



**WACANA ILMU :**

# PERANCANGAN DAN PEMBANGUNAN BANDAR PINTAR DI MALAYSIA - KEPERLOAN ALAF BAHARU



## **KERTAS KERJA 3 :** **KE ARAH PEMBANGUNAN BANDAR PINTAR MALAYSIA**

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PLANMalaysia  
(Jabatan Perancangan Bandar dan Desa)

**AGM**  
PPPM KE-18





# KE ARAH PEMBANGUNAN BANDAR PINTAR MALAYSIA



**PLANMalaysia**  
(Jabatan Perancangan Bandar & Desa  
Kementerian Wilayah Persekutuan)

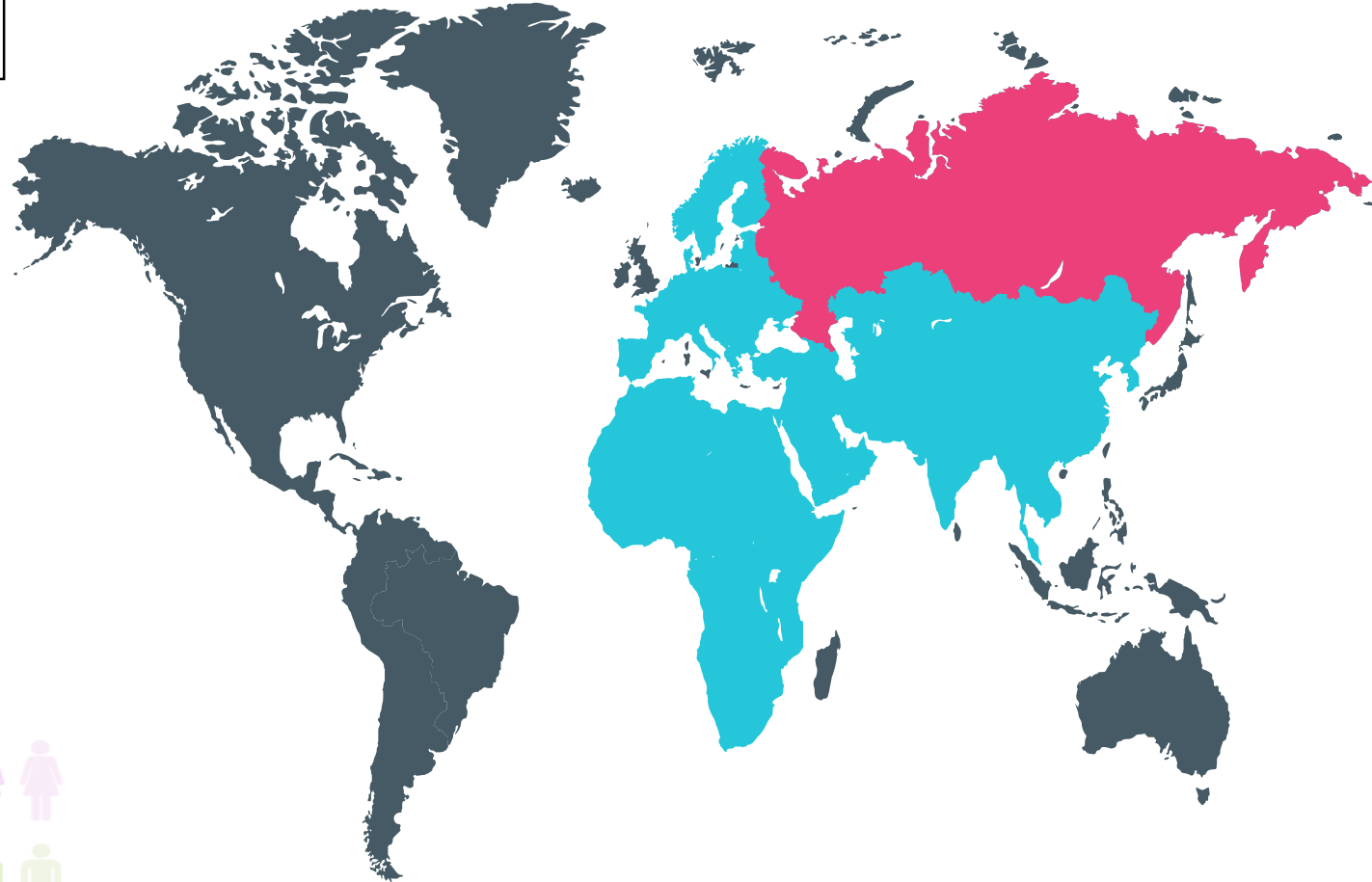
# APA ITU SMART CITY?



# POPULASI PENDUDUK BANDAR DUNIA

## KAJIAN KEPENDUDUKAN OLEH UNITED NATION

- Penduduk bandar akan meningkat dari 55% kepada 68%, penambahan sebanyak 2.5 bilion kepada penduduk bandar dunia pada tahun 2050.
- Dunia dijangka mempunyai 43 megacities dengan penduduk melebihi 10 juta menjelang 2030.

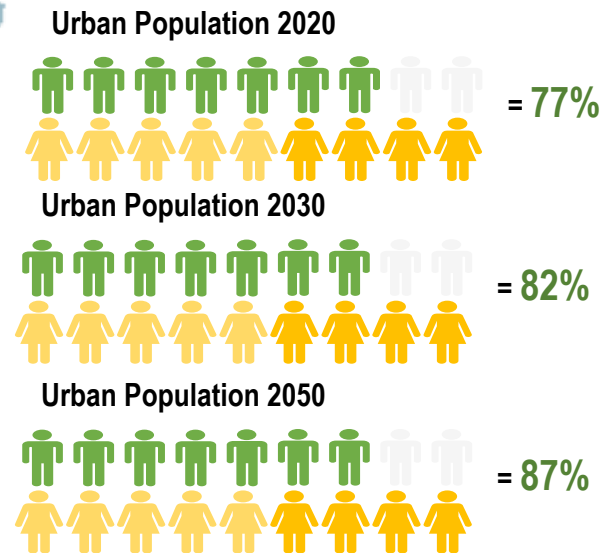


# PENDUDUK MALAYSIA



## RANCANGAN FIZIKAL NEGARA KE-3

mengunjurkan kira-kira 77% penduduk Malaysia akan tinggal di bandar pada tahun 2020 dan dijangka meningkat kepada 82% pada tahun 2030 dan 87% pada tahun 2050.



# MASALAH PERBANDARAN



**KESESAKAN LALULINTAS**



**PENCEMARAN ALAM SEKITAR**



**KESESAKAN MANUSIA**



**PERKHIDMATAN BANDAR**

# FAKTOR-FAKTOR YANG MENYUMBANG KEPADA PEMBANGUNAN SMART CITY



**Kepesatan Perbandaran**



**Kekurangan Rumah Mampu Milik**



**Pencemaran Alam Sekitar**



**Banjir Kilat**



**Pengurusan Sampah**



**Penyakit Berkaitan Stress**

# KENAPA PERLUNYA SMART CITY?

Dalam konteks global, Smart City digunakan sebagai salah satu pendekatan untuk menyelesaikan isu-isu urbanisasi dan meningkatkan kualiti hidup.

