



# **ACHIEVING SUSTAINABLE DEVELOPMENT AGENDA : Malaysian Spatial Planning Initiative**

**PLAN Malaysia**  
(JABATAN PERANCANGAN BANDAR DAN DESA)

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**SPATIAL PLANNING PLATFORM (SPP) SIDE EVENT | IMPLEMENTING TERRITORIAL/SPATIAL PLANNING SYSTEMS AND  
STRENGTHENING LOCAL CAPACITIES TO ACHIEVE SDGS & NUA**

10 February 2020 | Room 13 | Session Code : SE33



# MALAYSIAN DEVELOPMENT PLANNING FRAMEWORK

*KLCC, Kuala Lumpur  
MALAYSIA*

# SPATIAL PLANNING FRAMEWORK

## Planning Governance

### FEDERAL

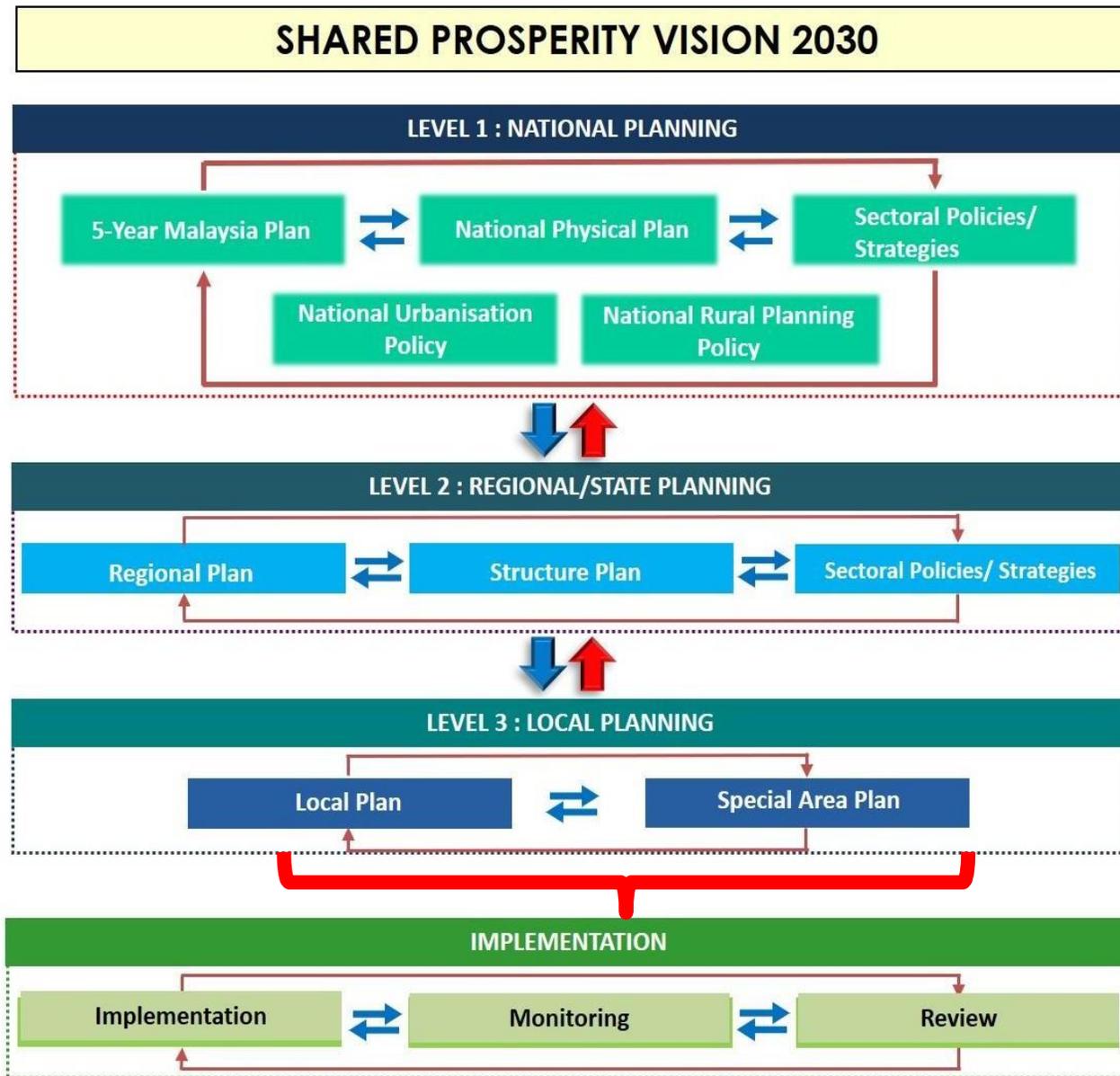
- **MINISTRY OF FEDERAL TERRITORIES**
- PLANMalaysia
- Federal Department and Agencies

### REGIONAL / STATE

- **STATE GOVERNMENT**
- PLANMalaysia@States -12 States in Peninsular Malaysia

### LOCAL

- **LOCAL AUTHORITIES**  
(100 Local Authorities in Peninsular Malaysia, including Federal Territories of Kuala Lumpur and Putrajaya)



## Legal Provision



Town Planning - Concurrent List

- Sec. 6B(2)(b)**
- National Urbanisation Policy (NUP)
  - National Rural Physical Planning Policy
  - National Physical Plan for Coastal Zones

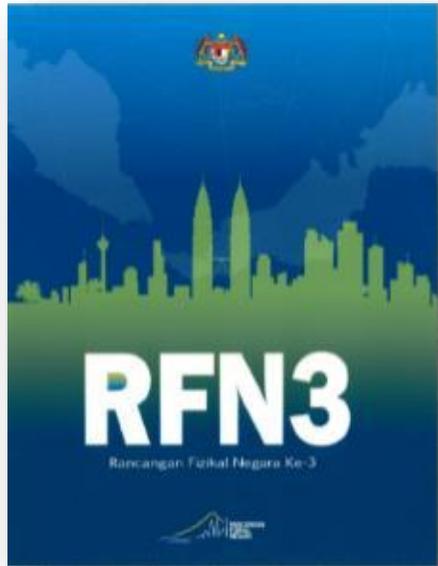
- Paragraph 6A(5)(b)**
- Central Forest Spine Action Plan
  - Sec. 7-11**
  - Structure Plan

- Sec. 12-16A**
- Local Plan
  - Sec. 16B**
  - Special Area Plan

- Every level must implement, monitor and review :
  - **Flexibility**
  - **Effectiveness**

