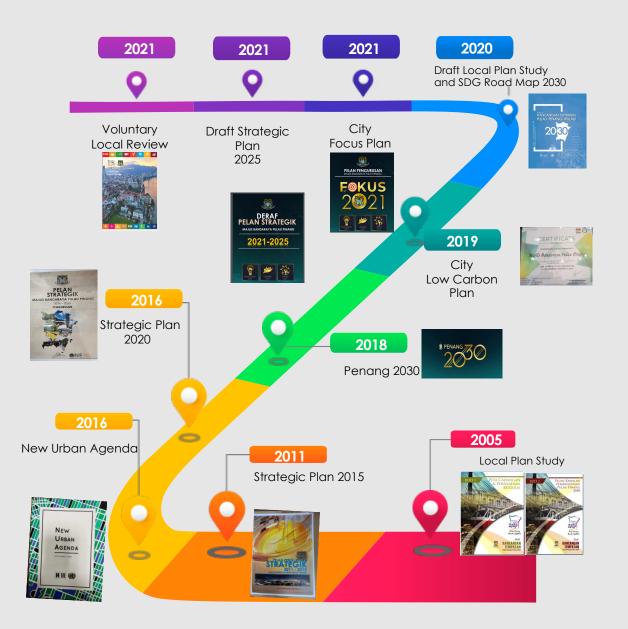
STRENGTHENING COMMUNICATION AND TRANSPORTATION SYSTEMS

Airport And Port Capacity And Integrated Public Transport Terminals



PROVISION OF ADVANCED STATE INFRASTRUCTURE

Water Supply, Electricity Supply, Irrigation And Drainage And Sewerage Systems.



<u>CITY ROADMAP</u>

Island SDG roadmap Penang contribute to a more prosperous city aligned with the 2030 Agenda for Sustainable Development. The Roadmap impact opportunities involve scaling up good practices environmental in and social building performance and on innovative partnerships, while recognising the importance of transition in the city's aim to achieve sustainability action plans.

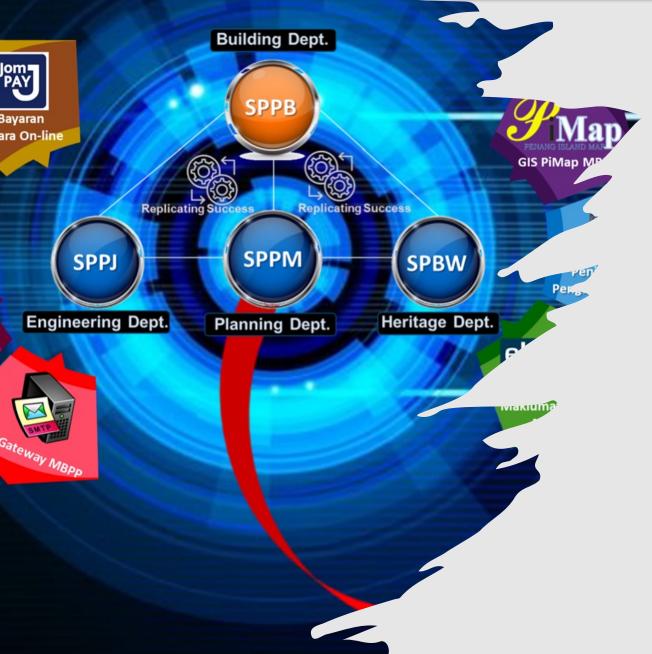
CITY FUTURE PROSPECTS

The future is moving forward towards fundamental changes of social economy and digital revolution. Penang Island will continue to innovate and transform the city as well as to strengthen the policies and adapt changes in business process according to the expectation of the local needs.

NEW INITIATIVES

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<u>NEW INITIATIVES</u>



Digital Transformation Plan

The future of urbanisation is a Smart City, where the city is equipped with Information and Communications Technology (ICT) and emerging technologies such as the Internet of Things (IoT), Big Data Analytics (BDA) and Artificial Intelligent (machine learning and deep learning) to advance a city's liveability, sustainability, and economy agenda.

To improve efficiency, the city council is planning to set up a centralised project management office called the Smart City Transformation Office.

Among the key initiatives include enhancing our digital infrastructure such as fiberization of the whole island, data centre, applications and network.



Secure and Seamless Council Network Fiberized-City (PiNet) Low-power Wide Area Network (LPWAN)



Integrated Local Council Solutions (ILCS) Penang Island Big Data (PiBiD) uAssessment

> Local Council Enterprise Systems

Enterprise Supports Systems Integrated Enterprise Solutions



SMART ISLAND DIGITAL TWIN

City Council of Penang Island is transitioning from digitalization to digital transformation with the ultimate goals of achieving a Smart Digital Twin City. The Smart Digital Twin City consists of a Virtual Real-World Model (replica) including roads, buildings, infrastructures, transportation, communications, distribution networks and their accessibility.

It is also a comprehensive real - time information generated from Internet Of Things or sensors, video analytics, satellites together with Big Platform. An Artificial Data Intelligence (AI) will be applied to generate smart decisions and actions.



<u>GOOD EXAMPLE & CASE STUDY</u>

COVID-19 PANDEMIC AND THE SUSTAINABLE DEVELOPMENT ACTION OF THE CITY According to statistics released by the World Health Organization, as of August 26, 2021, there are 213 million cases of COVID-19 including 4.5 million deaths globally. Meanwhile, as of August 24, 2021, a total 4.9 billion vaccine doses have been administered globally. The impacts brought on by the pandemic on countries around the world were not only in terms of public health but also financially and economically. It brought on a global recession that is underpinned by poverty, hunger, weak health systems, lack of clean water and sanitation, lack of access to education and a need for more global cooperation.

<u>GOOD EXAMPLE &</u> <u>CASE STUDY</u>

To mitigate the impact of the SDGs, we take steps to enhance good governance and increase efficiency while ensuring inclusivity. There is a need to move towards sustainability, not only in terms of development, but also at the economic level. Policies are formulated to emphasise on a green economy agenda.

Digitalisation and Industry 4.0 are the way forward through the adoption of Big Data Analysis (BDA), Internet of Things (IoT) and Artificial Intelligence (AI). It is imperative to invest in digitalisation to increase efficiency in implementation processes of policies and action plans.

In 2020, at the beginning of the pandemic, the City Council of Penang Island had immediately taken steps to set up a special squad and a command centre to manage the curb the spread of the virus. Preventive measures such limited business hours, limited number of people within any business premises, ensuring the wearing of face masks and preventing gatherings of crowds were implemented. In addition to this, the city council cooperated with both the state and federal governments in implementing all epidemic prevention measures.

The city applied the lessons learned from the COVID-19 episode to the crisis and play the role for knowledge sharing practices. This include standardize procedure were used for local authority within Malaysia.









EXPECTATIONS FROM THIS SMART CITY WORKSHOP

- Role of technologies in smart city development.
- Importance of data science.
 Readiness and reliability.
- How to engage in global partnership and encourage local participation.