Mengatasi cabaran bandar yang timbul dari pembedaran yang pesat

Memenuhi agenda Nasional dan Global

Menerima pakai trend pembangunan global yang baru

Mempromosikan ekonomi

Meletakkan bandar di Malaysia setanding dengan bandar besar lain



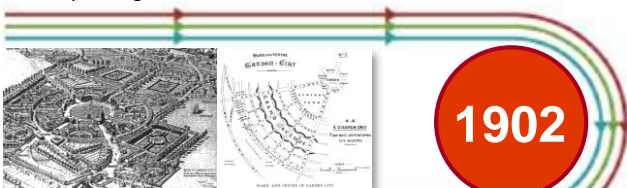


# EVOLUSI BANDAR

## FROM GARDEN CITY TO SMART CITY

### GARDEN CITY (Cities of Tomorrow)

To be planned, self-contained communities surrounded by "greenbelts", containing proportionate areas of residences, industry and agriculture.



1902

1924 -Kuala Kubu Bharu

1929

### RADBURN SUPERBLOCK

Separation of pedestrian & traffic, large block surrounded by main roads, open space linked to residential, houses grouped around small cul-de-sacs &

### NEIGHBOURHOOD UNIT

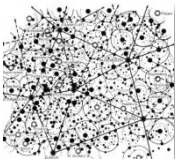
Focused on building community entities around schools & institutional, which promoted walkability & community interaction (Cth Seksyen 17, PJ)



1931

### CENTRAL PLACE THEORY

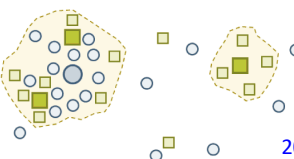
Is a geographical theory that seeks to explain the number, size and location of human settlements in a residential system. Settlements simply functioned as 'central places' providing services to surrounding areas.



1950

### GROWTH POLE THEORY

Economic development takes place around a specific pole, ignites growth and better quality of life in the urban periphery



### REGIONAL GROWTH THEORY

The ability of a region to produce, goods and services demanded and balancing every region growth. 1970 started the New Economy Model in Malaysia.

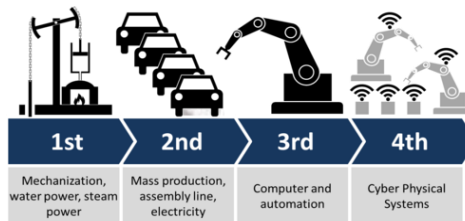
1997 - E-Kerajaan (MSC)

2002 - MURNInets

2004 - Safe City

2009

2009 – Special Economic Zone (ECER,IRDA,NCER,SCORE,SDC)



### SMART CITY

Integrates ICT to optimize the efficiency of city operations, services, connect to citizens and make city more sustainable and liveable

2018



### 4th INDUSTRIAL REVOLUTION

Digital revolution, representing new ways in which technology becomes embedded within societies and changing the way we live, work and relate to one another.

2016

### SUSTAINABLE DEVELOPMENT

Is a city designed with consideration for social, economic, environmental impact and resilient habitat for existing populations, without compromising the ability of future generations.

2015

### LOW CARBON CITIES

Transform existing cities towards more resilience regarding the impact of climate change and reduce total carbon emissions



2011 Green Neighborhood Guidelines and Low Carbon Cities Framework have been approved by the Green Technology and Climate Change Council



PLAN Malaysia

(Jabatan Perancangan Bandar dan Desa)

# KEPERLUAN BANDAR PINTAR



## CABARAN BANDAR

## EKONOMI DIGITAL

## ICT & TEKNOLOGI

## KUALITI HIDUP

## KEMAMAPAN

Peningkatan penduduk dan kepesatan pembangunan mengakibatkan pelbagai isu dan cabaran perbandaran

Tumpuan utama Kerajaan kerana ianya menyumbang 17.8% KDNK (2015) dan dijangka mencapai 20% (2020)

IoT, big data & Artificial Intelligence (AI) dan GIS memberi impak kepada polisi dan pengurusan bandar, integrasi maklumat dan meningkatkan tahap perkhidmatan

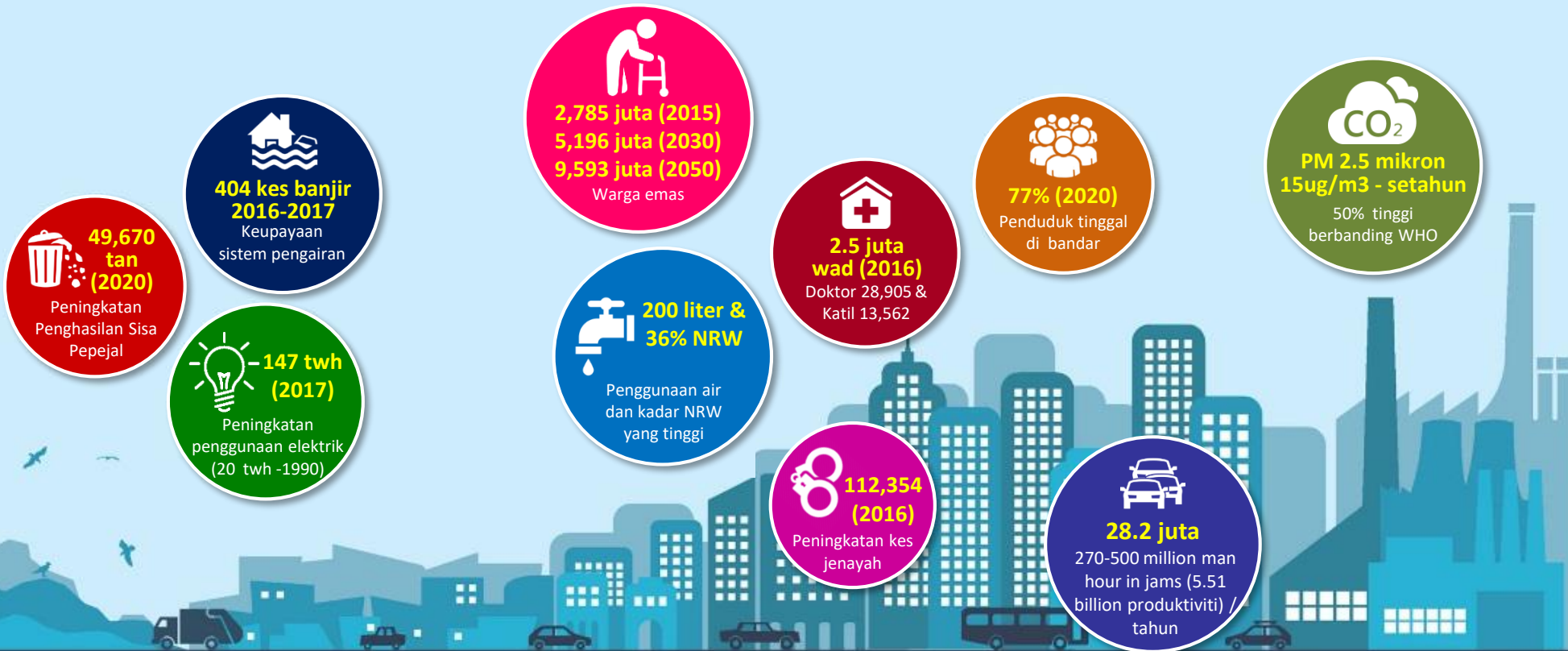
Inisiatif bandar pintar perlu selari dengan keperluan cabaran perbandaran, menyediakan penyelesaian bagi meningkatkan kualiti hidup

Selaras dengan agenda nasional dan global untuk memenuhi keperluan hala tuju negara terhadap pembangunan mampan

Konsep bandar pintar digunakan sebagai salah satu pendekatan untuk **menyelesaikan isu-isu perbandaran** bagi meningkatkan kualiti hidup, menggalakkan pertumbuhan ekonomi, membangunkan persekitaran mampan dan selamat serta menggalakkan pengurusan bandar yang cekap melalui **penggunaan ICT dan kemajuan teknologi**.

