

7<sup>th</sup> ASEAN – JAPAN SMART CITIES NETWORK  
HIGH LEVEL MEETING

# SEBERANG PERAI SMART CITY INITIATIVES PEOPLE-CENTERED X INCLUSIVITY

By :

**Mohd Raisul Muhaddisin Hamad**  
Head of Building Department  
Seberang Perai City Council



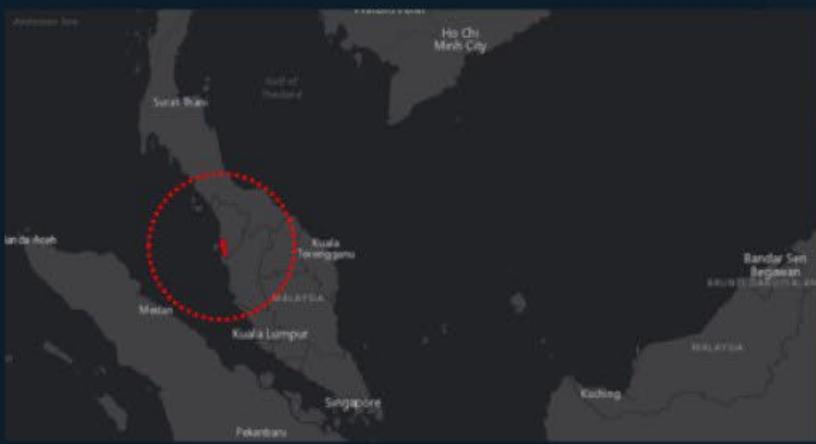
PENANG  
2030



*"Seberang Perai Aspiring  
City Of Tomorrow"*

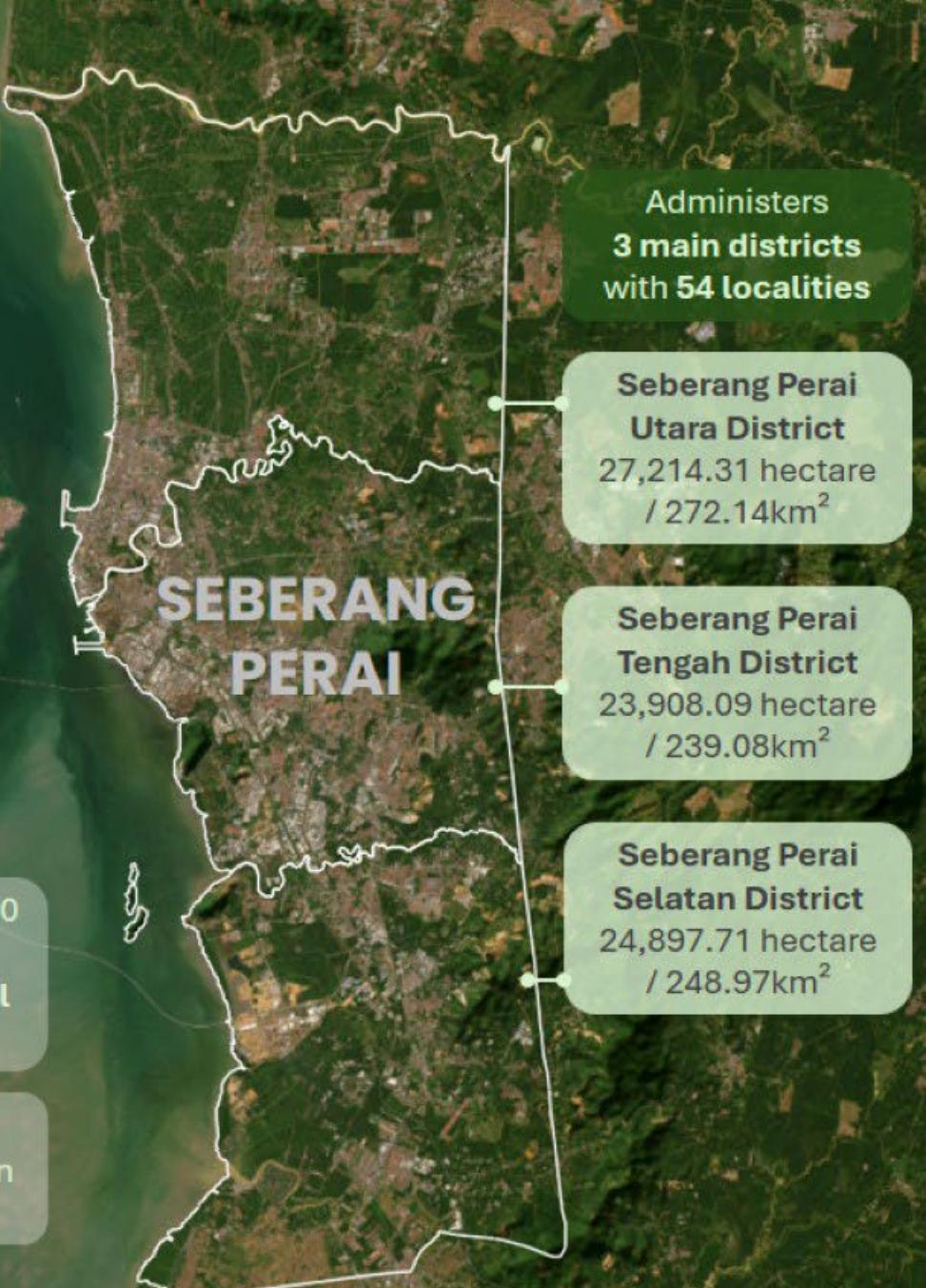
State of Penang is divided by two parts which are Penang Island and Seberang Perai, also known as Penang Mainland. It locates at the north of Malaysia and surrounded by State of Kedah and State of Perak.

