



SEMINAR ON EMERGENCE OF FUTURE CITIES

“SUSTAINING FUTURE CITIES”

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PRESENTATION OUTLINE :

- 1 BACKGROUND**
- 2 KEY TARGETS FOR JOHOR**
- 3 PLANNING FOR THE FUTURE CITIES OF JOHOR**
- 4 THE WAY FORWARD**



SUSTAINING FUTURE CITIES



PLANMalaysia@Johor
Perancangan Melangkaui Kelaziman
Planning. Beyond Conventional



BACKGROUND

Town Planning : Definition



“Town planning is the art and the science of **ordering the land-uses** and **siting of the buildings and communication routes** so as to secure the maximum level of economy, convenience and **beauty**”

(Keeble, 1969)

Future Cities



Expectations ?

**Smart Technologies, Connected Infrastructure,
Resilient, Sustainable & Responsive**

How to make the City as a Better Place?

Current Future Cities Emergence



Taipei : Designing the Future of Urban Living



Rio De Janeiro : Building a Smarter, more Inclusive City



Amsterdam : The Future of Smart City Masterplans



Singapore : A model for Sustainable Urban Growth



Dubai : The Modern-Day Crossroads of the World

Planning for Future Cities

**Smart Physical
Planning**
Creates
FUTURE CITIES



DEVELOPMENT PLANS
- Resource Allocation -



DEVELOPMENT CONTROL
- Planning Approval -



BUILDING & CONSTRUCTION
- Property Development -



LAND ADMINISTRATION
- Title Registration &
Ownership -



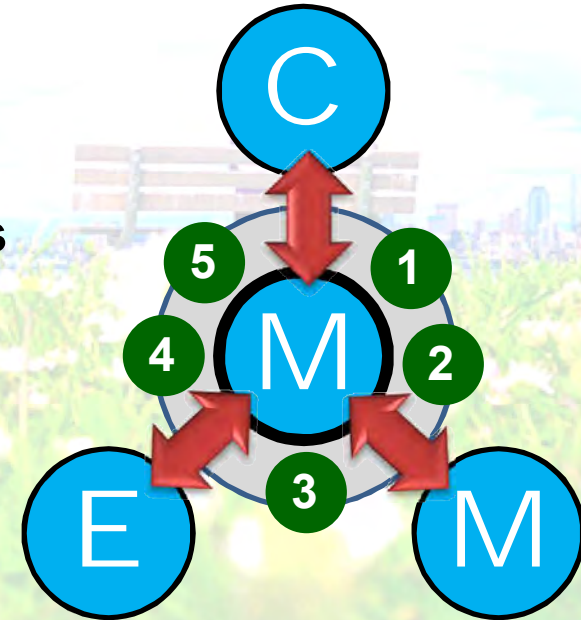
URBAN GOVERNANCE
- Property Occupation &
Maintenance -



PEOPLE CENTRIC GOALS
- Public Involvement -

Total Planning & Development Doctrine

TPDD focuses on creating
a **balance** between
physical development and
human development in terms
of **spiritual** and **noble**
universal values for the
SUSTAINABLE
PROGRESS
of the country.