# ■ National Physical Plan | NPP 3

## NPP3



REVIEWED EVERY  
**5 YEARS**

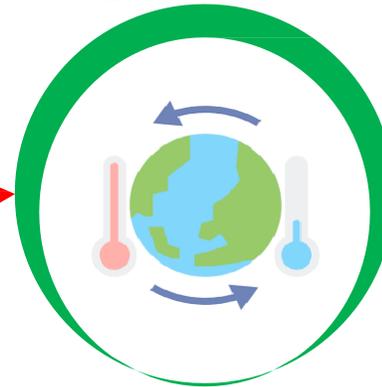
### GOAL

**Achieving  
a resilient  
and  
liveable  
nation**



### THRUST 1

**Dynamic Urban And Rural Growth**



### THRUST 2

**Spatial Sustainability And Resilience To Climate Change**



### THRUST 3

**Building Inclusive And Liveable Communities**

**GROWTH**

**LIVEABILITY**

**SUSTAINABILITY**

**RESILIENCY**

**2040**

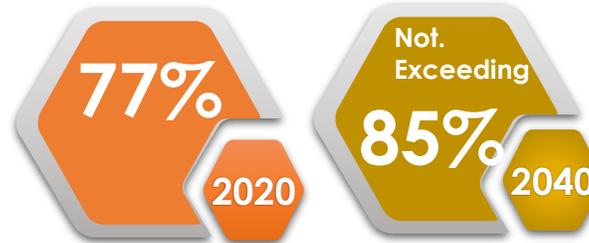
# Development Targets in NPP3 | for 2020-2040

## POPULATION & URBANISATION

### Population Target



### Urbanisation Target

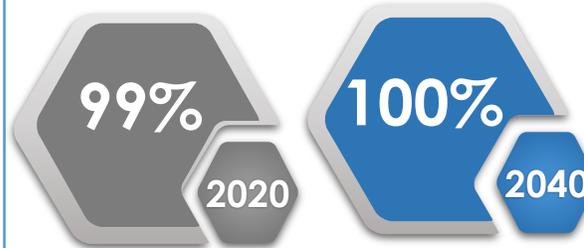


### Carbon Dioxide Emission Target

- Reduction of GHGs emission intensity from GDP in year **2020** as compared to year 2005 level.
- Reduction of GHGs emission intensity from GDP in year **2030** as compared to year 2005 level.
- Reduction of GHGs emission intensity from GDP in year **2040** as compared to year 2015 level.

### Infrastructure Development Performance Achievement target

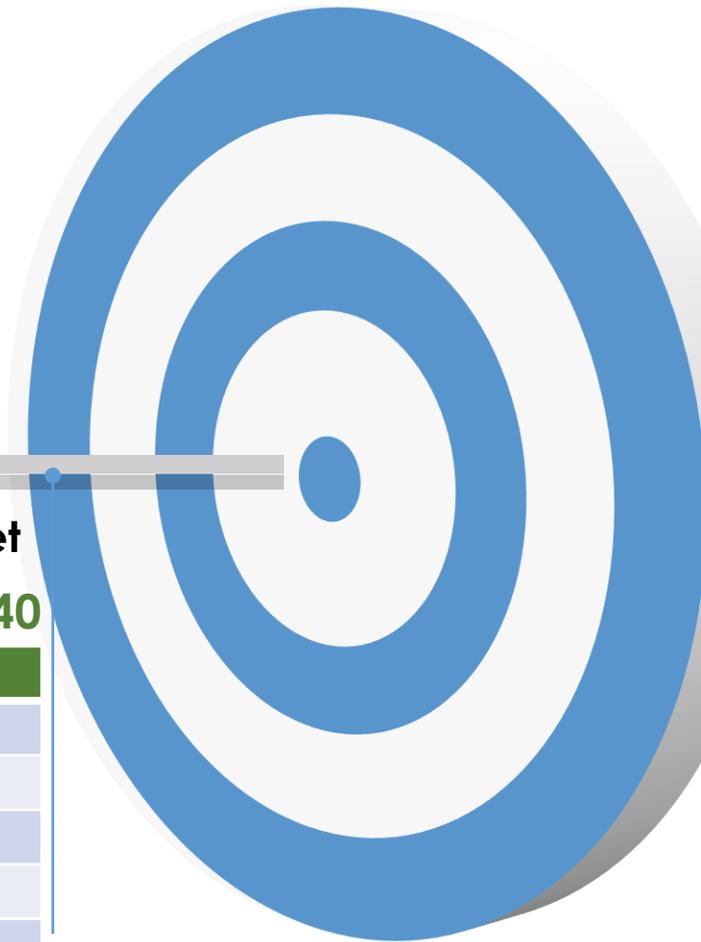
#### Clean and Treated Water Coverage



### Public Transportation target

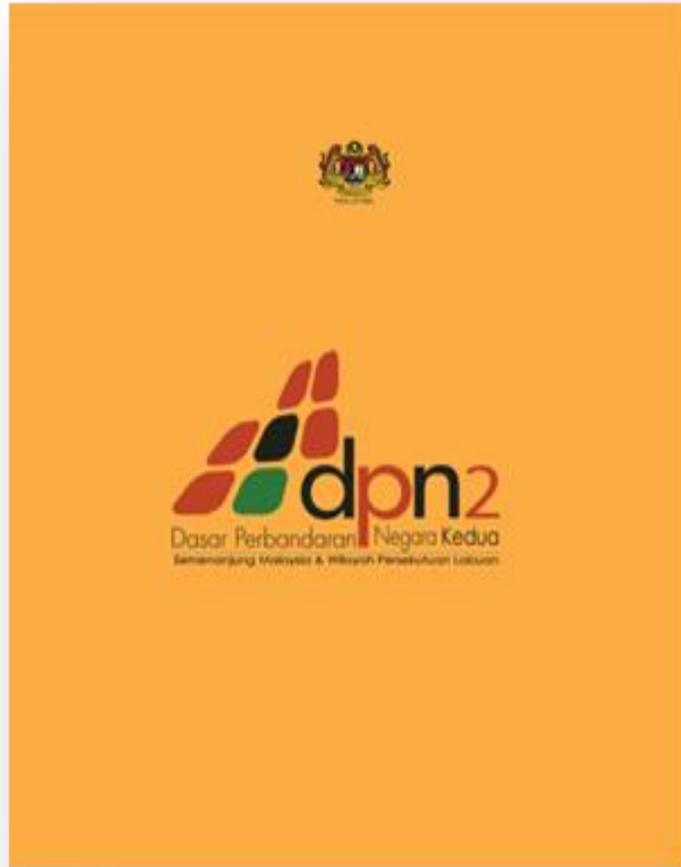
#### 2020 2040

	2020	2040
<b>Peninsular Malaysia</b>	30%	50%
Kuala Lumpur	40%	70%
Putrajaya/Cyberjaya	30%	60%
Johor Bahru	30%	60%
George Town	30%	50%
Kuantan	30%	50%
<b>Sabah &amp; Federal Territory of Labuan</b>		
Kota Kinabalu	15%	40%
Labuan	15%	40%