State of Penang is one of developing states in Malaysia as it locates at a very strategic location that became as a world attraction with some advantages. State of Penang also earned the title of "Silicon Valley Of The East" because of progress industry.



# Introduction

## SEBERANG PERAI



# Introduction SEBERANG PERAI

Total Area  
73,841  
Hectare

Assessment Tax  
RM220,409,391

## Landuse

Agriculture

**48%**

32,392 Hectare

0.23 Million  
(0.1%)

Residential

**14%**

10,859 Hectare

64 Million  
(29.16%)

Institution

**5%**

3,171 Hectare

12 Million

Industry

**4%**

3,484 Hectare

86 Million  
(38.91%)

Commercial

**1%**

1,302 Hectare

59 Million  
(26.84%)

Green Area

**12%**

11,535 Hectare

Transportation

**9%**

5,353 Hectare

Water Body

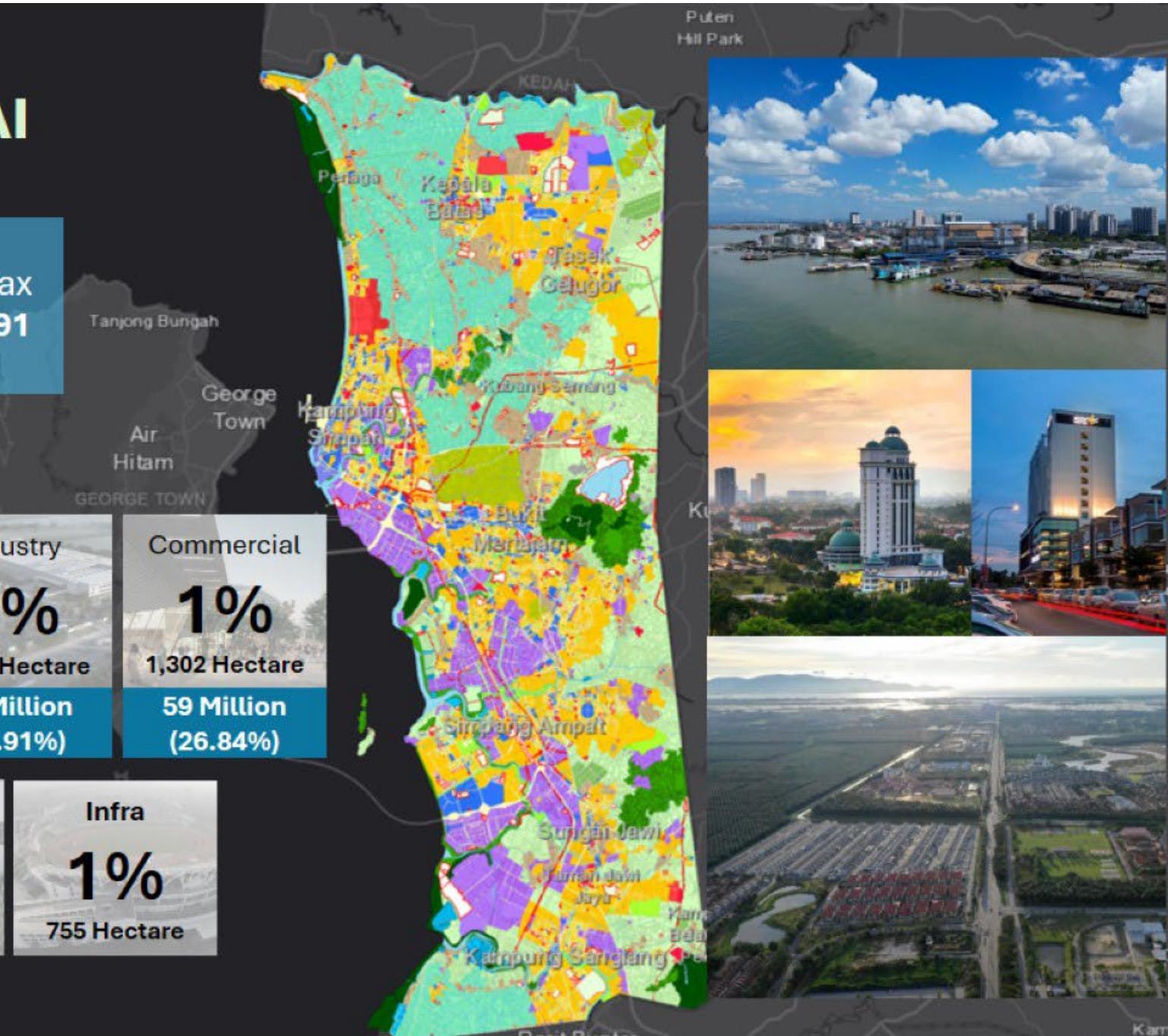
**6%**

4,988 Hectare

Infra

**1%**

755 Hectare





# SEBERANG PERAI CITY COUNCIL

## VISION

Seberang Perai Liveable, Resilient, Inclusive, Green, Competitive and Smart City

## MISSION

To provide urban services, development planning effectively and proactive to the needs of the community of Seberang Perai based on the principles of Trust, Accuracy and Fast