# CABARAN PERBANDARAN di Malaysia

City are changing and municipal managers will be facing numerous challenges to build the sustainable cities of tomorrow



Peningkatan tepubina dari 437,090 hektar (2001) kepada 1,174,300 hektar (2014) dan pengurangan kawasan hutan dari 5,844,890 hektar (2001) kepada 5,187,400 hektar (2014) – Semenanjung Malaysia

Source - Draft Report Malaysia Smart City Framework 2018 – 2025 & National Physical Plan - 3

### Definisi Bandar Pintar

Bandar yang menggunakan teknologi maklumat dan komunikasi (ICT) dan kemajuan teknologi untuk menangani isu-isu perbandaran dan meningkatkan tahap kehidupan, pertumbuhan ekonomi, kemampuan alam sekitar dan pengurusan bandar yang lebih efisien dan selamat



## DIMENSI

## FUNGSI

### Smart Governance

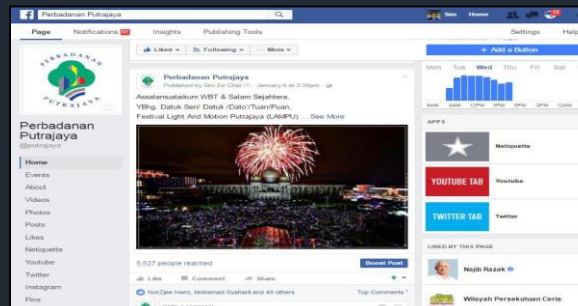
Untuk meningkatkan perkhidmatan kerajaan kepada orang ramai.

Aspek:

- Penyertaan awam
- Perkhidmatan awam dan sosial yang cekap
- *Private public partnership*
- Tadbir urus yang telus



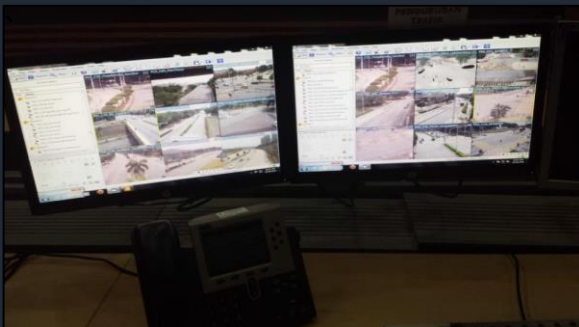
Centralised City Control Room



Information & Communication Platform



Broadband Penetration Rate



| DIMENSI                    | FUNGSI  |
|----------------------------|---|
| <p><b>Smart People</b></p> | <p>Untuk Meningkatkan cara hidup penduduk bandar, modal insan yang tinggi, (pekerja berpengetahuan), indeks pembangunan manusia yang tinggi, fleksibel dan berdaya tahan terhadap keadaan yang berubah-ubah.</p> <p>Aspek:</p> <ul style="list-style-type: none"> <li>• Komuniti menyihatkan</li> <li>• Indeks Pembangunan Manusia Tinggi</li> <li>• Modal insan yang mahir dan berbakat</li> <li>• Keharmonian kaum</li> </ul> |



**ICT Literacy Program**



**Community Broadband Centre**



**Human Capital Program**

| DIMENSI                                    | FUNGSI   |
|--|--|
| <p><b>Smart Digital Infrastructure</b></p> | <p>dapat meningkatkan kecekapan, produktiviti dan keselamatan organisasi</p> <p>Aspek:</p> <ul style="list-style-type: none"> <li>• Liputan rangkaian</li> <li>• Internet berkelajuan tinggi</li> <li>• Perlindungan data peribadi</li> <li>• Keselamatan siber</li> </ul> |



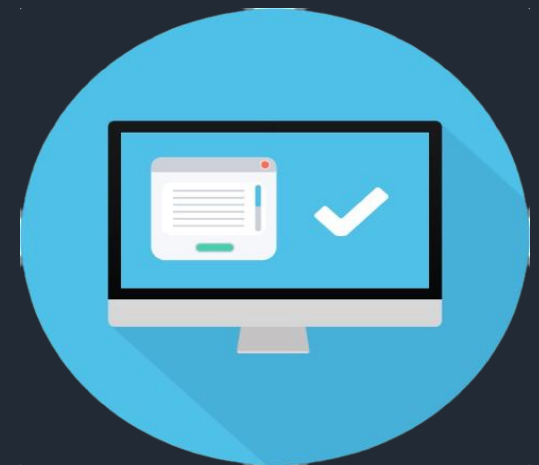
| DIMENSI              | FUNGSI  |
|----------------------|---|
| <b>Smart Economy</b> | <p>Mewujudkan daya saing, peluang ekonomi yang inovatif dan pelbagai untuk disediakan untuk cabaran dan peluang globalisasi ekonomi.</p> <p>Aspek:</p> <ul style="list-style-type: none"> <li>• Pertumbuhan ekonomi dan penciptaan nilai</li> <li>• Pertumbuhan ekonomi yang inovatif</li> <li>• Pengagihan kekayaan yang adil</li> <li>• Keusahawanan</li> </ul> |



**Data Centre**



**Media and Creative Village**



**One Stop Centre**



| DIMENSI                      | FUNGSI  |
|------------------------------|---|
| <p><b>Smart Mobility</b></p> | <p>Untuk Meningkatkan kecekapan pengangkutan awam, aksesibiliti, dan pengurusan lalu lintas melalui pengurusan lalu lintas pintar di bandar.</p> <p>Aspek:</p> <ul style="list-style-type: none"> <li>• Akses kepada jalan yang cekap</li> <li>• Pengangkutan awam yang cekap</li> <li>• Akses tanpa motor</li> <li>• Ketersediaan infrastruktur ICT</li> </ul> |



## Intelligent Transport System (ITS)

| DIMENSI                    | FUNGSI   |
|----------------------------|--|
| <p><b>Smart Living</b></p> | <p>Untuk mewujudkan tempat tinggal yang mampan dan vibrate terutamanya untuk wanita, kanak-kanak, dan warga emas di bandar.</p> <p>Aspek:</p> <ul style="list-style-type: none"> <li>• Keselamatan</li> <li>• Gaya hidup karbon rendah</li> <li>• Kualiti perumahan</li> <li>• Kualiti pendidikan</li> <li>• Keadaan kesihatan</li> <li>• Kemudahan kebudayaan</li> <li>• Daya tarikan pelancong / rekreasi</li> </ul> |



**Safe City Program**



**Healthy Community**

The advertisement promotes the 'MY MOBILE RIGHTS' APP. It features the text 'DOWNLOAD NOW!' and 'MY MOBILE RIGHTS' APP. Below this, it lists features: 'The Choice is Yours!', 'Complaint submission', 'Service Provider location', and 'Tips & guides'. The app is available on the App Store and Google Play. A hand is shown holding a smartphone displaying the app's interface, which includes a penguin logo and the text 'an official app of Communications & Multimedia Consumer Forum of Malaysia (CFM)'. A link '>>faq' is visible in the top right corner.