THREE KINDS OF RELATIONSHIP



Relationship between Man
and the Creator



Relationship between Man
and Man

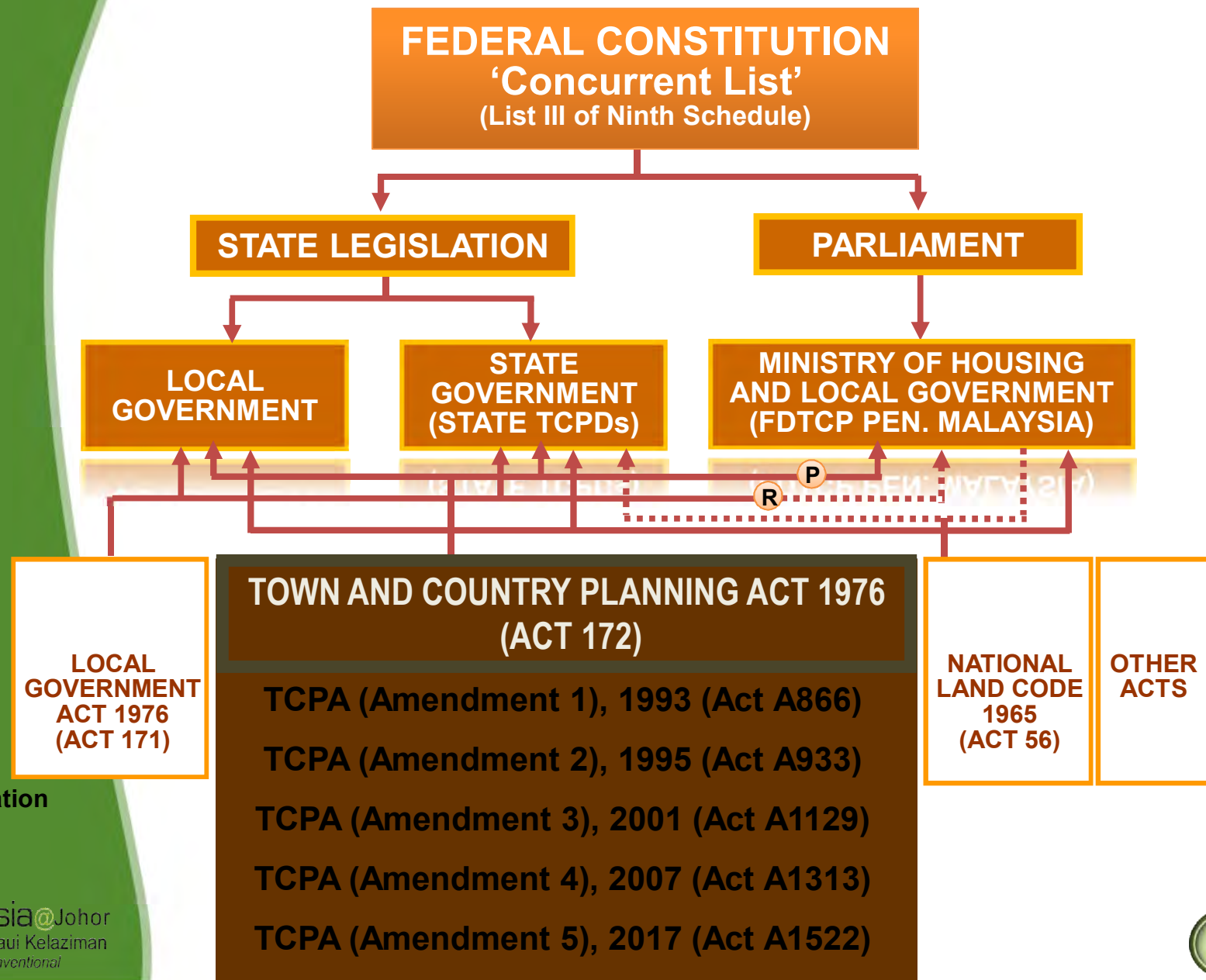


Relationship between Man
and the Environment

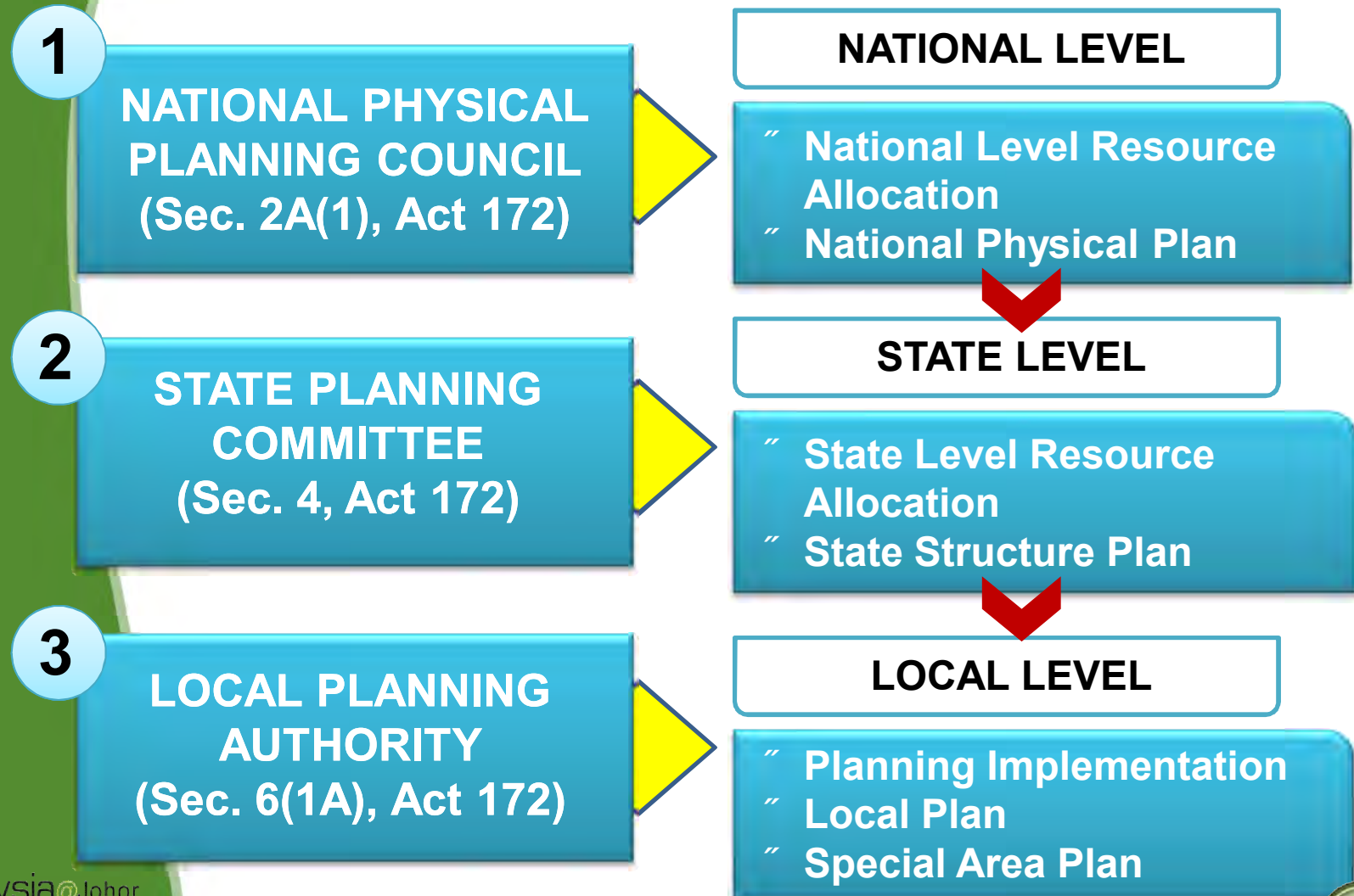
PLANNING PHILOSOPHY

- 1 Holistic
- 2 Man as Focus of Development
- 3 Multi-dimensional Activity
- 4 Quantitative & Qualitative Changes
- 5 Fair Distribution and Use of Resources

**TOWN PLANNING SERVICE IN MALAYSIA
ENABLING POWERS AND LEGISLATIONS**



Malaysia Planning Mechanism/ Institutional Hierarchy



National Physical Planning Council (NPPC)

– Sec. 2A(1), Act 172



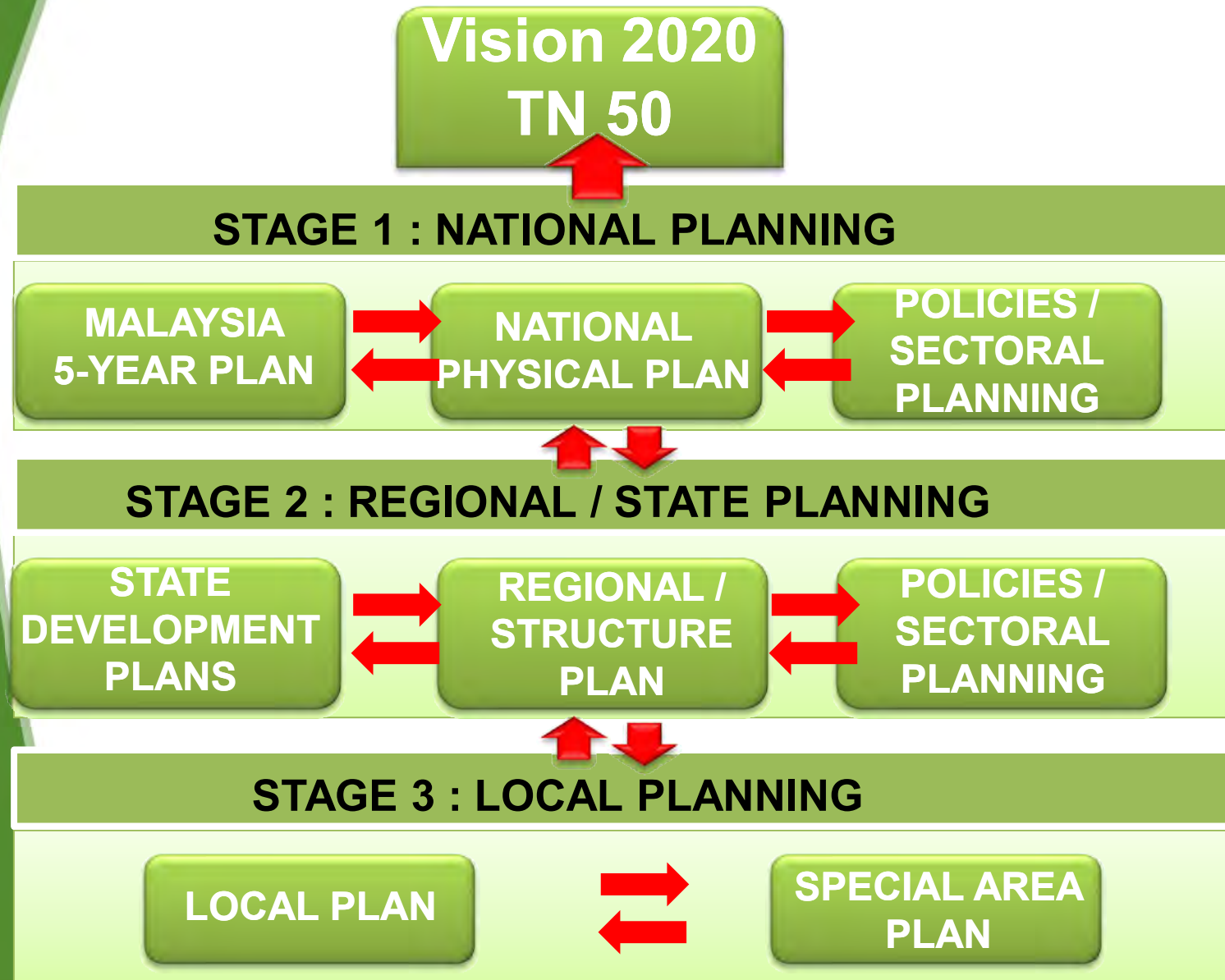
- **Main Function:**
“To encourage town and country planning as an **effective and efficient instrument** for the improvement of the physical environment”
- **Chaired by:**
Honourable Prime Minister
- **Meeting: Every 4 months**

