

NATIONAL CONSULTATION WORKSHOP UNITED NATIONS CONFERENCE ON SUSTAINABLE DEVELOPMENT 2012

SUSTAINABLE DEVELOPMENT : An Overview

Advancing the Sustainable Development Agenda through aligning Malaysia Plans & Policies

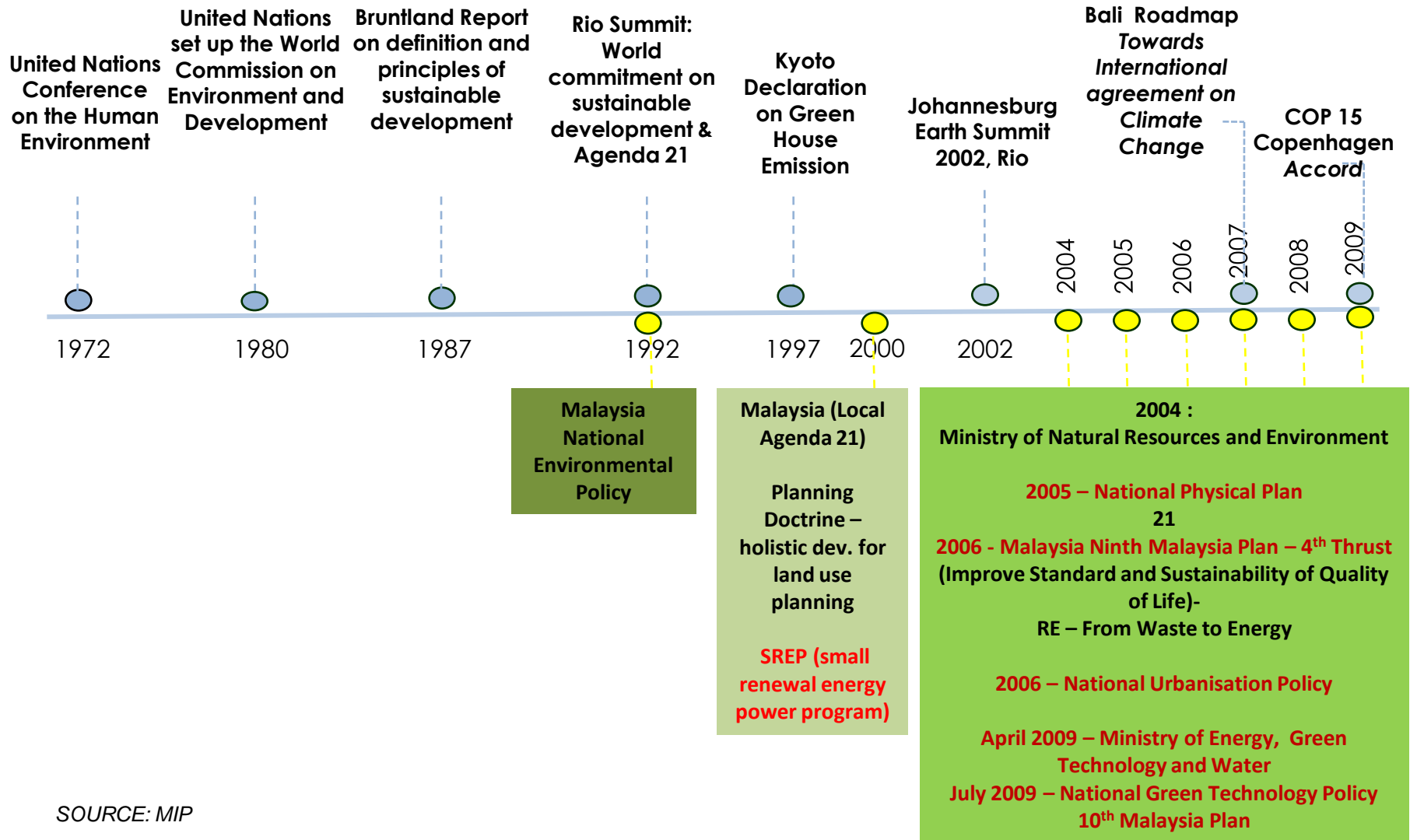
by :