**e-Complaint**

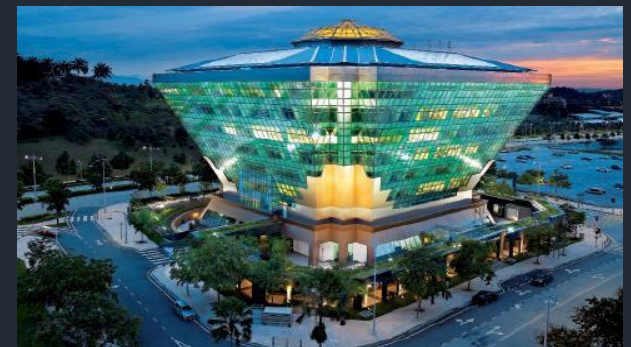
| DIMENSI                         | FUNGSI  |
|---------------------------------|---|
| <p><b>Smart Environment</b></p> | <p>Untuk mewujudkan persekitaran yang mampan melalui mengurangkan pelepasan rumah hijau, gaya hidup rendah karbon dengan memberi tumpuan kepada kecekapan tenaga, tenaga boleh diperbaharui dan teknologi hijau.</p> <p>Aspek:</p> <ul style="list-style-type: none"> <li>• Persekitaran yang bersih</li> <li>• Perlindungan alam sekitar</li> <li>• Pembangunan hijau</li> <li>• Infrastruktur hijau</li> <li>• Pertumbuhan yang bijak</li> <li>• Ekonomi hijau</li> </ul> |



**Leadership in Energy & Environmental Design**



**Electric Vehicle (EV)**



**Energy Commission Green Building Index (GBI) - Platinum**

# RANGKA KERJA BANDAR PINTAR MALAYSIA 2018-2025



## Smart Government

4 Strategi  
11 Inisiatif  
7 Indikator

2



## Smart People

6 Strategi  
23 Inisiatif  
19 Indikator

3



## Smart Digital Infrastructure

3 Strategi  
11 Inisiatif  
14 Indikator

4



## Smart Economy

3 Strategi  
7 Inisiatif  
4 Indikator

5



## Smart Mobility

7 Strategi  
19 Inisiatif  
22 Indikator

6



## Smart Living

5 Strategi  
17 Inisiatif  
8 Indikator

7



## Smart Environment

8 Strategi  
24 Inisiatif  
16 Indikator

**16 Polisi, 36 Strategi & 112 Inisiatif and 94 Indikator** untuk menjadikan bandar-bandar lebih kompetitif dan setaraf di peringkat antarabangsa, menyediakan kerjasama diantara pihak berkepentingan dan perancang strategik serta membolehkan isu-isu perbandaran diatasi

# BARCELONA SMART CITY



## How Smart is Barcelona?

- Europe Innovation Capital of 2014
- Mayor Bloomberg Innovation Challenge Winner 2014
- BCN Open Challenge crowdsources solutions for 6 major city problems

CityBikes app, App&Town, SOS info built thanks to **Open Data** of the City

IoT trash cans report their status in real-time

ApparkB and Bicing encourage **Smart Mobility**

Smart City Campus Innovation Area to promote synergies and **innovation in urban solutions**



# SONGDO SMART CITY

## Environment Service

RFID Ticketing  
Environment Info  
Weather Info



## Integrated Operations Center

## Transportation Service

Smart Signal Control  
Traffic Information  
Parking Information  
Illegal Parking Detection

## Smart Building

Intelligent Building System  
In-Building Communication Network  
Smart Office and Business Solutions



## Facility Management Service

Underground Facility Identification  
Water-pipe Monitoring  
Streetlight Monitoring



## Public Portal

Local Information  
Integrated PR Material  
Personalized Service



## Crime Prevention Service

CCTV Camera control  
Real-time video Analysis  
Monitoring & Decision Making



# SINGAPORE SMART CITY

## WHERE SINGAPORE STANDS TODAY

**1st** DELIVERING E-GOVERNMENT

In the use of "digital government", a comparative study by Accenture in 2014.

**2nd** DOING BUSINESS IN SINGAPORE

most competitive economy and most networked country in the World Economic Forum's "Global Information Technology Report 2014"

**1st** LIVING IN SINGAPORE

In Asia with the highest quality of living in 2014 report by Mercer Survey.



## DIGITALLY-ENABLED POPULATION

**data.gov.sg**

DRIVE SOCIAL INNOVATION WITH DATA

8,800 datasets released to public on data.gov.sg and OneMap

**OneInbox**

USEFUL E-SERVICES FOR CITIZENS

Receive and send government letters all in one digital mailbox.

**ACCESS TO COMPUTER**

97% of resident households in Singapore with school-going children have access to a computer at home.

**ACCESS TO BROADBAND**

87% of resident households in Singapore have access to a computer at home, and 87% have access to broadband.

## SKILLED TECH TALENT

Singapore is home to more than **146,000** Infocomm professionals, with a wide range of training and development opportunities.



**NATIONAL INFOCOMM COMPETENCY FRAMEWORK (NICF)**

Continual Education Training Centres to develop and launch NICF-accredited courses in areas such as strategic IT risk management and enterprise business analytics.



**CORPORATE PARTNERS FOR PROFESSIONAL DEVELOPMENT**

Centres of Attachment and Competency Training Programme to equip both young and experienced tech talent with expertise to take on high-value ICT roles.

## VIBRANT TECH INDUSTRY & STARTUP ECOSYSTEM

Key IDA Initiatives – IDA Labs, Accreditation and Accelerator – to boost the tech ecosystem.



**IDA LABS** support the collaboration of individuals, companies and government agencies to generate innovative IP from ideation to production.



**STARTUP INVESTMENT \$S\$1.7 billion**

in venture capitalists' fundings for Singapore-based technology companies in 2013.



**ACCREDITATION@IDA** aims to help innovative tech product startups build their credentials as qualified vendors to government and large enterprise buyers.

## TECHNOLOGY-ENABLED SECTORS

Singapore continues to drive adoption of tech to enhance innovation and productivity among the various economic sectors.

**NATIONAL ELECTRONIC HEALTH RECORD**

Has been deployed to **36** healthcare centres, including hospitals, specialist clinics and polyclinics.