# ▪ National Urbanisation Policy | NUP2

## NUP2



2016-2025

## VISION

“SUSTAINABLE CITIES FOR PEOPLE’S WELL-BEING”

PRINCIPLE 1



GOOD URBAN  
GOVERNANCE

PRINCIPLE 2



LIVABLE

PRINCIPLE 3



COMPETITIVE

PRINCIPLE 4



INCLUSIVE AND  
EQUITABLE

PRINCIPLE 5



GREEN  
DEVELOPMENT AND  
CLEAN  
ENVIRONMENT

# | SPATIAL PLANNING INITIATIVE (Planning Tools)

## ***Planning Legislations & Capacity Building***



- Town and Country Planning Act, 1976
- National Physical Planning Council (Chaired by PM)
- State Planning Committee (SPC)
- Planning Appeal Board

## **PLANNING RESEARCH AND GUIDELINES**



- 37 Planning Guidelines
- Youth City
- Smart City
- Safe City
- Affordable Housing etc.

## ***Regional & Territorial Planning***



- 3 Regional Planning Committee
- Central Forest Spine

## ***National Development Plans***



## ***Development Plans***



- 12 State Structure Plan
- 71 Local Plan
- Special Area Plan

## **PLANNING INFORMATION SYSTEM, DECISION SUPPORT SYSTEM TOWARDS BIG DATA**

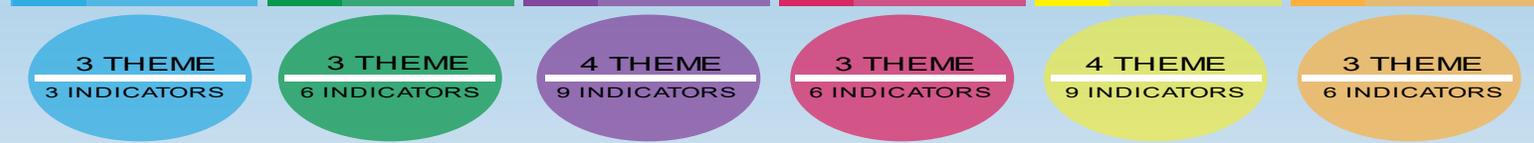


**MUO**



# URBAN SUSTAINABILITY ASSESSMENT

## MURNInets 2.0 FRAMEWORK



THEME	P	THEME	P	THEME	P	THEME	P	THEME	P	THEME	P
Economic Growth	1	Environmental Quality	2	Residential	1	Landuse Change	1	Utility Efficiency	6	Delivery System	1
Poverty	1	Risk Management	1	Recreation and Community Facilities	1	Urban Development	3	Solid Waste Management	1	Institutions Strengthening	3
Private Investment	1	Environmental management	3	Quality of Life	6	Forest Conservation and Tourism Development	2	Transportation	1	Enforcement & Monitoring	2
				Security	1			Sewerage Management	1		