State Planning Committee (SPC) – Sec. 4, Act 172



- **Main Function:**
 - To promote **conservation, use and development of lands** in the State;
 - To regulate, control, plan and co-ordinate all **development activities** in the State; and
 - To **advise the State Government** on matters relating to the conservation, use and development of lands in the State.
- **Chaired by:**
Honourable Chief Minister
- **Meeting:**
3-5 times per year

National Spatial Planning Framework



Development Plans



**NATIONAL
PHYSICAL
PLAN
(SEC. 6B,
ACT 172)**



**STRUCTURE
PLANS
(SEC. 8,
ACT 172)**



**LOCAL
PLANS
(SEC. 12-15,
ACT 172)**



**SPECIAL
AREA
PLANS
(SEC. 16B,
ACT 172)**

Gazetted Local Plans & Special Area Plan in Johor

Segamat District Local Plan 2020
Gazetted on 16 June 2010.
(JPU 14 Jil. 54 No. 12)



Tangkak District Draft Local
Plan 2030



Kluang District Local Plan
2020 (Alteration)
Gazetted on 16 August 2012.
(JPU 14 Jil. 56 No. 17)



Muar District Local Plan 2015
(Alteration)
Gazetted on 16 August 2012.
(JPU 43 Jil. 56 No 17)

**RKK Bandar Maharani
Bandar Diraja**



Batu Pahat District Local Plan
2020 (Alteration)
Gazetted on 16 August 2012.
(JPU 45 Jil. 56 No. 17)

**RKK Permas Kecil,
Kukup, Pontian**



Pontian District Local Plan
(Alteration) 2020
Gazetted on 16 August 2012.
(JPU 44 Jil. 56 No. 17)



Kluang District Local Plan
2020 (Alteration)
Gazetted on 6 June 2013.
(JPU 26 Jil. 57 No. 12)



Kota Tinggi District Draft
Local Plan 2020

**RKK Pelan Pelaksanaan
Projek PTB Kg Skudai Kiri
RKK Kulai Utara**

**RKK Pusat Pengangkutan
Bandar Senai**

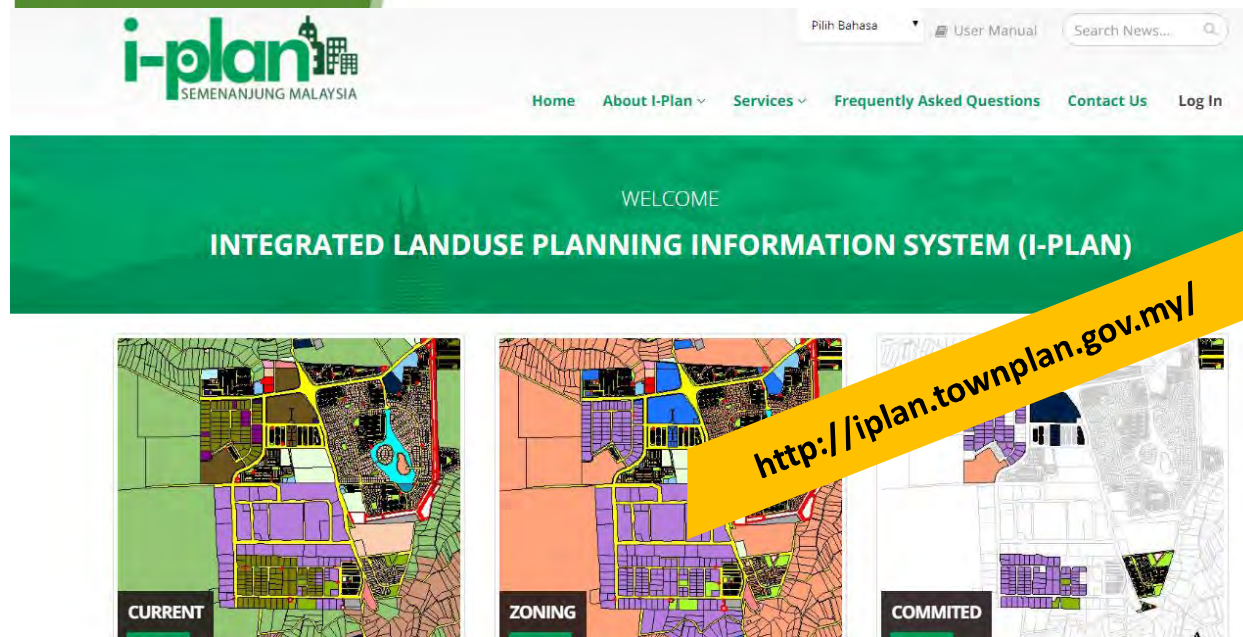


Johor Bahru District Local
Plan, 2020 (Alteration)
Gazetted on 16 August 2012.
(JPU 46 Jil. 56 No. 17)

Planning Database Tools : Iplan

WHAT IS LAND USE PLANNING INFORMATION SYSTEM (I-PLAN)?

I-PLAN contains a geo-database and web based application that shows land use information.

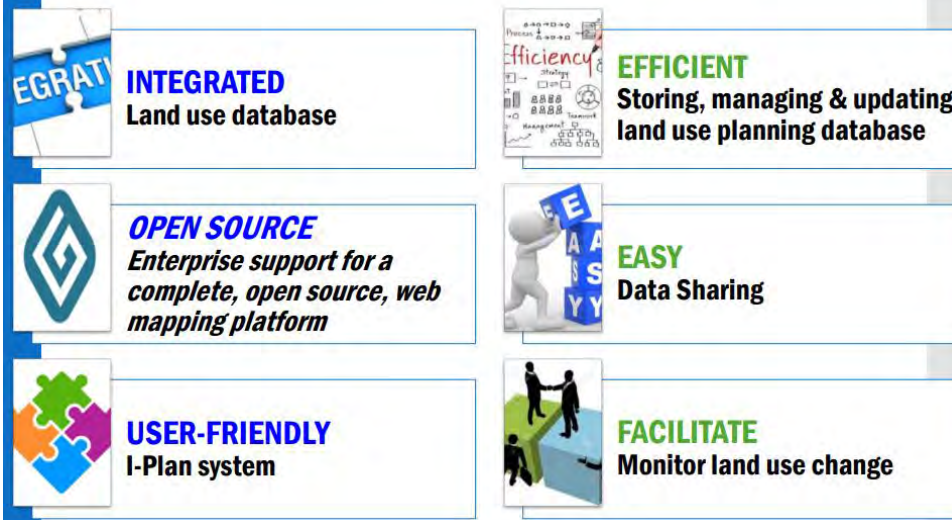


THE IMPORTANCE OF LAND USE DATA :