**ICT FOR PRODUCTIVITY AND GROWTH (IPG) PROGRAMME**

**\$S\$500 million** for small and medium enterprises (SMEs) to step up on the adoption and innovative use of ICT.

**COMPREHENSIVE ONLINE GOVERNMENT SERVICES**

Nearly **98%** of public services in Singapore are available online, the majority of them being transactional in nature.

**EFFECTIVE LEARNING AND TEACHING**

All schools have implemented Infocomm Competency Training in their curriculum. **50** applications rolled out from the Futureschools programme.

## SEAMLESS & PERVASIVE CONNECTIVITY

**SINGAPORE'S WIRED NETWORK**

NGNBN achieved nationwide fibre coverage since mid 2013. More than **550,000** subscribers served by 27 different service providers.

**Wireless @SG**

Hotspots to increase to **10,000** by 2015, and to double to **20,000** by 2016.

**FOURTH GENERATION**

Telecommunication services deployed nationwide since June 2013.

**PERSONAL DATA PROTECTION**

Do Not Call Registry launched on 2 January 2014, with **> 600,000** numbers and about **3,000** organisations registered.

**ENABLING SPECTRUM EFFICIENCY**

To regulate use of TV White Space spectrum band, increasing capacity and data connectivity, and allowing consumers to access more options for wireless services.

# Smart Singapore

Singapore is expanding its use of technology to entrench its position as a leading global city and improve Singaporeans' quality of life. Here are some upcoming initiatives:

**Punggol pilot:** The first "smart" housing project will be launched in Punggol next year, and will include energy-efficient measures like motion sensor lights in carparks.

**One ring to pay them all:** An embedded chip could turn a ring, a watch or your identity card into a payment device, eliminating the need for cash or credit cards.

**Remember me:** A new digital platform is being developed to bypass the need for citizens to provide their personal data repeatedly for government transactions.

**Mapping the future:** A new 3D map project called Virtual Singapore will integrate layers of data about Singapore's buildings, land and environment. Government agencies and other organisations can use it to solve problems such as identifying the most flood-prone areas, while the public can contribute information like traffic patterns or the locations of their favourite nasi lemak stores.

**Phone home:** Controlling household appliances from a smart phone may be possible once HDB determines the digital infrastructure needed for an automated home. Trials start next year.

**Senior sensors:** Sensors in the homes of the elderly will monitor their movements and send alerts to caregivers if irregular behaviour is detected.

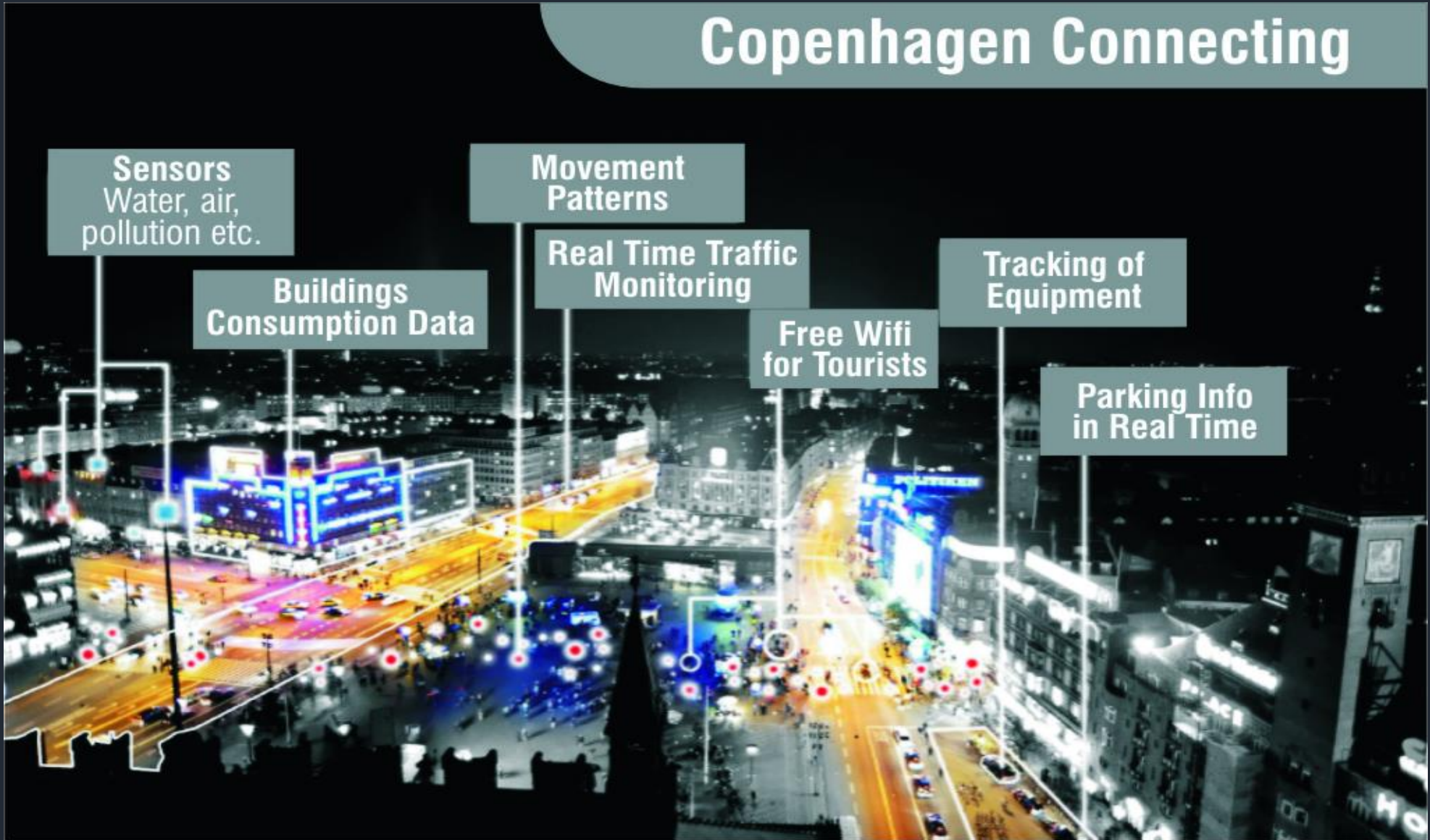
**Virtual therapy:** A "tele-rehab" system being tested at community hospitals will allow patients to perform therapy exercises at home, while sensors attached to their limbs transmit data back to the hospitals.

**Where's my bus:** By next March, commuters can use the MyTransport app to find out bus arrival times by the minute and how crowded each bus is.

**"Public" transport:** Self-driving cars will be tested on public roads for the first time come January next year, in One-North at Buona Vista.