Note :  
**S** STRATEGY  
**D** DIMENSION  
**P** INDICATORS

Malaysian Urban Rural National Indicators Network for Sustainable Development

## PORTAL MURNInets 2.0

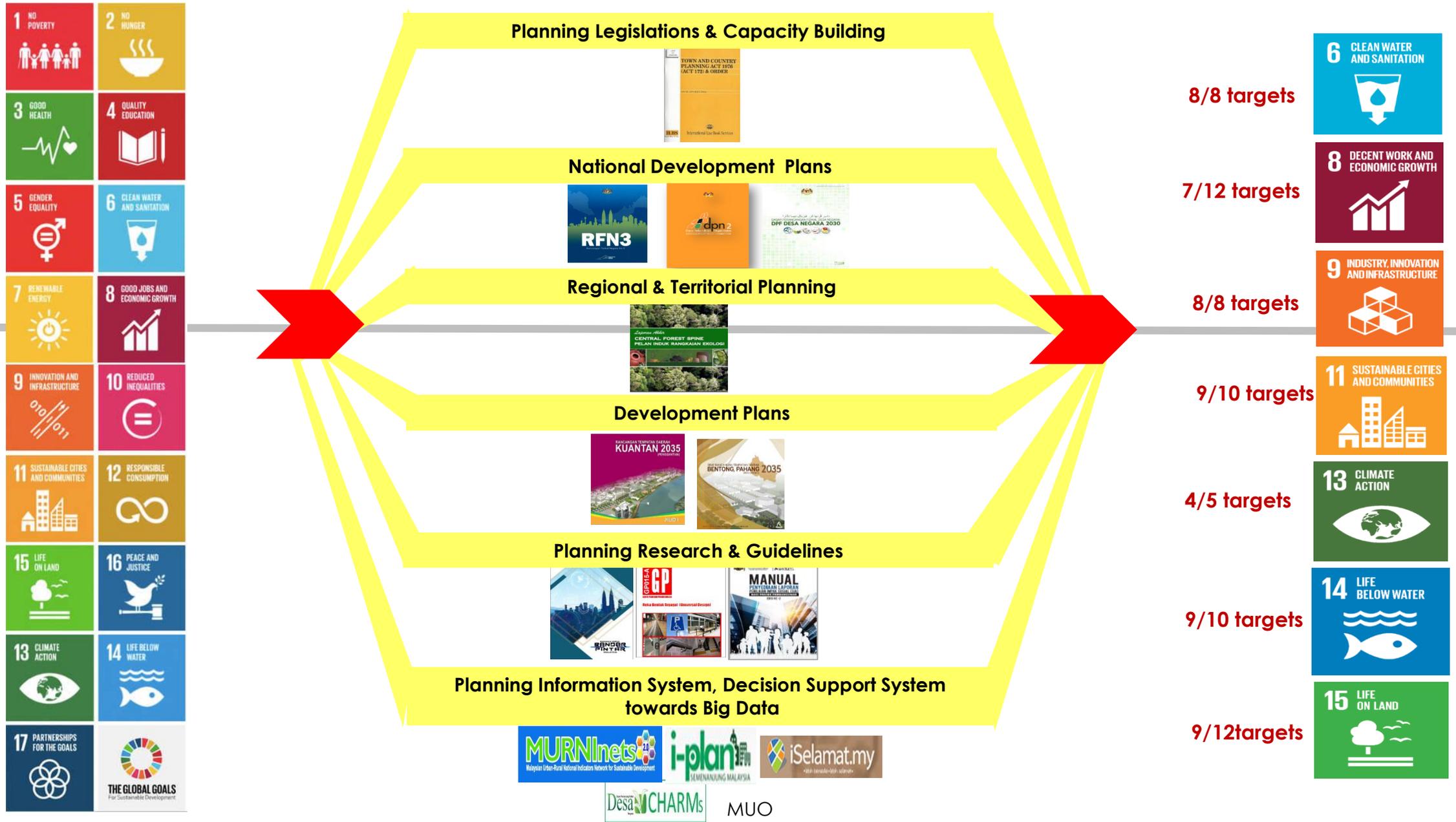


**B**

**SPATIAL PLANNING  
INITIATIVE AND  
SUSTAINABLE  
DEVELOPMENT AGENDA**



# (1) Mapping of Existing Planning Initiatives to the SDGs



# (2) Mapping of MURNInets Indicators to SDGs (Example)



SDGs



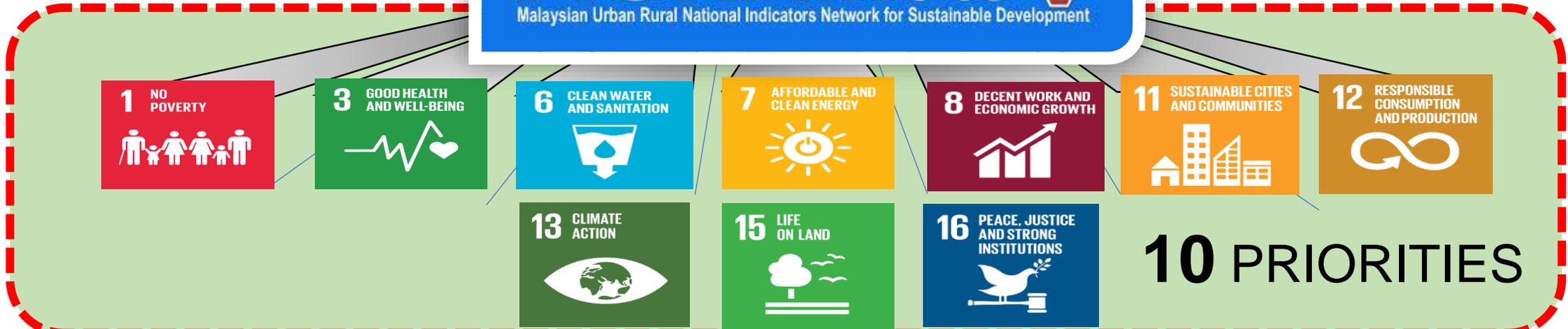
MURNInets INDICATORS

- Broadband Penetration Rate

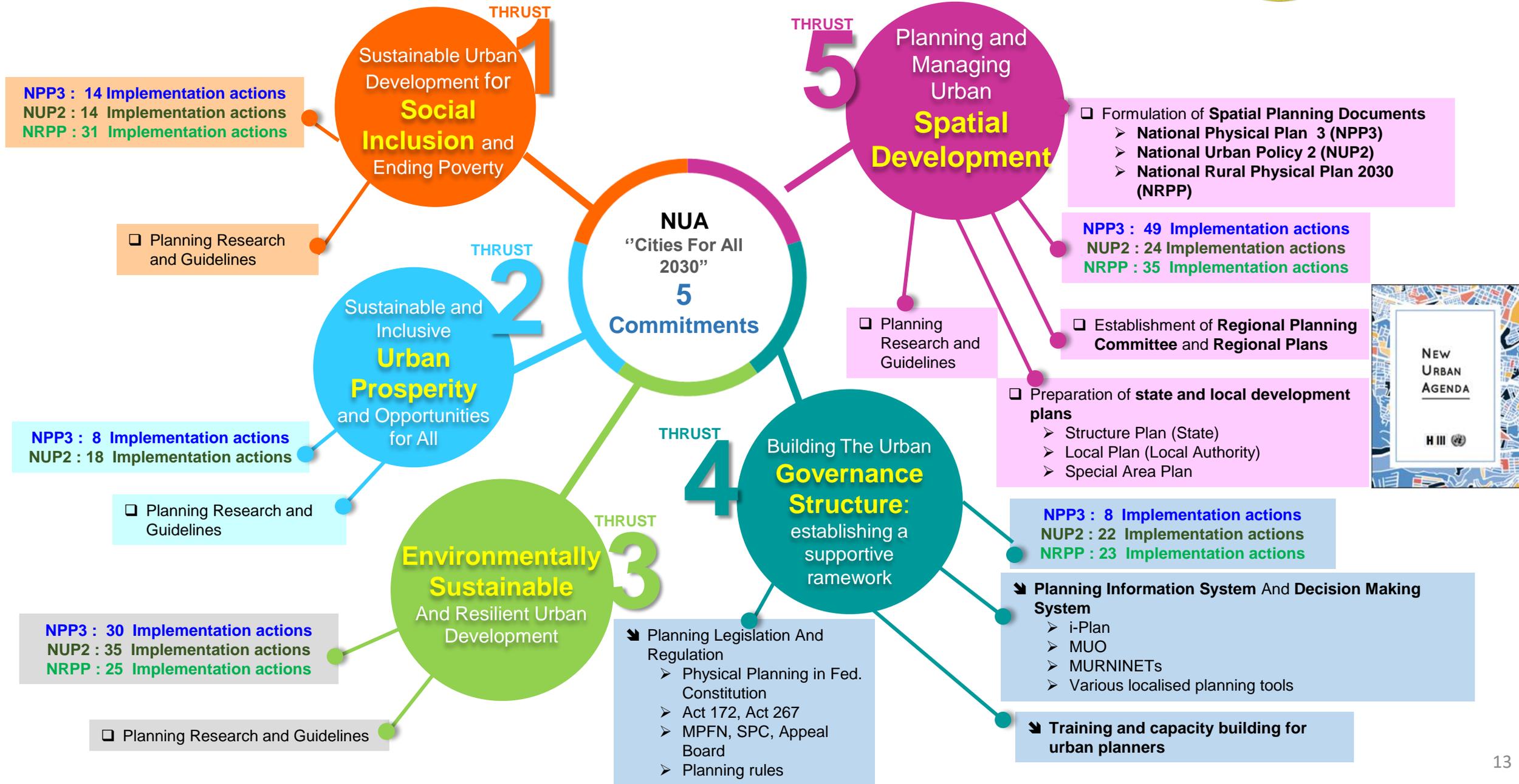
- Number of Disaster Risk Management and Implementation Initiative
- Number of Environmental Management Initiative
- Percentage of Affordable Housing Provided/State Target
- Percentage of Residential Land Use Within 400m from Public Facilities
- Ratio of Public Nuisance Complaint Cases/10000 population
- Happiness Index
- Percentage of Reduction in Crime Index
- Percentage of Changes in Non-Built up Area
- Urbanization Rate
- Ratio of Public Open Space / 1000 population
- Rate of Application for Open Space Gazzetment
- Conservation of Forest Reserve and Public Park
- Number of Integrated Public Transport Terminal/Stations