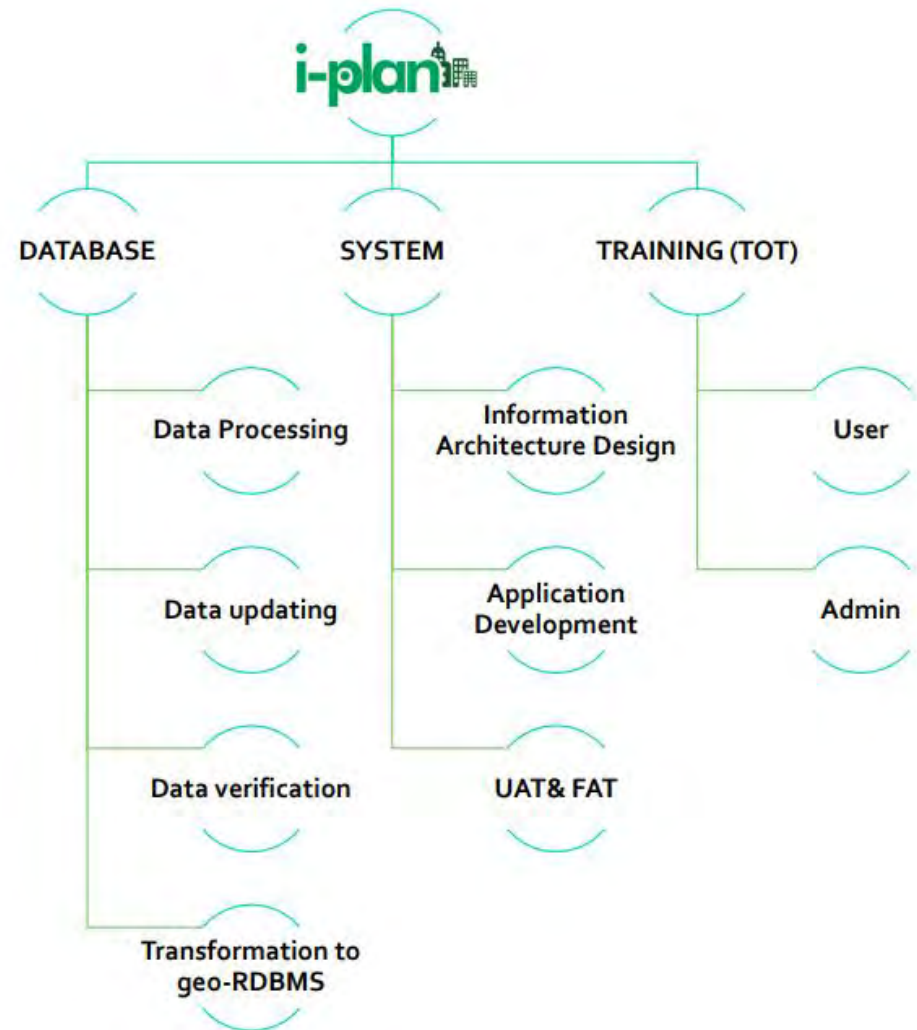
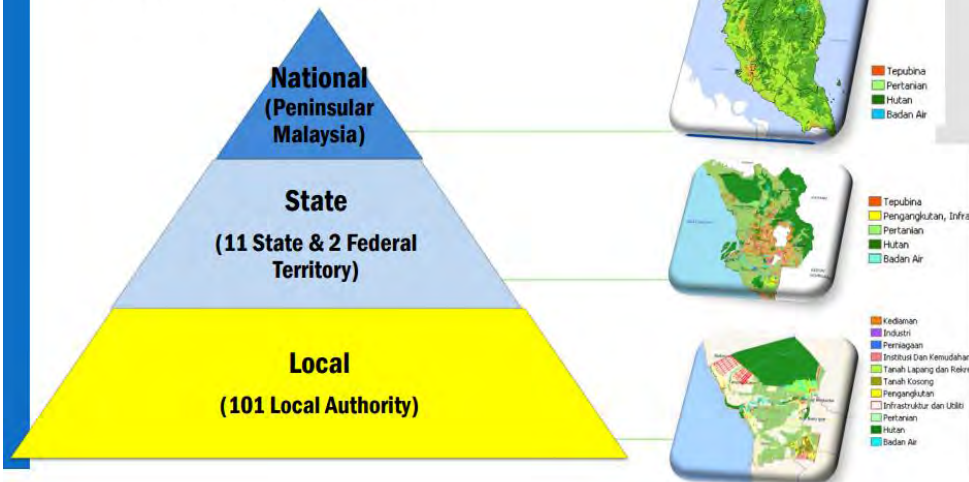
The information is used to manage and plan the development, and also to control the use of land and natural resources

SUSTAINING FUTURE CITIES

Planning Database Tools : Iplan



SEAMLESS LANDUSE DATA



Planning Database Tools : GeoJohor

GeoJohor was developed as
a Johor Land Use database
information system



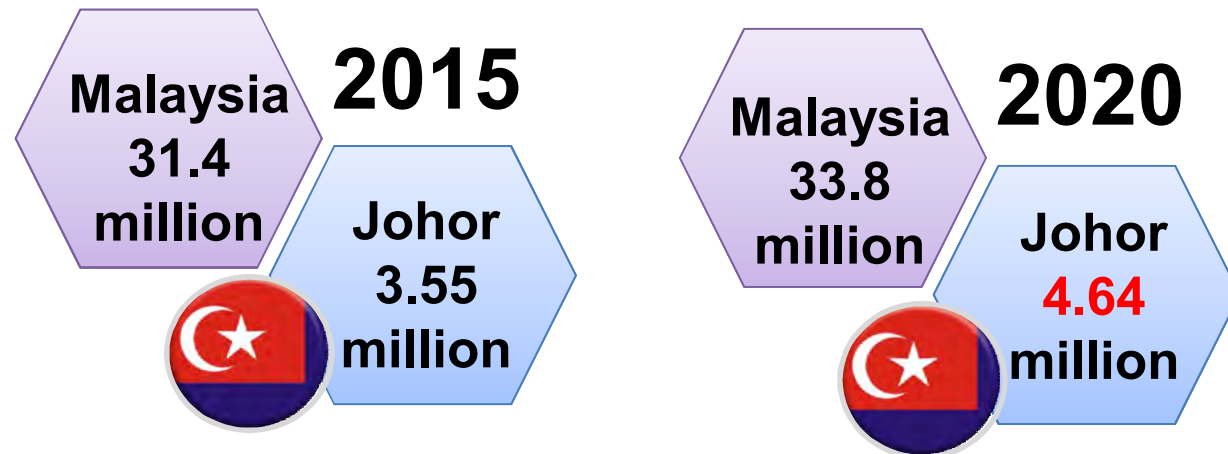
- To assist **PLANMalaysia@Johor** (JPBD Johor), public, Local Authorities and other technical agencies
- A sharing of geospatial information system
- To be used as planning tools to develop planning framework, development policies & strategies