# COPENHAGEN SMART CITY

## Copenhagen Connecting





# GUANGZHOU SMART CITY

## SMART DISPATCHING SERVICE OF GUANGZHOU PORT



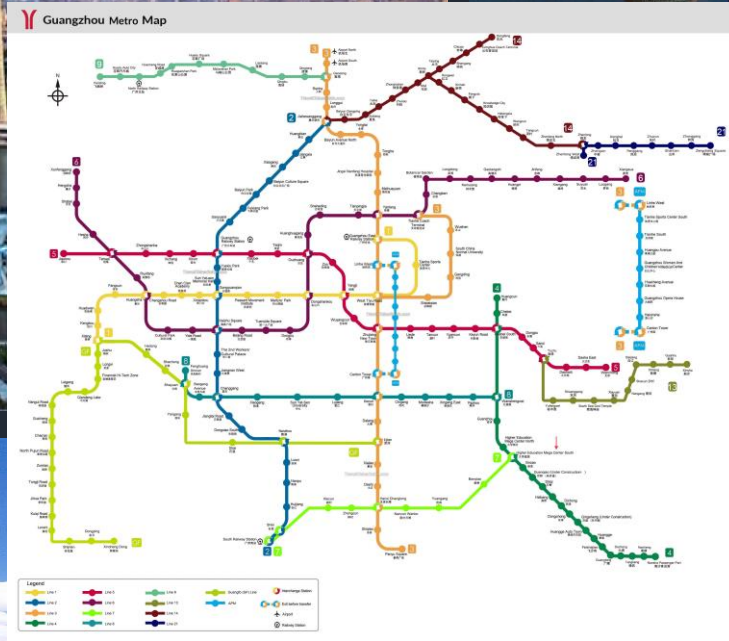
## 思科（广州）智慧城产业合作项目签约活动

MOU Signing Ceremony with Cisco Partners  
Cisco (Guangzhou) Smart City

18.4.24



Systems Plug and Play



# FAEDAH PELAKSANAAN



Tahap Kualiti  
Hidup



Menarik  
Pelaburan



Kecekapan  
Pengurusan &  
Perkhidmatan

Peluang Pekerjaan



Penjimatan  
Kos & masa



Mengurangkan  
Masalah  
Alam Sekitar



**Bandar Pintar**

# **PERANCANGAN & PEMBANGUNAN**

PLANMalaysia (Jabatan Perancangan Bandar dan Desa) Kementerian Wilayah Persekutuan (KWP)



# BANDAR PINTAR DI MALAYSIA

Memenuhi keperluan hala tuju Negara dan antarabangsa serta meletakkan bandar di Malaysia setaraf di peringkat antarabangsa



Infrastruktur, Pengurusan Bandar, Kualiti Hidup

Pengurusan Tenaga, Infrastruktur Hijau, Pengurangan Kesyakan Jalan Raya.



Infrastruktur Digital, Rendah Karbon, Perkongsian Pintar

Ekonomi digital, komunikasi, tenaga, kesihatan, pendidikan, media digital dan pengangkutan



Aplikasi Digital, Sistem Komunikasi Dan Sempadan Bandar

*Internet Of Things (IOT), Cloud Computing, Big Data Dan Integrasi Maklumat Geografi*



Teknologi (ICT), Bandar Yang Inklusif, Berdaya Tahan & Mampan

Kerjasama Antara Kerajaan Dan Syarikat Swasta



# PEMBANGUNAN BANDAR PINTAR DI MALAYSIA

## KUALA LUMPUR



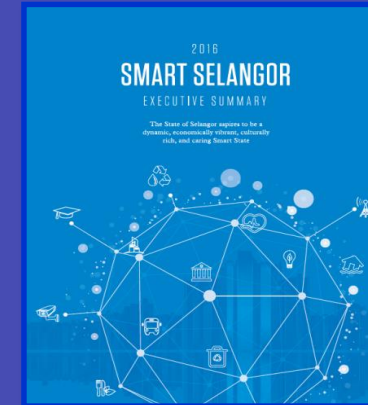
## PUTRAJAYA



## ISKANDAR MALAYSIA



## SELANGOR



## CYBERJAYA



1. EPP 1: World's firms
2. EPP 2: Talent
3. EPP 3: HSR system
4. EPP 4: Integrated MRT
5. EPP 5: Revitalising River
6. EPP 6: Greening KL / KV
7. EPP 7: Iconic places attractions
8. EPP 8: Comprehensive pedestrian network
9. EPP 9: Solid waste management

1. Smart Transportation & Mobility
2. Smart Home & Environment
3. Smart Governance
4. Smart Infrastructure & Utilities
5. Smart Safety & Security
6. Smart Economy
7. Smart Community

1. Smart Economy
2. Smart Governance
3. Smart Environment
4. Smart Mobility
5. Smart People
6. Smart Living

1. Smart Governance
2. Smart Digital Infra
3. Smart Mobility
4. Smart Waste
5. Smart Healthcare
6. Smart Education
7. Smart Water Smart Energy & Utility
8. Energy & Utility
9. Smart Food & Agro
10. Smart Safety & Security
11. Smart Building
12. Smart Disaster

1. Dua Belas (12) inisiatif Smart Selangor
2. Penyertaan & penglibatan komuniti
3. Menyokong empat (4) elemen di dalam Low Carbon City Framework & Assessment System (LCCF).

### Rumah Iskandar Malaysia



Merupakan konsep rumah transit dimana sebanyak 1,500 unit rumah sewa ditawarkan

### INNEONUSA Command Centre



Merupakan sistem keselamatan yang dibangunkan dengan kerjasama TM Malaysia bagi memantau keselamatan dan trafik lalulintas.