# Malaysian Smart City Rating Category

Smart City Early Adopter  
**BRONZE**



- ✓ Pelan Tindakan Bandar Pintar
- ✓ Jawatankuasa Bandar Pintar
- ✓ Initial Dashboard / Mini Command Center
- ✓ Pematuhan kepada 10 indikator

**Current Rating  
MBSP**

Developing Smart City  
**SILVER**



- ✓ Melaksanakan inisiatif melalui Pelan Tindakan Bandar Pintar
- ✓ Jawatankuasa Bandar Pintar Unit
- ✓ Bahagian / Unit Bandar Pintar
- ✓ Integrated Command Center
- ✓ Pematuhan kepada 34 indikator MS ISO 37122:2019

Leading Smart City  
**GOLD**



- ✓ Melaksanakan sebahagian besar inisiatif melalui Pelan Tindakan Bandar Pintar
- ✓ Jawatankuasa Bandar Pintar
- ✓ Bahagian / Unit Bandar Pintar
- ✓ Advanced Command Center
- ✓ Pematuhan kepada 62 indikator MS ISO 37122:2019

Visionary Smart City  
**PLATINUM**



- ✓ Melaksanakan keseluruhan inisiatif Pelan Tindakan Bandar Pintar
- ✓ Jawatankuasa Bandar Pintar
- ✓ Bahagian / Unit Bandar Pintar
- ✓ SME Bandar Pintar
- ✓ Advanced Command Center with Machine Modelling
- ✓ Pematuhan kepada 85 indikator MS ISO 37122:2019