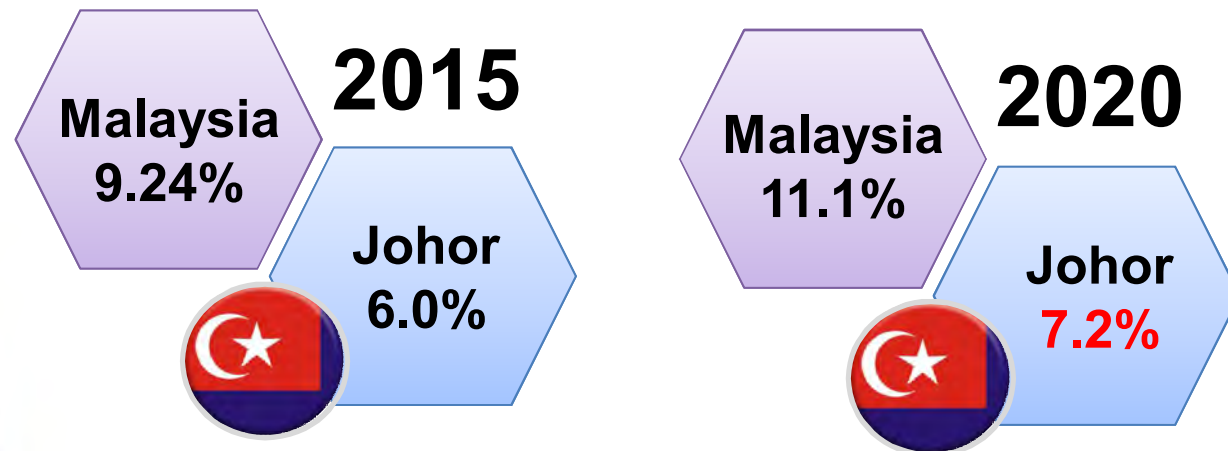
KEY TARGETS FOR JOHOR

Malaysia's & Johor's Present Status

■ Population

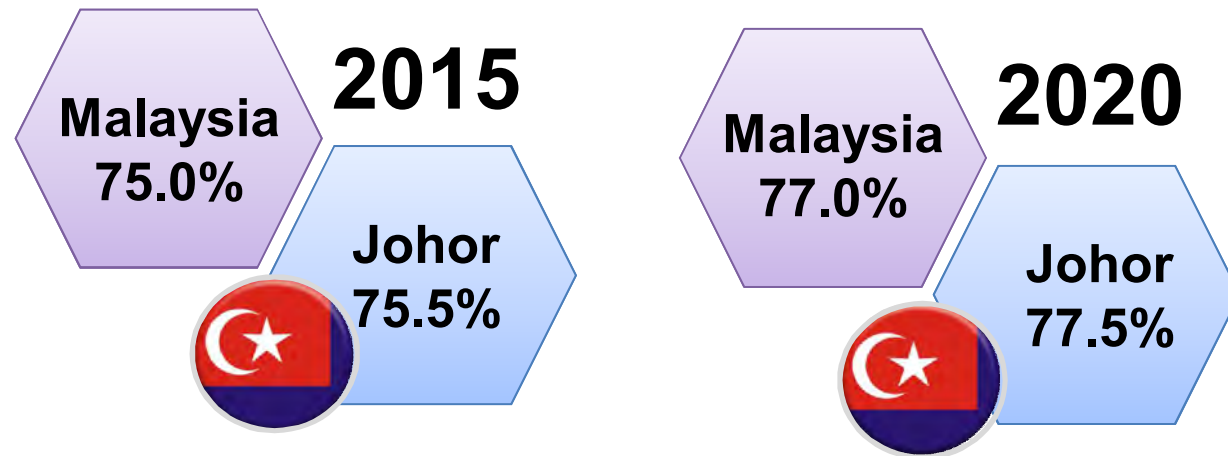


■ Ageing Populations (65 yrs old and above)

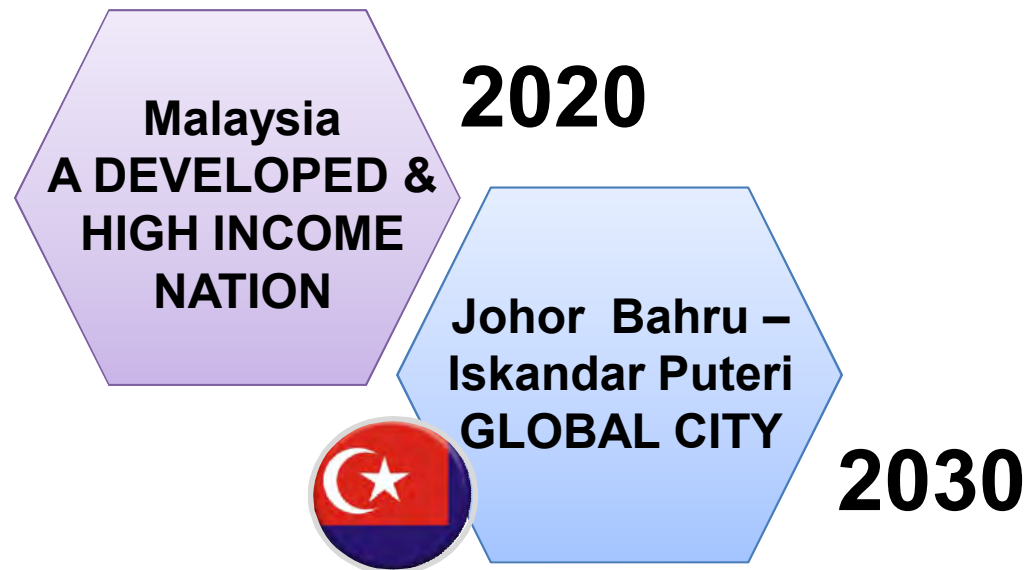


Malaysia's & Johor's Present Status

■ Level of Urbanisation



■ Urban Status





Related Development Policies & Strategies:

International Initiatives :

- ✓ **Habitat III – New Urban Agenda**
- ✓ **Green Cities, Green Communities**
- ✓ **Global Warming & Climate Change**
- ✓ **Low Carbon City (LCCF)**
- ✓ **Green Economic Growth**
- ✓ **Resilient Cities**

National Policies & Strategies:

- ✓ **11th Malaysian Plan**
- ✓ **National Physical Plan 2 and 3**
- ✓ **National Coastal Physical Plan**
- ✓ **Central Forest Spines (CFS)**
- ✓ **National Rural Physical Plan 2030**

Related Development Policies & Strategies (cont.) :

National Policies & Strategies (cont.):

- ✓ **National Urbanisation Policy 2**
- ✓ **National Green Technology Policy**
- ✓ **National Policy on the Environment**
- ✓ **Sustainable Development Goals**
- ✓ **National Policy on Climate Change**

State Policies & Strategies:

- | | |
|--|---|
| ✓ State Structure Plan | ✓ Johor Utility Corridor |
| ✓ Johor Strategic Growth Plan | ✓ Johor Strategic Growth Plan |
| ✓ Johor Economic Masterplan | ✓ Johor Sustainable Policy |
| ✓ Johor Straits Development Corridor Masterplan | ✓ Comprehensive Development Plan ii 2025 |
| ✓ Dasar Kelestarian Johor | ✓ Local Plans, Special Area Plans |

Other Concepts & Planning Approaches :

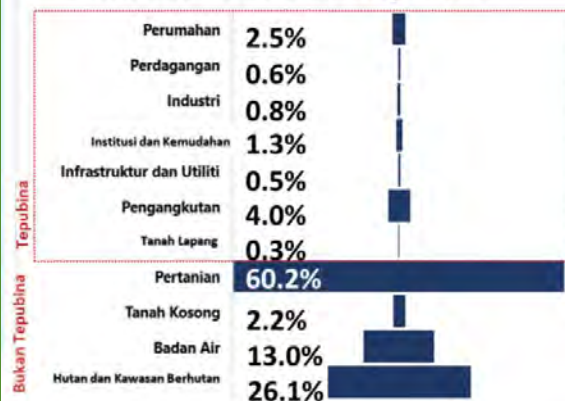
- ✓ **Forest Linkages**
- ✓ **Green Oriented Development**
- ✓ **Vertical and Urban Farming**
- ✓ **Urban Rural Linkages**
- ✓ **Brownfield Development, Renewal Regeneration**