DR. DAHLIA ROSLY

Federal Department of Town and Country Planning
Peninsular Malaysia

8 OKTOBER 2011

Advancing the Sustainable Development Agenda – National Level



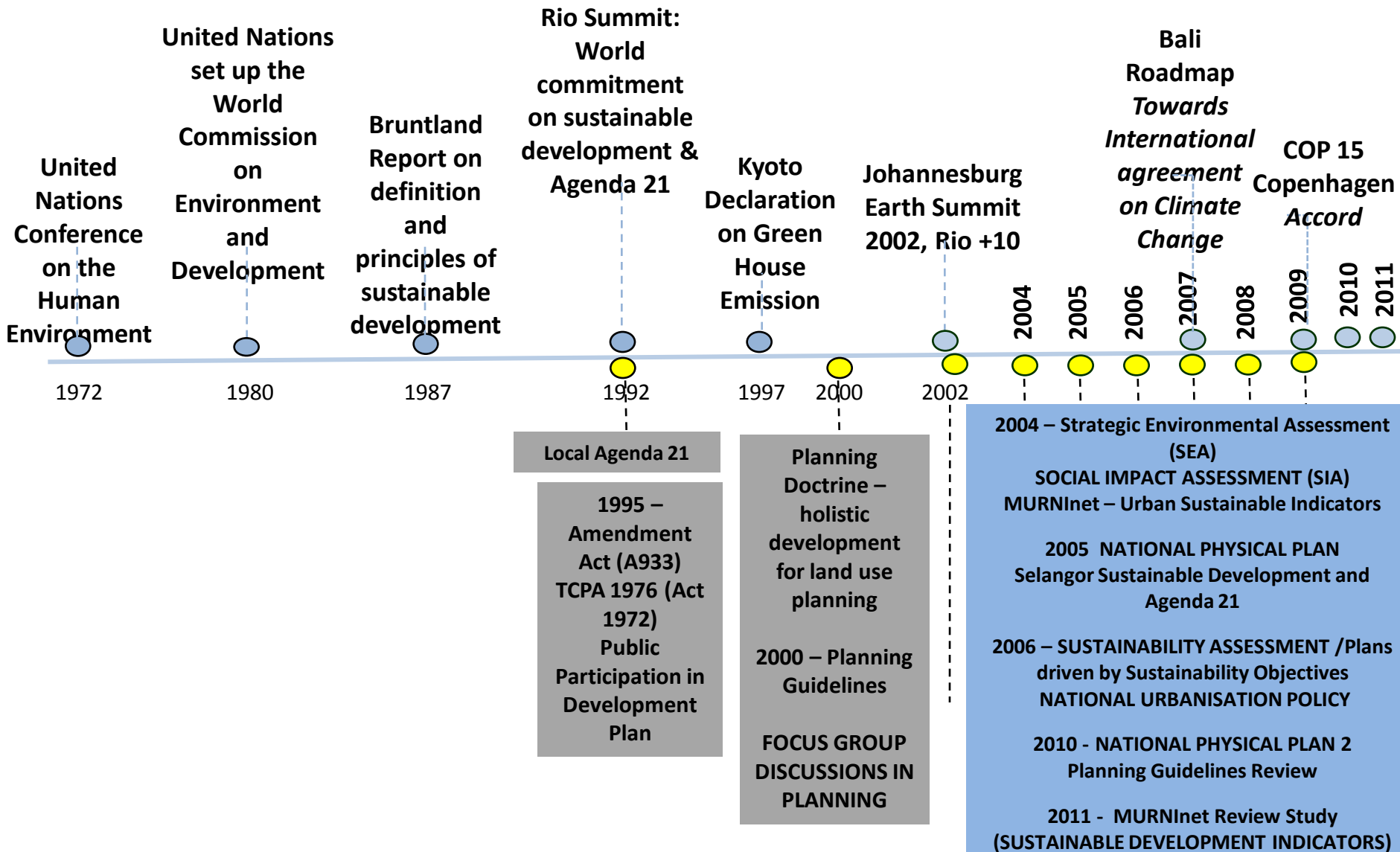
SOURCE: MIP

Malaysia's Commitment Towards Sustainable Development

VISION 2020

“We must also ensure that our valuable resources are not wasted. Our land must remain productive and fertile, our water unpolluted, our forest resources capable of regeneration and able to yield the needs of our national development. The beauty of our land should not be desecrated; for its own sake and for our own economic advancement.”