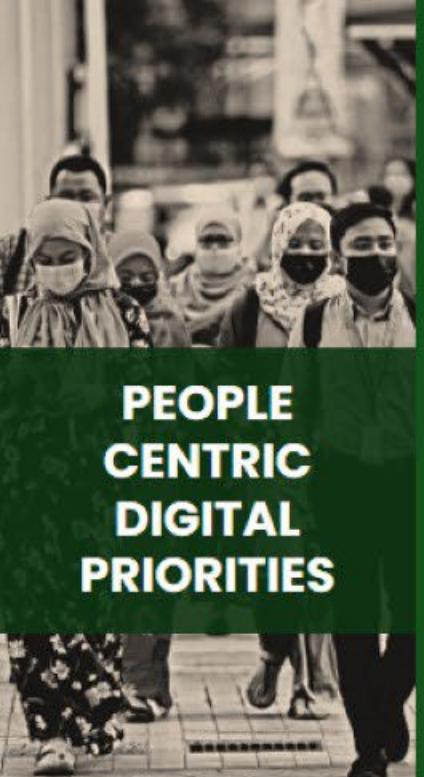


# Seberang Perai Towards **SMART STATE**

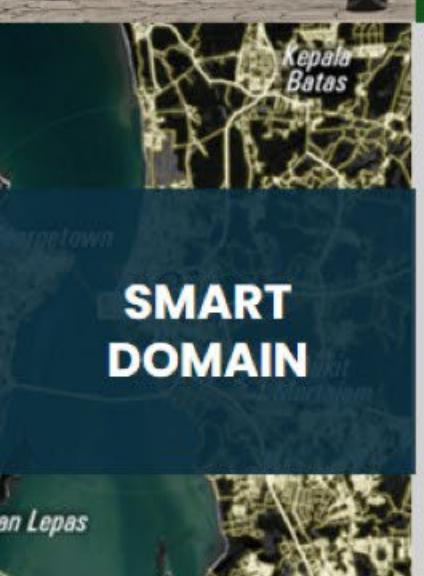
MBSP continues to commit to the recommendations of the Penang State Government as well as MBSP's vision to make **Seberang Perai a Resilient, Inclusive, Green, Competitive and Smart City Based on Technology** and in line with the Penang 2030 vision.



To compete and remain relevant in the future, Seberang Perai needs to become a smart city that uses **digital technology** to increase and **improve the quality of municipal services**.



## PEOPLE CENTRIC DIGITAL PRIORITIES



## SMART DOMAIN



# Seberang Perai Towards SMART STATE



Flood  
Mitigation



Service  
Delivery



Traffic  
Dispersion



Payment  
Gateway



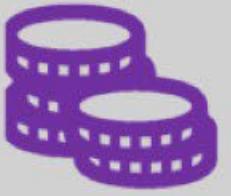
Waste  
Management



Security



Ease of Doing  
Business



Smart  
Economy



Smart  
Digital  
Infrastructure



Smart  
Mobility



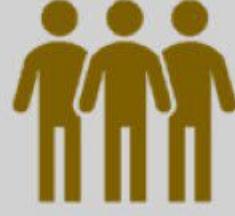
Smart  
Living



Smart  
Environment



Smart  
Governance



Smart  
People

## Governance



Non-Emergency Response Time



City Services Requested Online

## Urban Planning



Citizen Engaged in Planning Process



Building Permits Through e-Submission

### e-FIZ PERAI

The dashboard displays the following data:

Category	Value
Total Vehicle	32
Total Account	49
Agent	Forwarding
Total Account	162
Total Collection (RM)	160.00
Total Vehicle	483
Total Collection (RM)	2,462.00

### OSC 3Plus

The portal includes sections for:

- Laman Utama (Home Page)
- Perkhidmatan Mewajah (Permit Services)
- TJS (Traffic)
- Permit
- Lelang (Auction)
- Urahan (Fees)
- Am (Announcements)

Other features include:

- SEMAKAN STATUS PERMOHONAN MBSP (Check Application Status)
- JUMLAH TRANSAKSI ONLINE 2020 (Number of Online Transactions in 2020)
- Calendars for Bulan (Month), Minggu (Week), Mingguan (Week), Bulan (Month), and Perkit (Permit).