Draft State Structure Plan (review) Johor 2030 - Current Land Use, 2015

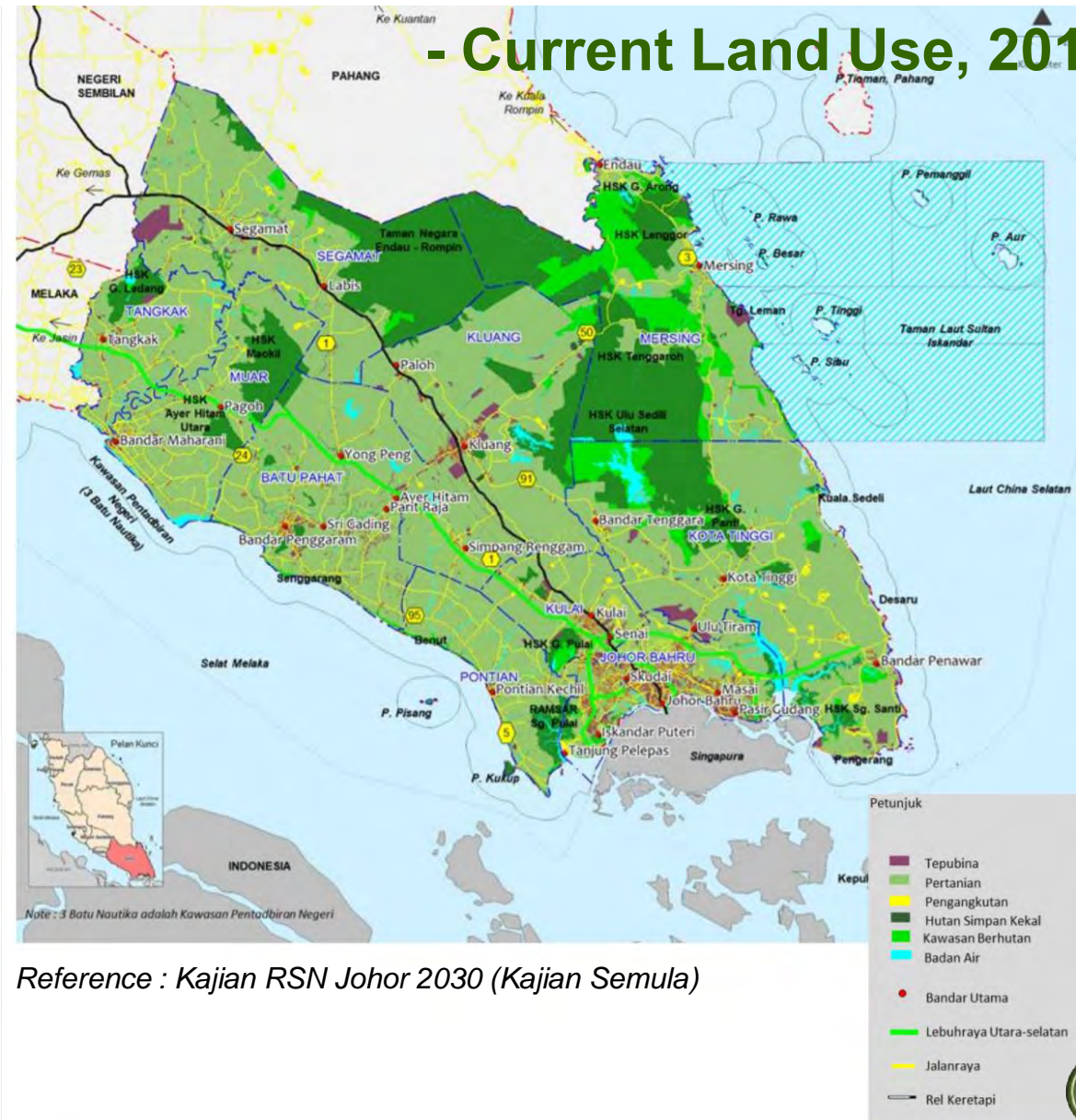


CORAK GUNA TANAH NEGERI JOHOR, 2015

Peratusan Gunatanah Negeri Johor

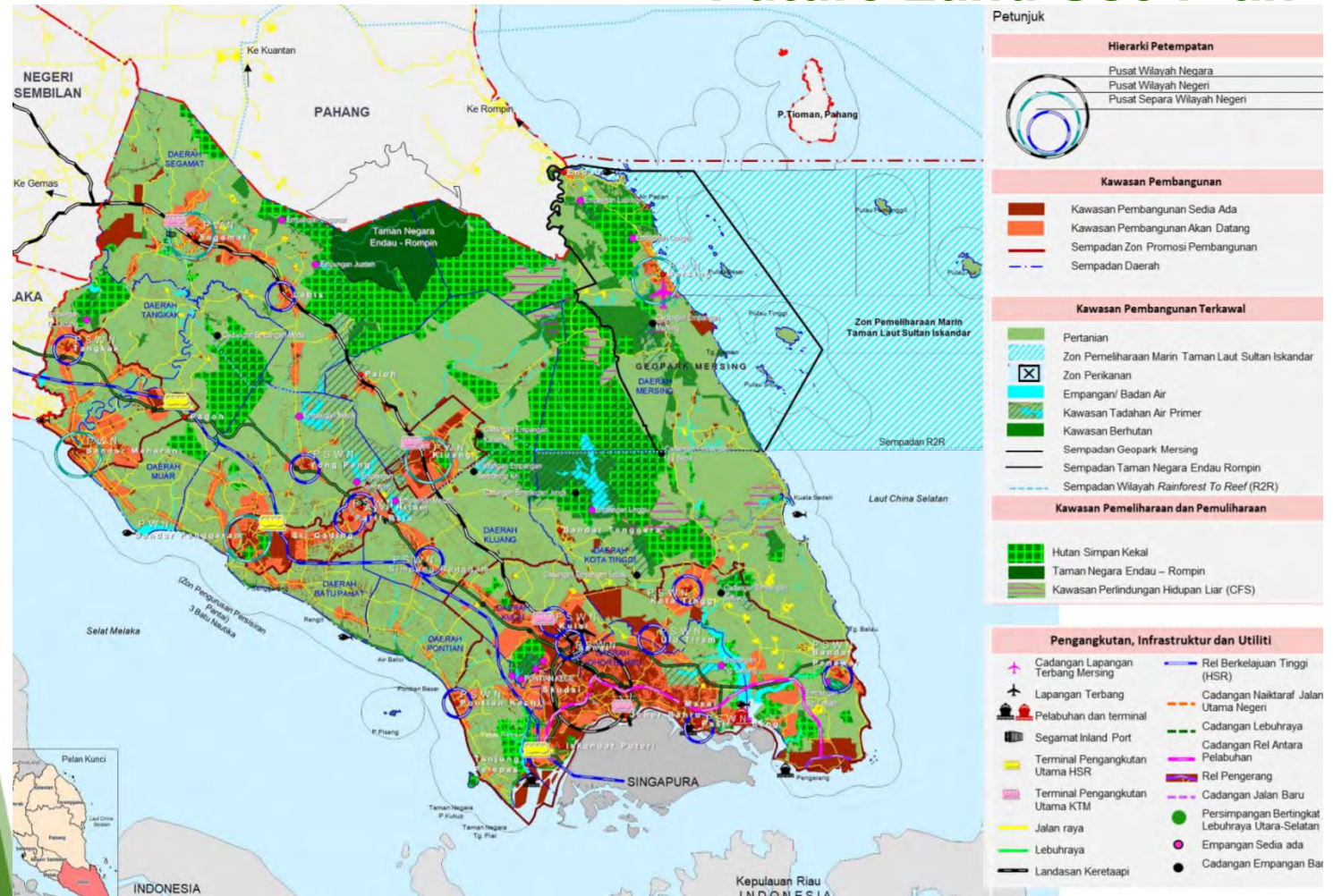


Sumber : Kajian Rancangan Struktur Negeri Johor 2030
(Kajian Semula) (2016).