# Smart Government

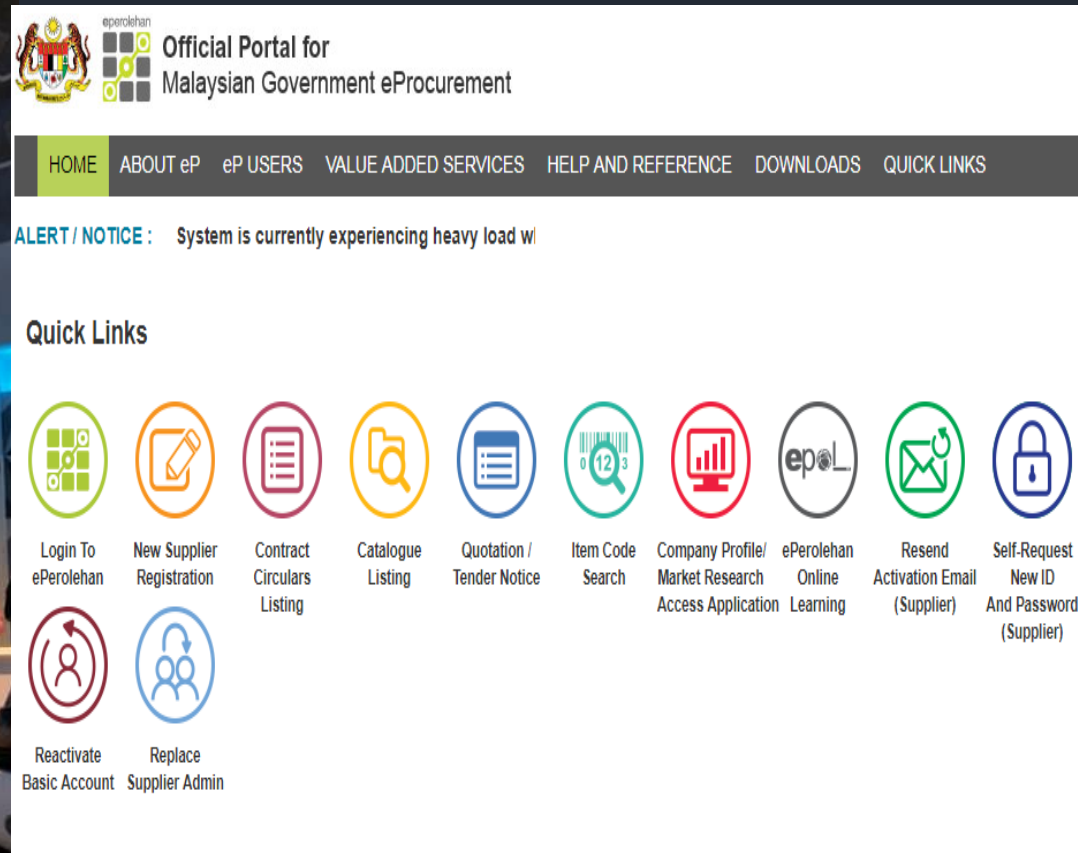
## Contoh Amalan Terbaik di Malaysia

### PJ Smart Centre



lanya berfungsi bagi menguruskan dan memantau Bandaraya PJ dengan lebih cekap dan efisien melalui paparan dashboard

### E-Perolehan



Pendaftaran, tender lantikan dan bayaran kepada pembekal perkhidmatan secara atas talian

### Media and Creative Village



Program ini telah melatih 900 krew filem tempatan untuk bekerja dengan pengeluar filem antarabangsa berskala besar di

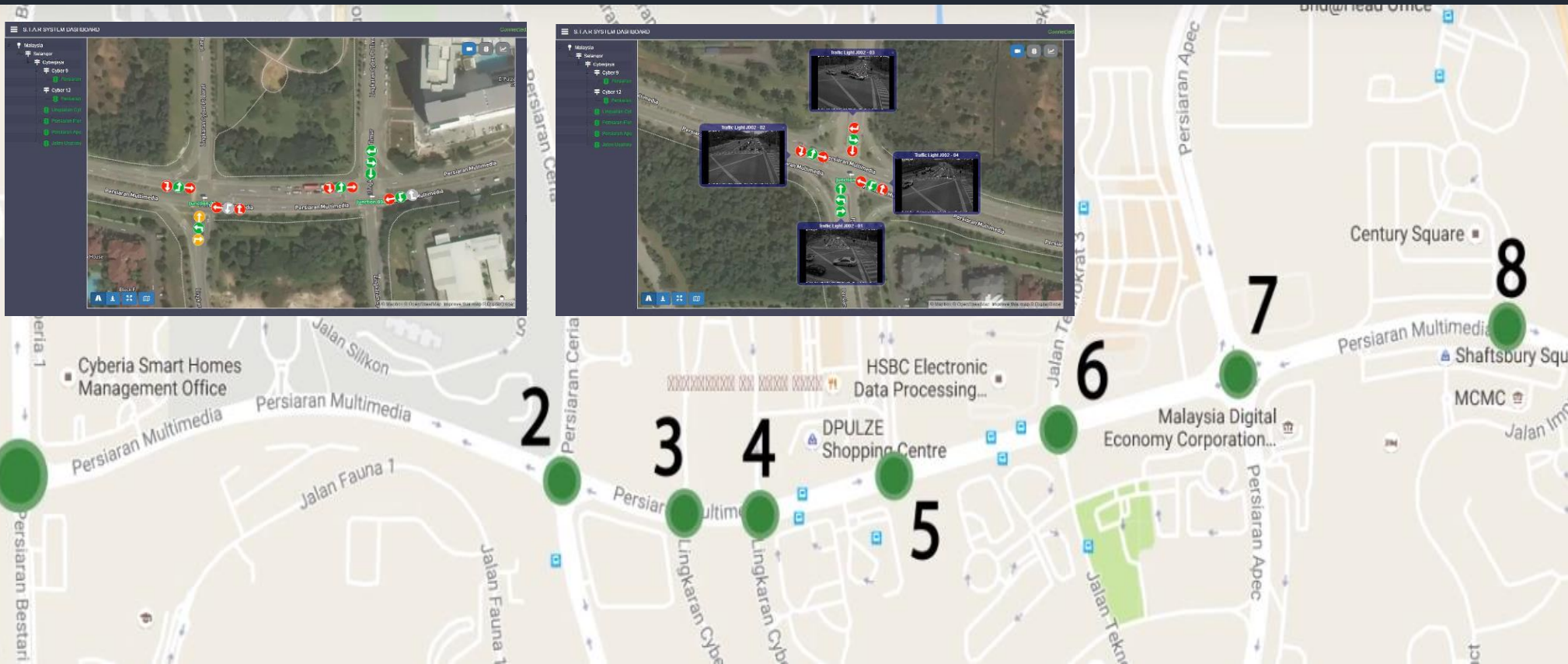
### Smart Putrajaya Cashless



Memudahkan urusan perniagaan menggunakan QR Pay dengan kerjasama Bank Muamalat.



### Cyberjaya Smart Traffic Analytics and Recognition System



Sistem berasaskan IoT dan dipasang di sepanjang Persiaran Multimedia Cyberjaya. Ia membolehkan sistem lampu trafik sedia ada mudah diubahsuai dan mengangihkan tempoh masa lampu isyarat hijau secara automatik bagi memastikan aliran trafik yang lancar.

# Smart Mobility

## Contoh Amalan Terbaik di Malaysia

### Bas Smart Selangor



Merupakan perkhidmatan bas dan wifi secara percuma di 12 Pihak Berkuasa Tempatan Negeri Selangor.

### Flexi Parking



MUDAH • PANTAS • BERKESAN

Parkir Menjadi Mudah Dengan  
**FlexiParking**

- ✗ Tidak Perlu Kupon
- ✗ Tidak Perlu Gores
- ✗ Tidak Perlu Duit Syiling
- ✓ Hanya Muat Turun dan Klik. **MUDAH SAHAJA!**



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Muat Turun Sekarang



Sistem bayaran TLK menggunakan aplikasi telefon pintar sebagai kaedah alternatif & penambahbaikan pengurusan yang lebih efisien dan sistematik.

# Smart Environment

## Contoh Amalan Terbaik di Malaysia

Sungai Segget Revitalization



Projek Integrated Water Treatment Plant (IWTP) merawat air sungai dan mengubah kelas air sungai ini dari kelas 4 ke kelas 2.

Heriot-Watt University, Putrajaya



Konsep pembinaan bercirikan teknologi mesra alam semulajadi bagi memastikan penggunaan sumber semula jadi (tenaga, air dan bahan) secara efisien.