### Cyber Counter

Key information displayed:

- Sebarang aduan mengenai banjir, tanah runtuh, pokok tumbang dan lain-lain sila hubungi:
- MBSP CALL CENTRE (07.30am - 17.30pm) **04-2696969**
- Talian Bebas Tol (24 Jam) **1-800-88-6777**

Background image shows a rainy street scene with a bus, car, and truck.

### SPEED

The banner features:

- HEBAHAN SPEED
- SEBERANG PERAI EXPRESS AND EFFECTIVE DEVELOPMENT
- KOORDINATOR Unit Pusat Setempat (OSC)
- Diselaraskan oleh UNIT MYMUDAH MBSP
- Kelebihan Permohanan SPEED:
  - Permohonan pelan persejuaan serentak
  - Pengeluaran C1 dan Pelan Bangunan segera
  - Permulaan kerja-kerja awal bangunan & kerja tanah
  - Kebenaran mesin dipasang semasa pembinaan
  - Kelulusan lesen dalam tempoh 24 jam
  - Penilaian cukai loketran awal
- Setiap permohonan yang mengemukakan intisif SPEED perlu membuat perundingan bersama Unit MyMudah dan Agen/Technician terlibat.

### MyMBSP Call Centre

#### Cyber Counter

Key features of the service include:

- Penang's citizen can pay their assessment tax without having to physically attend any government offices, thus reducing congestion at the offices.
- The initiative also help to curb COVID-19 from spreading in the community.

The screenshot shows the Cyber Counter interface with various service icons and a search bar.

# SMART GOVERNMENT

## Governance



Non-Emergency Response Time



City Services Requested Online

## Urban Planning



Citizen Engaged in Planning Process



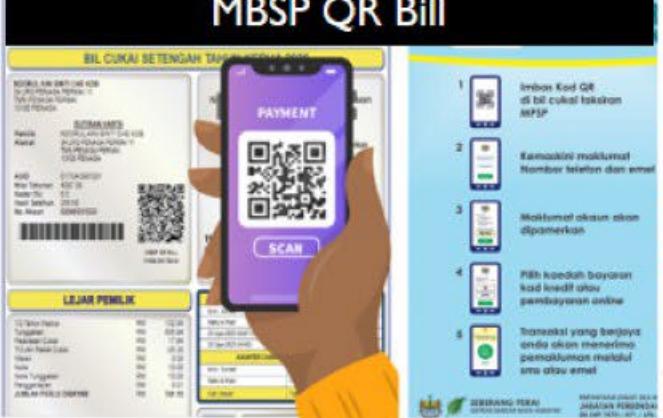
Building Permits Through e-Submission

## MyMBSP Apps

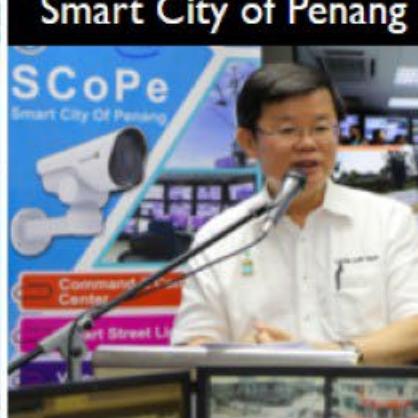
# TATACARA PENGGUNAAN ADUAN MyMBSP apps



## MBSP QR Bill



## Smart City of Penang



## Cyber Counter MBSP

Majlis Bandaraya Seberang Perai  
Negeri Sembilan, Jalan Merdeka, Seberang Perai, 12000 Butterworth, Pulau Pinang

### Cyber Counter

#### DATA & SPESIFIKASI

Dilengkapi bagi memudahkan pengguna untuk mengakses maklumat dan maklumat berkaitan dengan isu-isu yang mereka hadapi.

#### NEGERI & BANDAR

Platform yang mudah dan senang dilengkapi dengan maklumat berkaitan dengan isu-isu yang mereka hadapi.