Reference : Kajian RSN Johor 2030 (Kajian Semula)

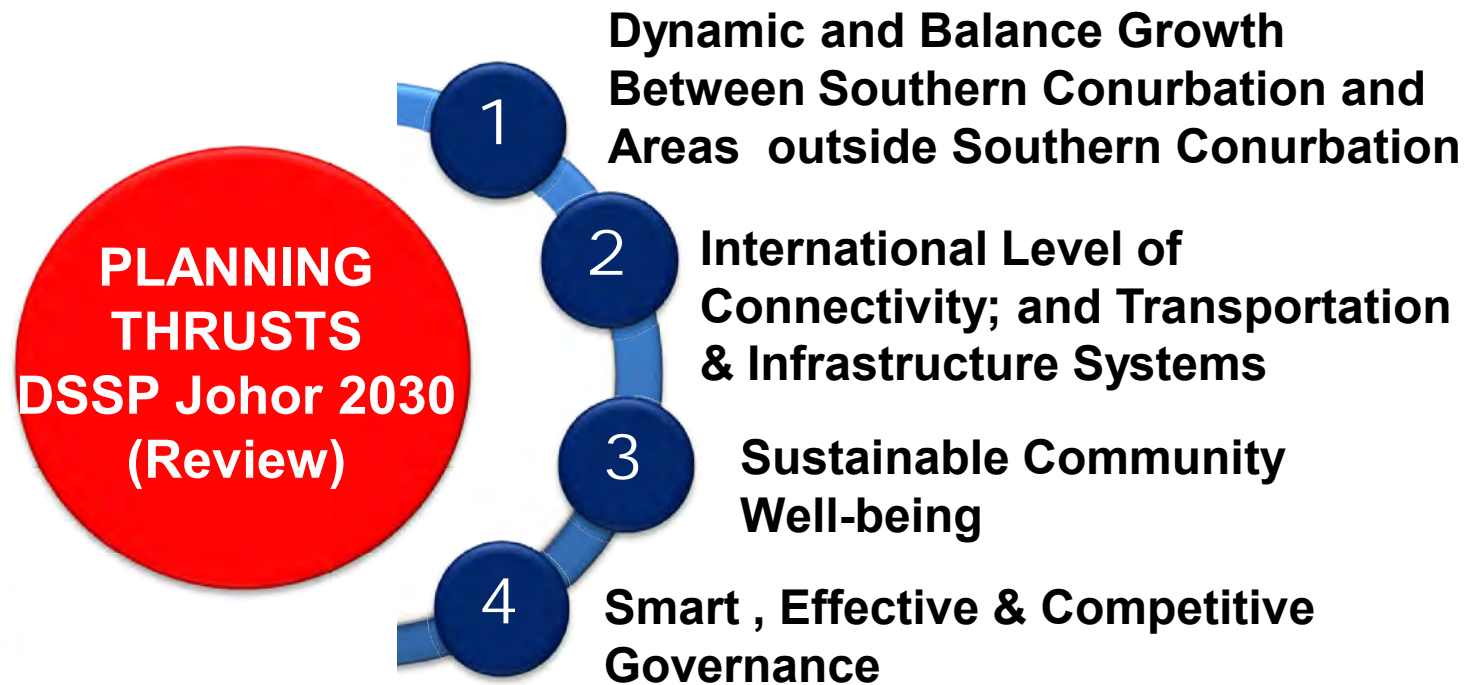
Draft State Structure Plan (review) Johor 2030 - Future Land Use Plan



Reference : Kajian RSN Johor 2030 (Kajian Semula)

Draft State Structure Plan Johor 2030

- State Planning Thrusts



STATE SPATIAL DEVELOPMENT OBJECTIVES

**Dynamic &
Balance
Development**

**Liveable
Environment**

**State and
Regional
Network**

**Urban and
Rural
Symbiosis**

**Conservation
of Natural
Assets**



Planning for The Future City of Johor

Challenges to Create Future Cities

- Growth in population and meeting the needs of segments of popn e.g. an **ageing population**
- Increased **human mobility** and the globalisation of economies and risks
- **Geo-political** shifts and changes in governance framework
- **Inequality** (create social tensions) and **insecurity** (food, water, energy)
- Developing advanced **technologies** and impacts of **bclimate change**

Key Elements to the Success of Future Cities

**Five essential ingredients to the
success of future cities are:**

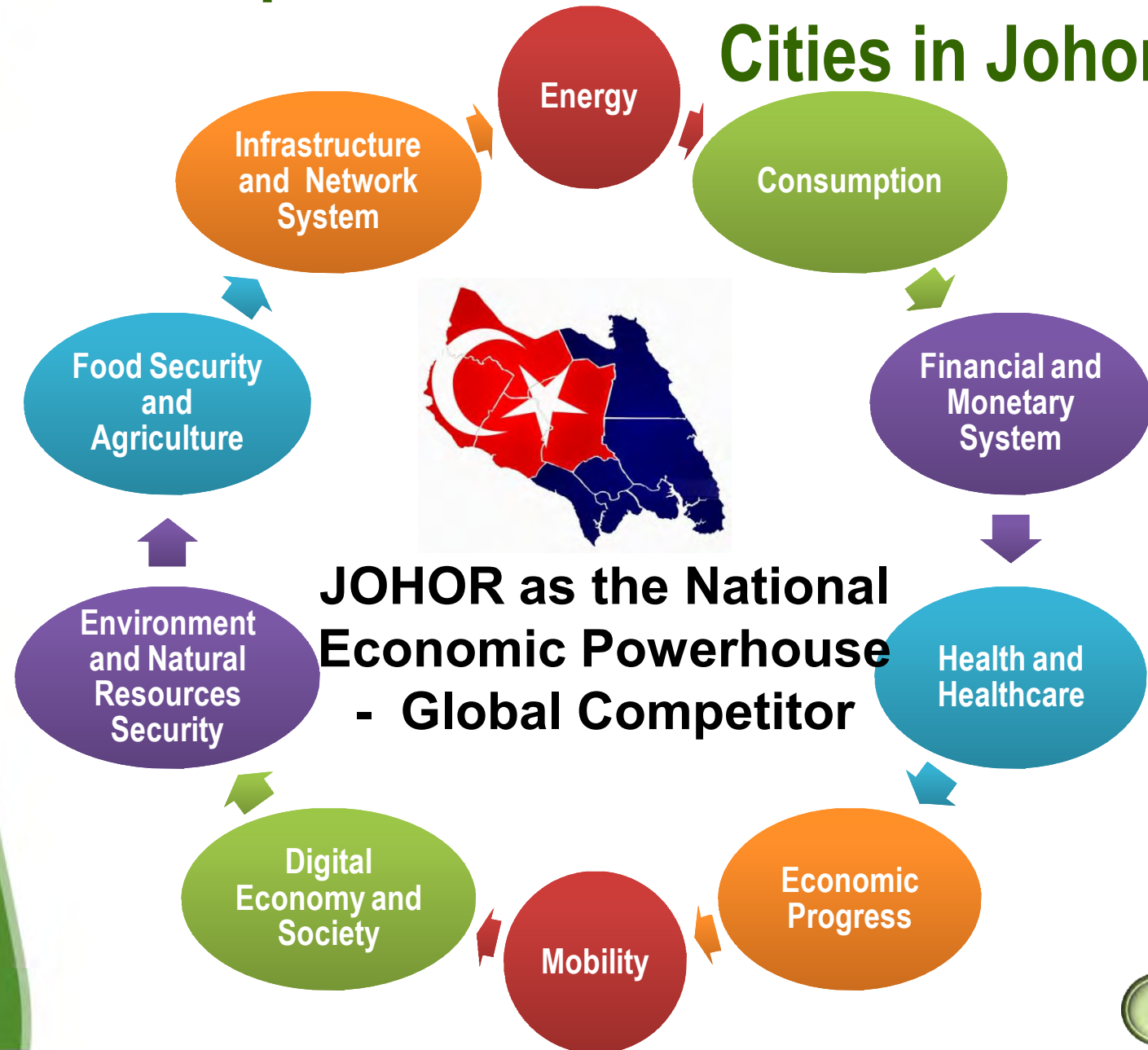
- 1) Vision**
- 2) Entrepreneurship**
- 3) Specialisation**
- 4) Social cohesion**
- 5) Governance**

Concepts of Future City

By weburbanist.com



Expected Enablers of the Future Cities in Johor



SUSTAINING FUTURE CITIES



THE WAY FORWARD

The Way Forward...