- MURNInets** | Malaysian Urban Rural National Indicators Network for Sustainable Development (39 indicators)

## Priority SDGs based on Existing Selection Criteria



# (3) Translating of NUA in Spatial Planning



**C**

**PROMOTING AND  
IMPLEMENTING  
THE SDGs AGENDA**



# Integrating Climate Change Mitigation Measures in Local Plan



## Low Carbon City Planning Guidelines

City Layout and Design



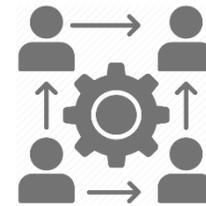
Transport and utility



Urban Services and Waste Management



Governance



Environment and Green Technology



15 LIFE ON LAND



# Integrating Disaster Resilience Management in Local Plan

## Mapping Disaster Risk



1 Identify type of hazard

1

2

2 Identify level of hazard risk

3

3 Evaluate resilience of a city

4

4 Identify appropriate measures to reduce vulnerability and increase cities' resiliency



Susceptibility Map



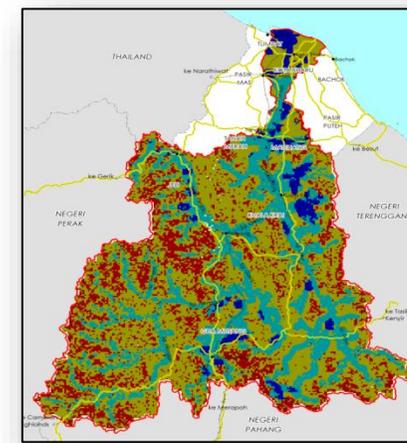
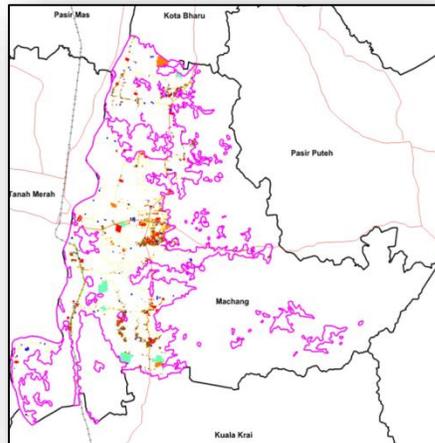
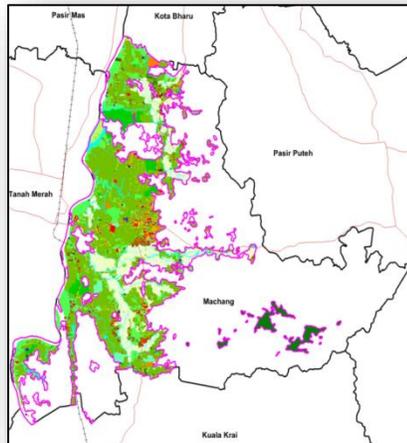
Vulnerability Map