#### DATA & JAWATAN

Umpan balik yang diberikan akan membantu dalam meningkatkan perkhidmatan.

### PERKHIDMATAN YANG DISEDIAKAN

DATA & PERKHIDMATAN YANG DILAKUKAN

## Affordable Housing



## AFFORDABLE HOUSING

LOREM IPSUM DOLOR SIT AMET, CONSECTETUR ADIPISCING ELIT, SED DILUCIDUM IN LIBERTY EQUITY INSTITUTE OF LEARNED MENSIS MAGNA ET ALIQUAM.

Economy



Open Data  
City Service



New Businesses



ICT Labour  
Force



Education  
& R&D

Finance



Sharing  
Economy



**Aplikasi e-Wallet**

12:31 0 00 8 9 95% 100% 11:48 0 00 8 9 25% 54%

← Bills Select Operator

Looking for something?

Entertainments Loans Local Council

Selangor Majlis Bandaraya Alor Setar

Pahang Majlis Bandaraya Subang Jaya - Cukai Taksiran

Penang Majlis Bandaraya Subang Jaya - Bil Air

Majlis Bandaraya Subang Jaya - Sewa Harta Majlis

Majlis B. Seberang Perai (Cukai Pintu)

Majlis B. Seberang Perai (Sewa Gera/Petak)

Majlis B. Seberang Perai (Kompau)

Melaka Majlis Daerah Hulu Selangor - Cagaran

Kedah Majlis Daerah Hulu Selangor - Cukai Taksiran

Terengganu Majlis Daerah Hulu Selangor - Pelbagai

**Integrated Accounting and Financial System**

STATISTIK SUMPAH HAKIM KAWALAN KEMERDEKAAN STYSPH / KATNOM

Stokan/Kategori	41-Sanggaran	42-Tanah	43-Lesuan	44-Cegeran Pelbagai	45-Pelbagai	46-Pelan	47-Semua	48-Pig	Jumlah Stokan
01 - BP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
02 - BP	90,783.15	0.00	97.21	0.00	239.00	0.00	964.00	0.00	98,845.00
03 - BP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
10 - BP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
104 - JS	0.00	0.00	0.00	0.00	1,960.00	0.00	0.00	0.00	1,960.00
105 - JS	0.00	0.00	0.00	0.00	1,295.00	0.00	0.00	0.00	1,295.00
116 - HT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
14 - BP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
21 - BP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
23 - BP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
24 - BP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
25 - BP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
26 - BP	46,584.74	0.00	771.40	7,750.00	1,724.00	41,870.54	1,940.00	0.00	44,758.74
27 - BP	0.00	0.00	1,194.00	1,730.00	27,229.00	1,242.40	2,112.00	0.00	30,586.74
28 - BP	103,550.50	0.00	1,065.50	1,150.00	2,193.00	312.00	1,284.00	0.00	110,460.50
29 - BP	66,544.50	0.00	5,192.50	0.00	736.00	0.00	5,564.00	0.00	75,235.50
30 - BP	1,41,486.40	0.00	3,417.70	0.00	429.00	0.00	0.00	0.00	141,294.40
31 - BP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
32 - BP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
33 - HT	61,769.25	0.00	60.00	0.00	418.00	0.00	664.00	0.00	65,312.25
34 - HT	15,670.55	1,863.55	0.00	0.00	120.00	0.00	1,100.00	0.00	16,534.50
35 - BP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
36 - BP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
37 - BP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
38 - BP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
39 - BP	33,113.00	1,812.00	0.00	0.00	160.00	500.00	1,806.00	0.00	35,812.00
40 - HT	47,374.45	0.00	170.00	0.00	539.00	0.00	0.00	0.00	48,274.45
41 - HT	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
42 - BP	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Jumlah (Kategori)</b>	<b>526,613.01</b>	<b>2,576.15</b>	<b>15,115.55</b>	<b>5,250.00</b>	<b>14,294.00</b>	<b>45,374.70</b>	<b>15,372.00</b>	<b>0.00</b>	<b>712,094.57</b>