Towards sustaining future cities *in Johor?*



...to be prudent with nature's gifts.

Present Planning Emphasis



Transit Oriented Development



Garden City, Green Cities

**SUSTAINABLE
FUTURE
DEVELOPMENT**



**Urban Brownfield
Redevelopment,
and Infill Development**



**Integrated Development, Safe City,
Liveable City and Compact City**

Towards TRANSIT ORIENTED DEVELOPMENT



- **TODs** - developments linked to **TRANSPORT NODES** and **LINKAGES**
- **PLANNED INTEGRATION** of transport linkages
- Linked to **EFFICIENT PUBLIC TRANSPORTATION SYSTEMS**
- Reduce **CAR-CENTRED DEVELOPMENTS**
- **SMART PARTNERSHIPS** Between Developer – Transport Operators

Public Transportation Target: Private Vs. Public MODAL SPLIT

70 : 30



By 2030:

50 : 50

Amount of space required to transport the same number of passengers by car, bus or bicycle.



Car?



Bus?



Bicycle?



Integrated Public Transportation System

- ✱ Enhance Connectivity and Mobility

- ✱ Mass transport:

- **HSR, BUS SYSTEM**

" *Modal Split* **50 : 50**

" *One Hour Public Transportation Model*

" *Intermodal transportation*

" *Integrated ticketing system*

- ✱ Enhance bus system

- ✱ Can we emulate **CURITIBA BUS SYSTEM??**

- **CURITIBA BUS RAPID TRANSIT SYSTEM**

- All stations are **EASILY ACCESSED** and **ENCLOSED**.

- **EASIER ENTRY AND EXIT** to buses

- **COMFORTABLE** and **PREFERRED** transportation choice



Curitiba Bus Rapid Transit System



Building GREEN BUSSINESS INDUSTRY

1. **Skill-intensive & high-value** capital
2. Development of **R&D**
3. **Local natural resources** utilisation
4. **High-tech, aerospace & IT** industries
5. **Eco-friendly industries** (non-polluting industries)
6. Business opportunities for **local entrepreneurs**
7. Industries that are **not labour intensive**



Building GREEN CITIES, GARDEN CITIES



- **LAND ALLOCATION** for open spaces
- **SEAMLESS NETWORK** of green spaces, playing fields, etc.
- Open spaces as **CENTRE OF ACTIVITIES**
- Open spaces **WITHIN BUILDINGS**
- Strictly **GAZETTMENT** of open spaces **ENFORCE**

Green Neighbourhoods



GN ELEMENTS

- Walkable Streets
- Bicycle Network and Storage
- Parking Management
- Green Network, playing fields, recreation
- Green Building
 - Green Roof
 - Rain Water Harvesting
 - Solar Orientation
 - Infrastructure Energy Efficiency



**“INCENTIVES FOR GN
DEVELOPMENTS??”**

Solid Waste Management

- Integrated **SOLID WASTE MANAGEMENT**
- Increase **3Rs**
- Promote **CHANGE IN LIFESTYLE?**



promotes;
“No plastic bags
Day”

**3Rs concept is
aimed to reduce the
capacity of solid
waste.**

Streamline the Rural Development with the urban growth

- Develop **growth areas** as identified in Local Plans
- Provision and upgrading of **infrastructure** (roads, electricity, water, broadband)
- Provision of adequate **social facilities**
- Safeguarding **rural environment** from inappropriate encroachment
- Safeguard **environmental resources**

We must not forget the rural areas in
Sustaining Future Cities...

Follow through initiatives...

**“ Enforcement at local
implementation level
Education and awareness
Smart partnership for
Sustainable Development**





...CONCLUSION

Sustaining Future City is **not merely** a catch phrase

The crux of the matter is in **implementing** and ensuring that **all our activities** are deemed **sustainable**.



THANK YOU.

PLANMalaysia@Johor
Perancangan Melangkaui Kelaziman
Planning: Beyond Conventional

27 November 2017

Prepared by Dr Shamsaini Shamsuddin & Nurfaeza Saleha Sahlan

Sustainable Development



‘Development that meets the needs of the present without compromising the ability of future generations to meet their own needs’

SUSTAINING FUTURE CITIES

NATIONAL PHYSICAL PLAN



RANCANGAN
FIZIKAL NEGARA



PLANMalaysia@Johor
Perancangan Melangkaui Kelaziman
Planning: Beyond Conventional

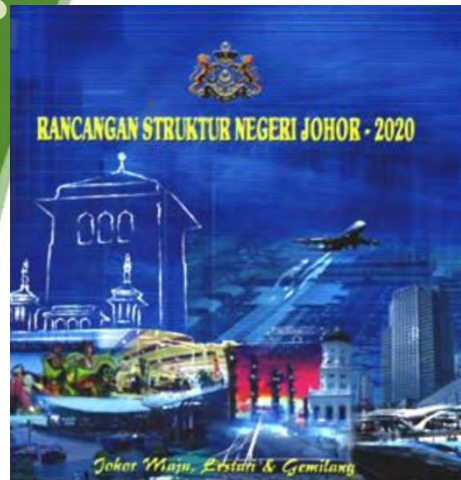
National Physical Plan (NPP) – Sect. 6B, Act 172

“A written statement which formulates strategic policies to identify development direction of overall physical land use and conservation of resources in Peninsular Malaysia”

- NPP 1 - Approved in 2005
- NPP 2 - Approved in 2010
- NPP 3 - Approved in 2015

Functions:

- i. To provide a physical dimension for socio-economic planning;
- ii. Establish a framework for lower tier planning at regional, state and local levels; and
- iii. Prepare policies and physical planning guidelines.



Gazetted on 3.1.2008



**Currently in the process of
reviewing the report.**

State Structure Plan (SSP)

– Sec.8, Act 172

“A written policy which explains the proposed state strategies and policies on the development and use of land for a 15 to 20 year plan period”

Functions:

- i. Translate policies of the National Physical Plan;**
- ii. Identify main land uses at the State level;**
- iii. Identify main State projects; and**
- iv. Provide framework for Local Plan**

Local Plan

– Sect. 12-15, Act 172

“A detailed development plan which translates policies and proposals of the State Structure Plan into local development context”

Functions:

- i. Translate the policies of the Structure Plan;**
- ii. A physical development guide for the respective district through the proposed land use plan;**
- iii. Identify main projects of the district;**
- iv. Preparation of Implementation Guidelines to guide implementation; and**
- v. Aided with Subject Plans for sectoral development implementation.**

Special Area Plan (SAP)

– Sect. 16B, Act 172

“A detailed development plan prepared within a short period of time for implementation and management”

The main output : Development Action Plan

Categories of SAP:

- i. Redevelopment of areas within urban centres;**
- ii. Heritage Conservation Areas;**
- iii. Environmental Sensitive Areas;**
- iv. Resettlement of Communities; and**
- v. Special Area For Specific Needs.**