Hazard Map

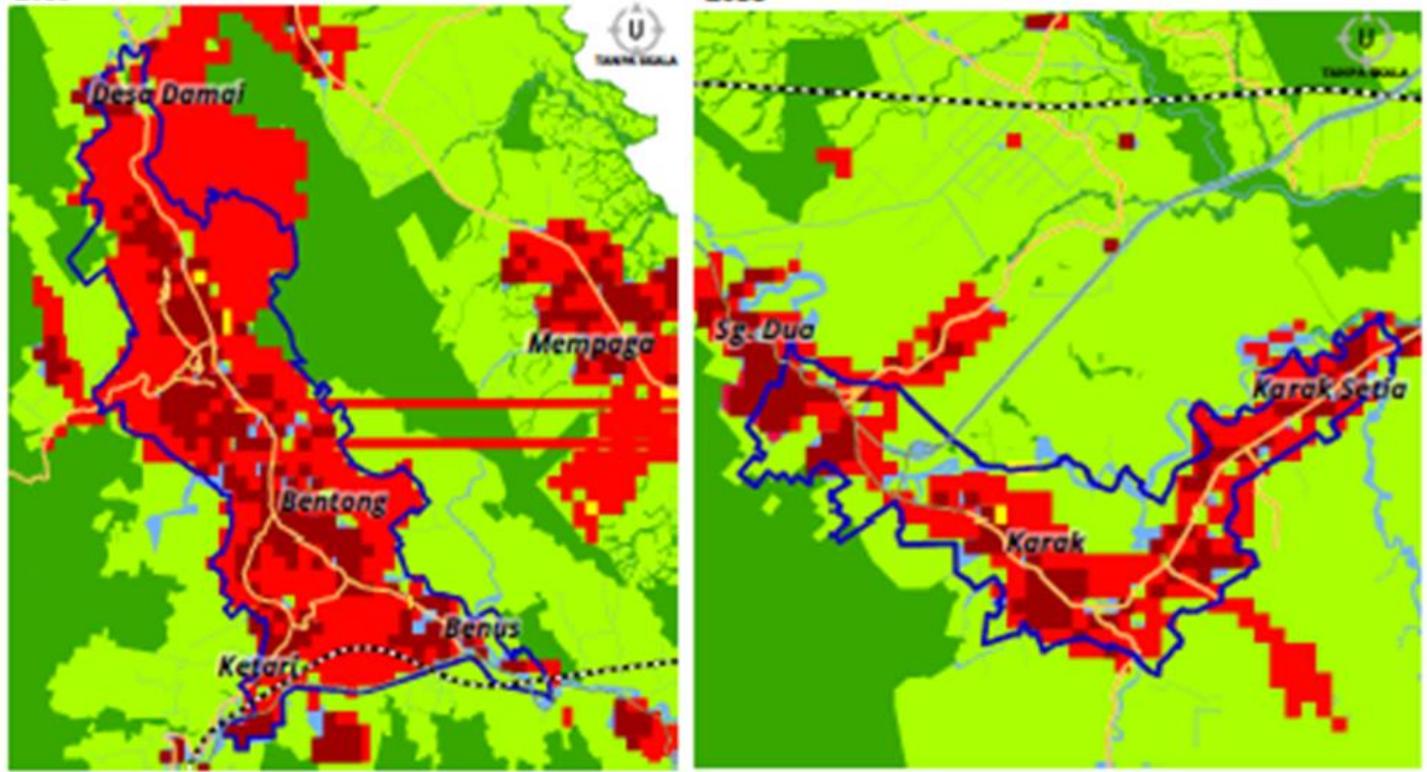


Disaster Risk Map





## URBAN GROWTH BOUNDARY



Bentong Draft Local Plan 2035

### Benefits of Urban Growth Boundary :

- i. To **balance and sustain** physical, environment, economy and social components for future development.
- ii. Smart and efficient control of urban sprawl.
- iii. Managing and planning development of cities.



Criteria used in determining Urban Growth Boundary for Bentong Local Plan

Built-up area

Committed Development

Zoning

Public Facilities

Density

Existing Boundary

Accessibility

Topography

# NATIONAL - LOCAL

Maximizing development within walking distance of public transport.



## Transit Oriented Development (TOD)



Promote **mixed development with high intensity** in walkable distance from station .



Promote **optimum and inclusive** land use and spaces



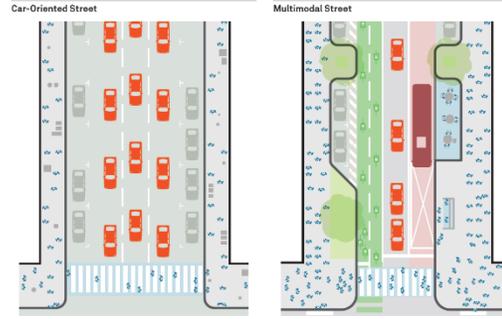
Centred on public transport – rail and buses .



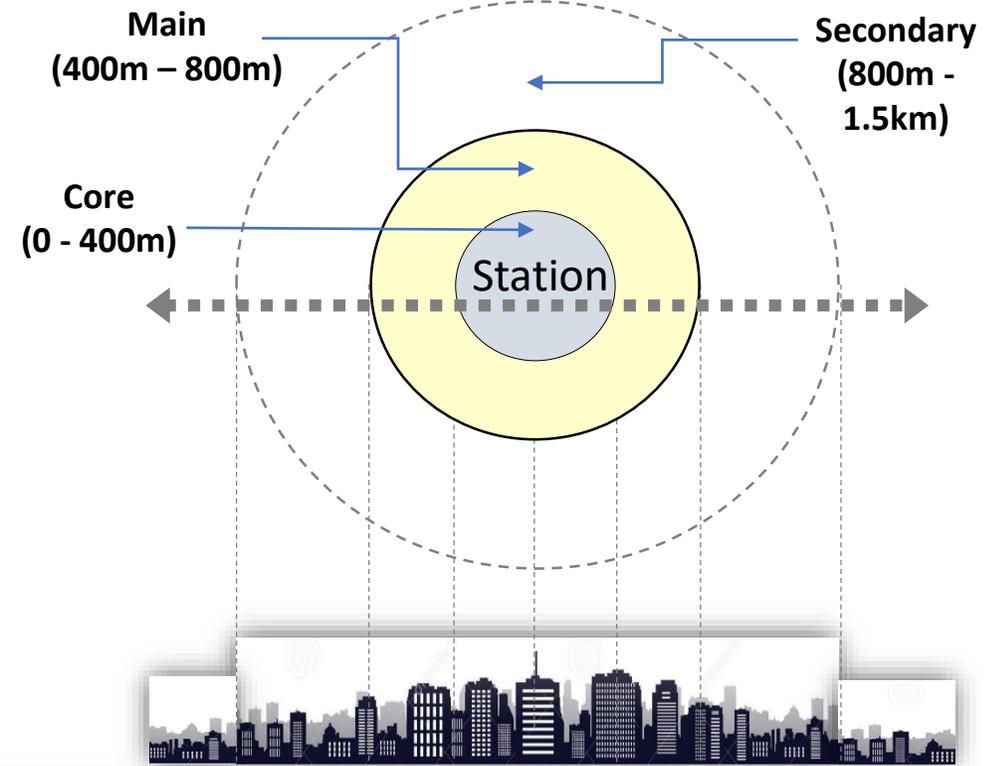
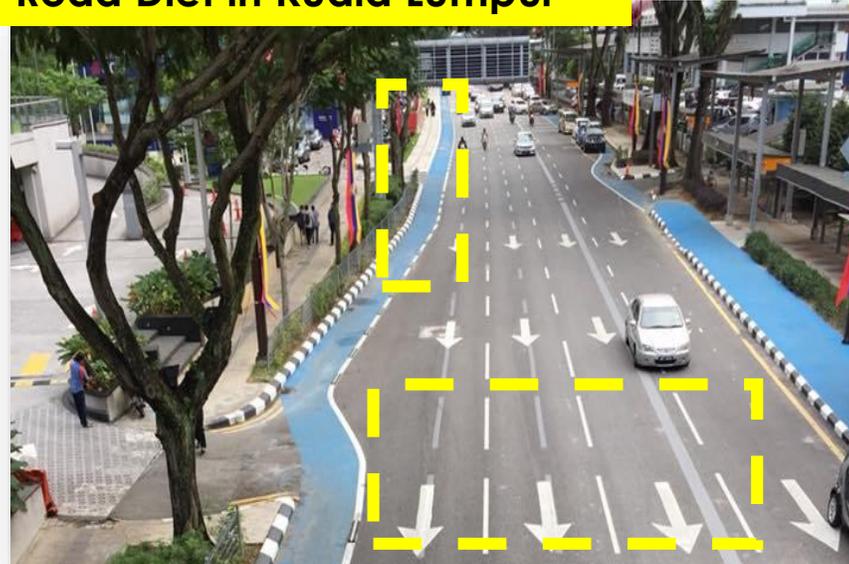
Promote **high connectivity, public transport friendly,** pedestrian and cyclist



Reduce carbon emission



### Road Diet in Kuala Lumpur



0-400m    400 - 800m-800m    1.5km



## Government Transformation Programme



## PROGRAM AND INITIATIVE

- Introduced in 2004.
- Part of Government Transformation Programme under **NKRA Reducing Crime**.
- Consists of **3 strategies and 15 measures**.
- Implemented by local authorities with budget allocation from Federal Government.