## Economy



## Open Data City Service



## New Businesses



## ICT Labour Force

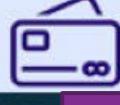


## Education & R&D

## Finance



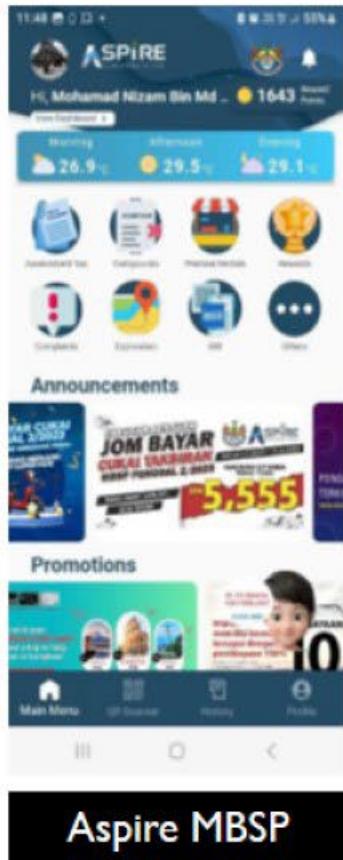
## Sharing Economy



Aspire Smart  
Cashless  
Kiosk



## Kiosk Pay



Aspire MBSP



## Online Booking for Public Recreation & Sport Facilities



## Smart Water Meter



## Digital Surveillance Camera

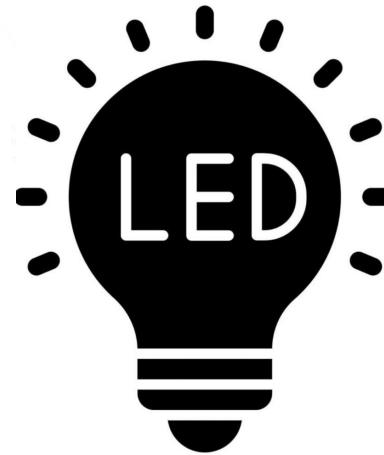


## Budget for Bridging Digital Divide



## Medical Appointment Conducted Remotely

## Smart saving devices



CCTV



## Education



Digital Learning Devices



STEM Higher Education Degrees



Proficiency In Other Languages

educate

Empower learning Workshops

## MPSP Makerspace

Self-paced learning PSC Platforms

Latest science magazine e-Learning

ideate

Cool tech gadgets Tech Lab

Shows, Events & Talks Shared Space

Freshly brewed coffee Café

create

Compete & Learn Competitions

Advanced Tools for Projects

Seed, grow & connect Entrepreneurs



## Butterworth Digital Library

## Universal Design



## Penang Free WiFi



## Penang Free WiFi

[Home](#) | [Mission](#) | [Hotspot Location](#) | [Hotspot Map](#) | [FAQs](#) | [Photo Gallery](#) | [Contact Us](#)

Connect with  
Wireless @ Penang

To Register



Tele-  
communication



High Speed  
Broadband



Internet  
Coverage



White / Dead  
Zone  
Connectivity



Internet 5G



Digital  
Nasional

# *Majlis Pelancaran* **Rangkaian 5G di Pulau Pinang**





Fiberisation



*Majlis Pelancaran*  
**Rangkaian 5G di Pulau Pinang**



GARIS PANDUAN PERANCANGAN DAN PEMBINAAN STRUKTUR  
KOMUNIKASI NEGERI PULAU PINANG TAHUN 2024

BERKUAT KUASA

1 OGOS 2024



Indoor Air Quality System



Sensor-Enabled Public Garbage Bins



Smart Energy Meter



River Water Quality Monitoring



Green Building



Electronic Waste Recycled

## Sistem Utama Ber

## INFLOS

Area Code: Taman Mangga (01)  
 Date : 17.10.2020  
 Time : 15:35:17  
 Location : 5.3156° N, 100.4397° E  
 Area Covered : 315m<sup>2</sup>  
 Pump : ON/OFF  
 Rainfall : 135mm  
 Duration : 127 min  
 Rainfall Intensity : 1.063 mm/min  
 Flow rate : 115,000L/day  
 Water Height : 1500/3000 mm  
 Tide Level : 2.7m