# Smart People

## Contoh Amalan Terbaik di Malaysia

### Free Wifi



In Collaboration With **TM**

#### FREE SMART PUTRAJAYA WIFI

Perkhidmatan Wifi percuma dengan kerjasama TM kepada penduduk di Putrajaya

### Putrajaya Open Innovation (POINT)

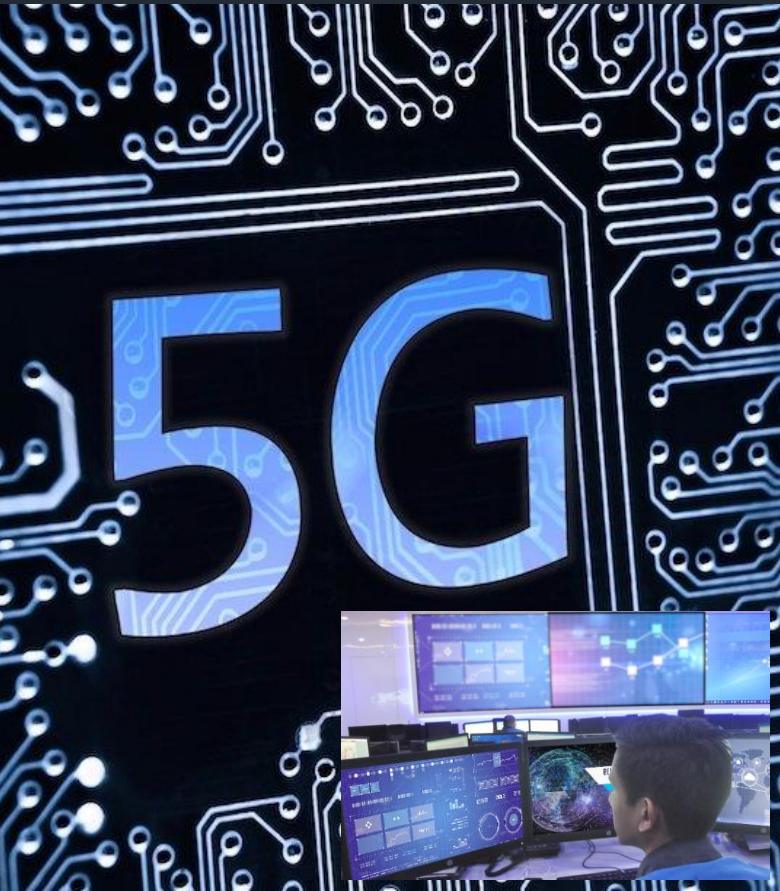


putrajaya  
young  
inventor

Program untuk menggalakkan penglibatan komuniti setempat di dalam pembangunan teknologi.

# Smart Digital Infrastructure

Contoh Amalan Terbaik  
di Malaysia



Kelajuan internet adalah pemacu asas untuk bandar pintar. Ianya membolehkan penggunaan teknologi moden terutama yang berkaitan dengan infrastruktur dan utiliti seperti IoT, AI, Smart Grid, Smart Water, Energy dan lain-lain. Putrajaya dan Cyberjaya bakal menjadi bandar raya pintar pertama di negara ini apabila rangkaian teknologi generasi kelima (5G) dilaksanakan.



**Bandar Pintar**

# **HALA TUJU PEMBANGUNAN**

PLANMalaysia (Jabatan Perancangan Bandar dan Desa) Kementerian Wilayah Persekutuan (KWP)



# IMPLIMENTASI PROJEK BANDAR PINTAR



# HALA TUJU PEMBANGUNAN BANDAR PINTAR

- a. Cadangan **penubuhan Majlis Bandar Pintar Negara** dimana KWP dan PLANMalaysia sebagai Setiausaha Majlis dan dibantu urusetia Jawatankuasa Penyelarasan dan Jawatankuasa Teknikal.
- b. Pelaksanaan **akreditasi** bagi pemantauan Bandar Pintar Malaysia
- c. Pelaksanaan projek bandar pintar melibatkan penerapan elemen pintar di dalam pembangunan **Kg. Bharu, Smart Tourism di Labuan, Smart Bin di DBKL dan Showcase Pocket Park Jalan TAR.**



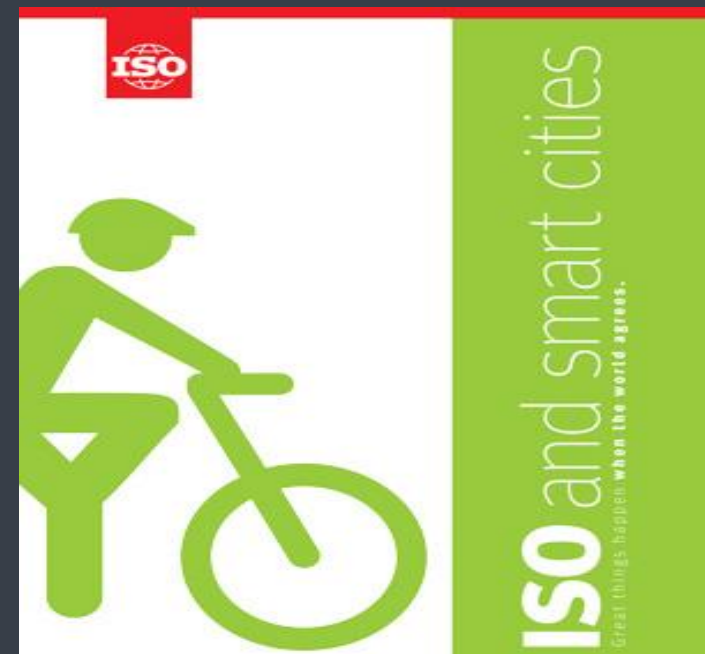
# CADANGAN MAJLIS BANDAR PINTAR NEGARA

- a. Bertanggungjawab **merangka polisi dan hala tuju strategik** serta menasihati Kerajaan Persekutuan, Kerajaan Negeri dan Pihak Berkuasa Tempatan bagi perancangan dan pembangunan bandar pintar Malaysia
- b. Membincangkan **isu dan cabaran perbandaran** berkaitan pelaksanaan bandar pintar;
- c. Mewujudkan dan menyediakan **peluang kerjasama di kalangan pihak berkepentingan** (Kerajaan Persekutuan, Kerajaan Negeri dan Pihak Berkuasa Tempatan) dengan kolaborasi bersama sektor swasta; dan
- d. Mempromosi dan memantau **pelaksanaan pembangunan bandar pintar** bagi mencapai tahap akreditasi antarabangsa.



# CADANGAN AKREDITASI BANDAR PINTAR

- a. Terdapat beberapa agensi penarafan dan organisasi yang mengukur tahap pintar Bandar mengikut elemen-elemen tertentu seperti **ICT, spesifikasi bangunan, efisiensi tenaga, impak alam sekitar, tahap mobiliti dan aspek keselamatan.**
- b. Rangka Kerja Bandar Pintar 2018-2025 (polisi 6) telah menetapkan **akreditasi piawaian bandar pintar akan diperkenalkan sebagai standard piawai bagi mengukur dan memberi pengiktirafan bandar pintar.** Standard Malaysia dicadangkan untuk memperkenalkan akreditasi bandar pintar berdasarkan ISO 37122.





**Bandar Pintar**

**APAKAH PERANAN ANDA?**



..... THE BEST WAY TO **PREDICT THE FUTURE** IS TO  
**PLAN & DESIGN IT,**  
A JOURNEY TO ACHIEVE OUR **DREAMS CITY**.....

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**PLAN**Malaysia

Jabatan Perancangan Bandar dan Desa  
Kementerian Wilayah Persekutuan