**BLACKSPOT INITIATIVE**

**SAFE CITY MONITORING SYSTEM**

**CPTED**



## BLACKSPOT and CPTED Initiatives

**Fear of Crime (FoC)**



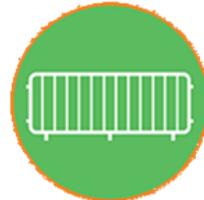
**High Crime Case (Hotspot)**



Lightings  
**24,844 units**



CCTV  
**992 units**



Pedestrian Walkways  
**385.65 km**



Traffic Calming  
**385 units**



Motorcycle Parking  
**44,061 units**



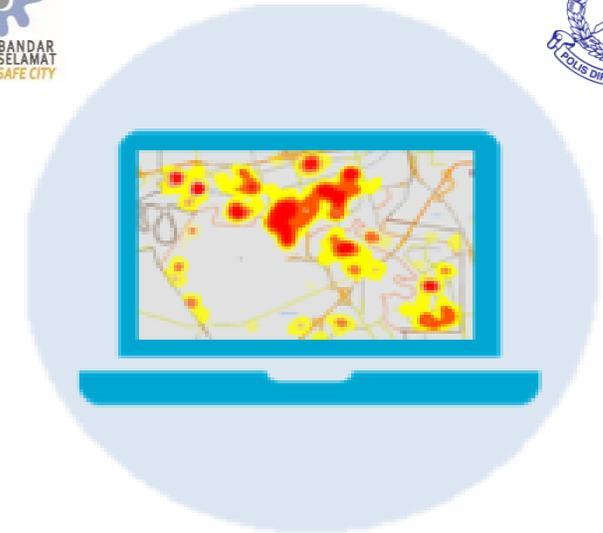
Crime Prevention Signage  
**2,211 units**



Safety Mirrors  
**2810 units**

**Budget :**  
**RM340.84million**  
(US\$95.00 mil.)

## Safe City Monitoring System (SPBS)



**Budget :**  
**RM29.79million**  
(US\$8.00 mil.)

# Promoting and Implementing Green Neighbourhood Initiatives



2012

GARIS PANDUAN PERANCANGAN

GREEN NEIGHBOURHOOD

**Guideline Purpose** - To drive local authorities to support green lifestyle through the neighbourhood design that would reduce carbon emissions & improve the quality of life and well-being.

**Yearly Awards** : To appreciate the community's efforts in implementing the green neighbourhood initiatives.



Provision of Bicycle Lane



Rain Water Harvesting



Provision of Pedestrian Walkway



Composting



Community Gardening



Other Initiatives



HEALTHY WALKABLE CITY

Site 1: Kuala Terengganu (1.15km)

3 GOOD HEALTH AND WELL-BEING

11 SUSTAINABLE CITIES AND COMMUNITIES



• BEFORE

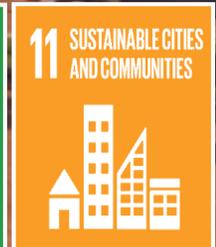
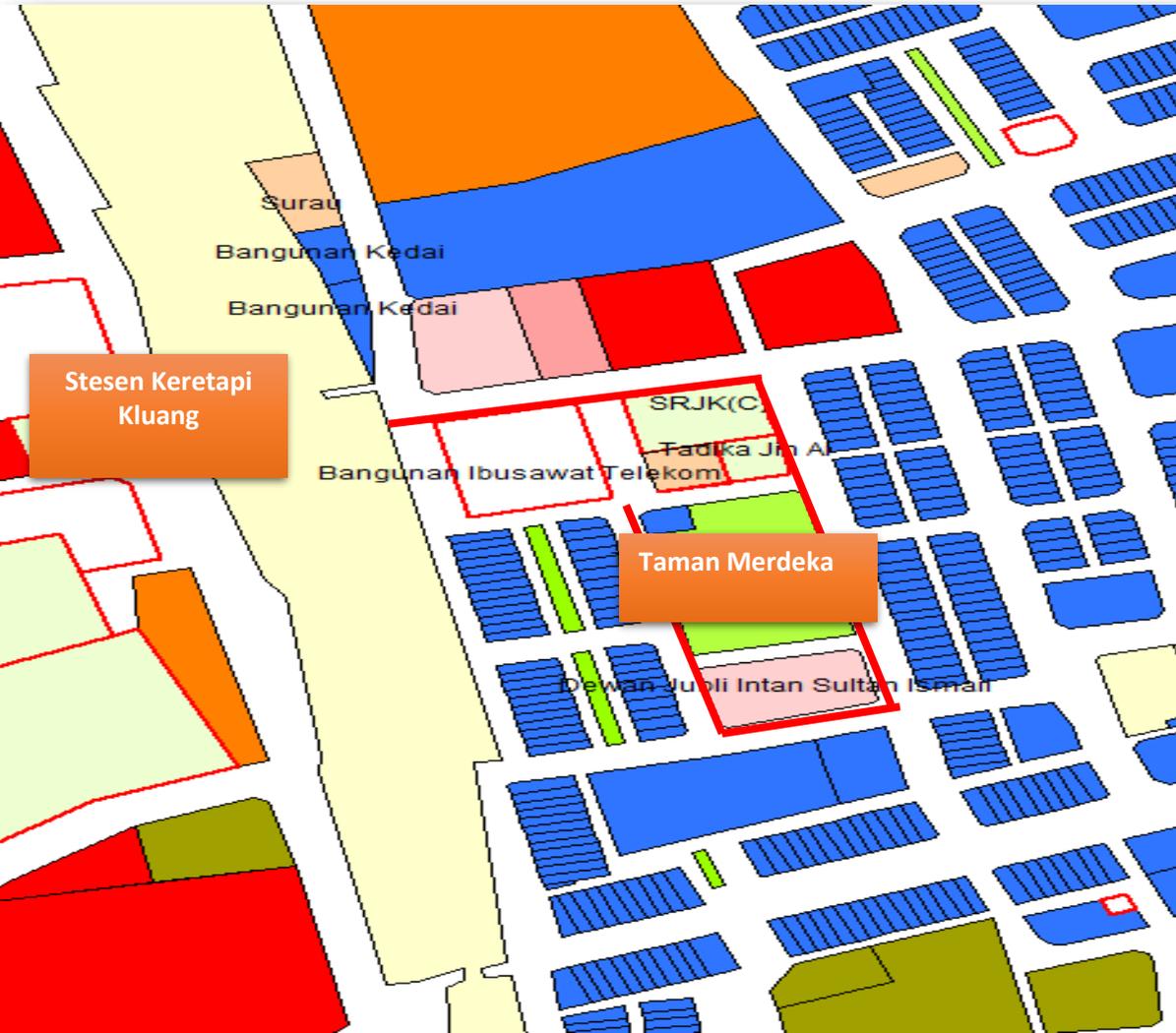