CCTV 1:



CCTV 2:



CCTV 3:



## Waste Management



## Connected Garbage Truck For Smarter Waste Management

Cadangan Projek Berkaitan Smart City dan Urban Development di Bawah Bab Kerjasama Ekonomi MKFTA



## i-Collect

- 01 Pengguna mendaftar melalui aplikasi mudahalih/web
- 02 Pengguna menambah nilai melalui MBSP
- 03 MBSP menghasilkan kod QR berdasarkan size tong sampah yang didaftarkan
- 04 Petugas mengimbas kod QR melalui pintar ketika proses kutipan
- 05 Status kutipan dan baki akaun diketahui secara masa nyata



## E-Clocking system



## SEA System



**SISTEM  
E-CLOCKING**



Indoor Air Quality System

Sensor-Enabled  
Public Garbage Bins

Smart Energy Meter



River Water Quality Monitoring



Green Building

Electronic Waste  
Recycled

# Satellite Leachate

The old truck was modified, and a pump was installed to suck the leachate water from the compactor truck to prevent leachate spillage due to the leachate tank being full.

This innovation is expected to solve the problem of leachate spillage and is expected to optimize the use of compactor trucks because the frequency of dumping leachate at landfills can be reduced.

## i-SWeeP

This system was developed to simplify the monitoring of work in the field of cleaning and the management.

- Personnel management
- Mileage Claim
- Waste collection
- Cleaning Contractors
- Vehicle Management
- Waste weight management
- Enforcement Management
- Complaint Management
- Management of Solid Waste Facilities
- Department Data Management

## GREEN BUILDING INITIATIVE

Green Building Index is now  
**ISO 9001:2015 Certified**

The certification has been awarded by SIRIM QAS International Sdn. Bhd., effective 28 December 2023.



*Malaysia's International Green Benchmark*

# SMART MOBILITY Transportation



Sharing Economy  
Transportation



Transport Lines with Real-  
Time System



Parking Spaces with e-  
Payment Systems



Intelligent /Smart Traffic Lights

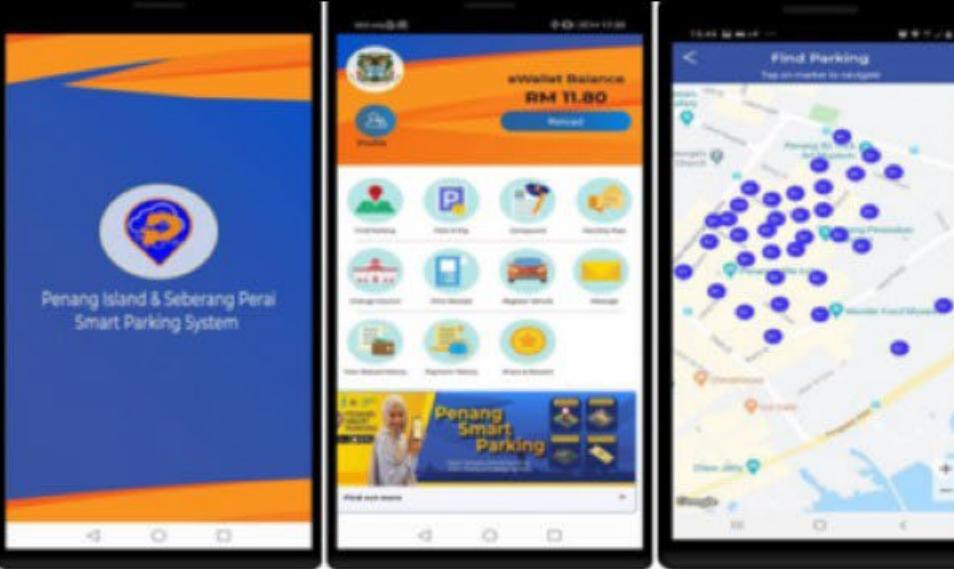


Low emission vehicle



Micro Mobility-  
Sharing Services

## Penang Smart Parking



## EV Charging



## Penang Smart Bus Stop





#SeberangPeraiAspirationCityofTomorrow

**THANK YOU**