• AFTER



HEALTHY WALKABLE CITY

Site 2: Kluang (0.5 km)



HEALTHY WALKABLE CITY

Site 3: Kuala Terengganu

BEFORE



**TRANSIT ORIENTED DEVELOPMENT (TOD)**

**Site 4: LRT Station, Ampang KL**



Site 5: Bidor

PLACEMAKING THROUGH POCKET PARK

Petai Lane @ Bidor, Perak



D

# GOVERNING SUSTAINABLE DEVELOPMENT INITIATIVE | SDGs



Amazing  
Terengganu

Where Nature Embraces Heritage

*Kuala Terengganu Drawbridge*  
**MALAYSIA**

**.....The first drawbridge built in  
Southeast ASIA**

# MURNInets – Data Collection and Verification

## National and State Operation Centre + 150 Local Authorities

17 PARTNERSHIPS FOR THE GOALS



### National Operation Centre



Ministry of Federal Territories

**PLAN**Malaysia  
Perancangan Melangkaui Kelaziman  
*Planning : Beyond Conventional*



20 Years Partnership

# | SAFE CITY – Crime Blackspot Whitening Program

## Agencies Collaboration – Blue Ocean Strategy

17 PARTNERSHIPS FOR THE GOALS



### Main Agency



Ministry of Federal Territories

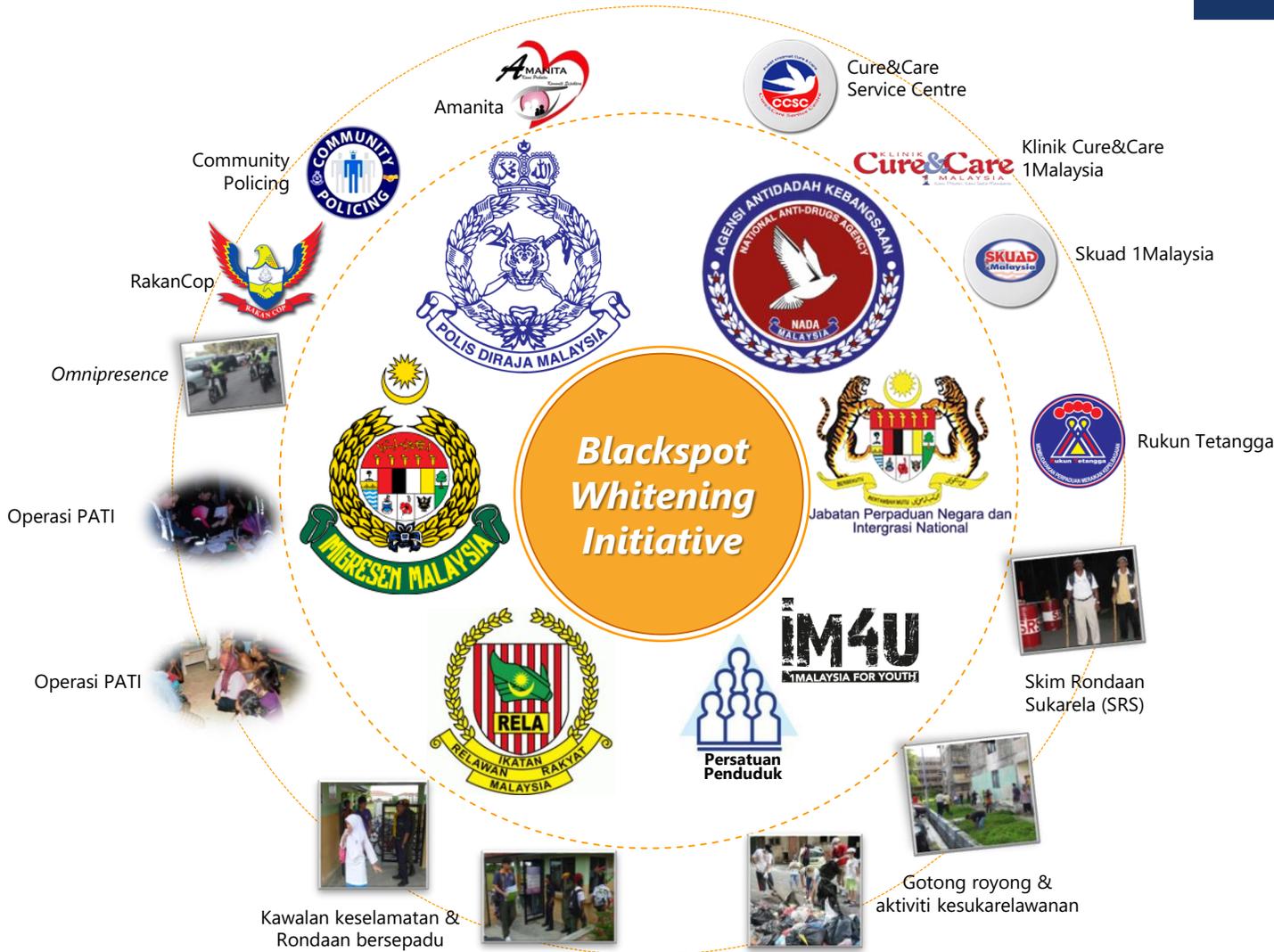
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*Planning : Beyond Conventional*



Ministry of Home Affairs



Royal Malaysia Police (PDRM)





# terima kasih

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