Advancing the Sustainable Development Agenda – Initiatives in Landuse Planning



SUSTAINABLE DEVELOPMENT

Social

- Community Place Making
- Access to health
- Education opportunities
- Safer environment

Environment/ Ecology

- Protection of natural resources and bio-diversity
- Adoption of low impact development
- Energy efficiency
- Climate change

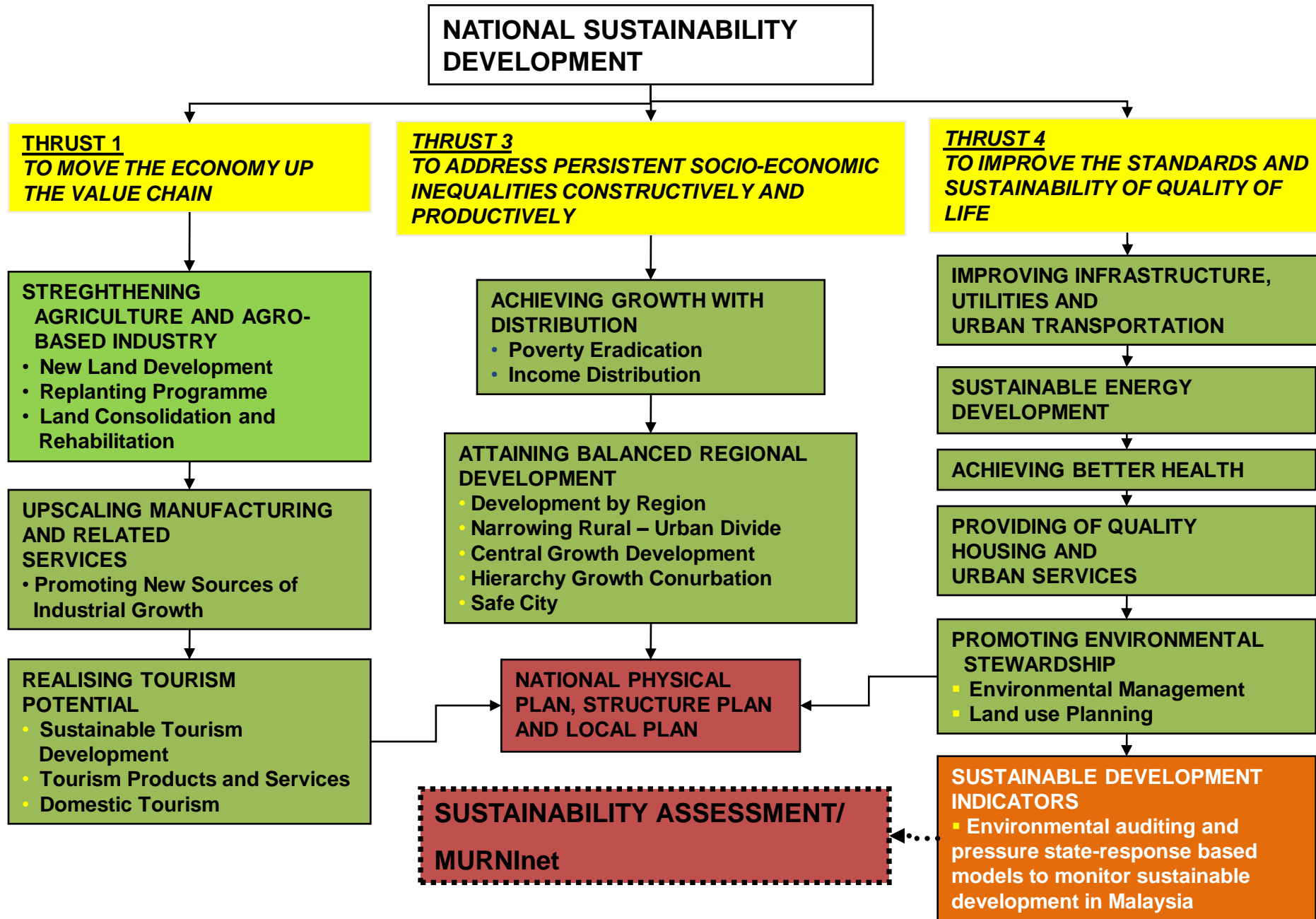
Economy

- Green economy to improve growth, social equity and quality of life.

Need for a balance in social, cultural and economic uses within natural resource limitations

PLAYERS: JPM/EPU, NRE, MOF, KeTTHA, KPKT-JPBD, MKN, KPM, UNIVERSITIES (*LESTARI) NGO'S, CBO'S, STATE/LOCAL /REGIONAL AUTHORITIES, COMMISSIONS + others

SUSTAINABLE DEVELOPMENT IN 9TH MALAYSIAN PLAN



TENTH MALAYSIA PLAN

2011 - 2015



TENTH MALAYSIAN PLAN (10th MP)

**THRUST FOUR: IMPROVING THE STANDARD
AND SUSTAINABILITY OF
QUALITY OF LIFE**

**Chapter 3 - *Ensuring Effective Sourcing
and Delivery of Energy***

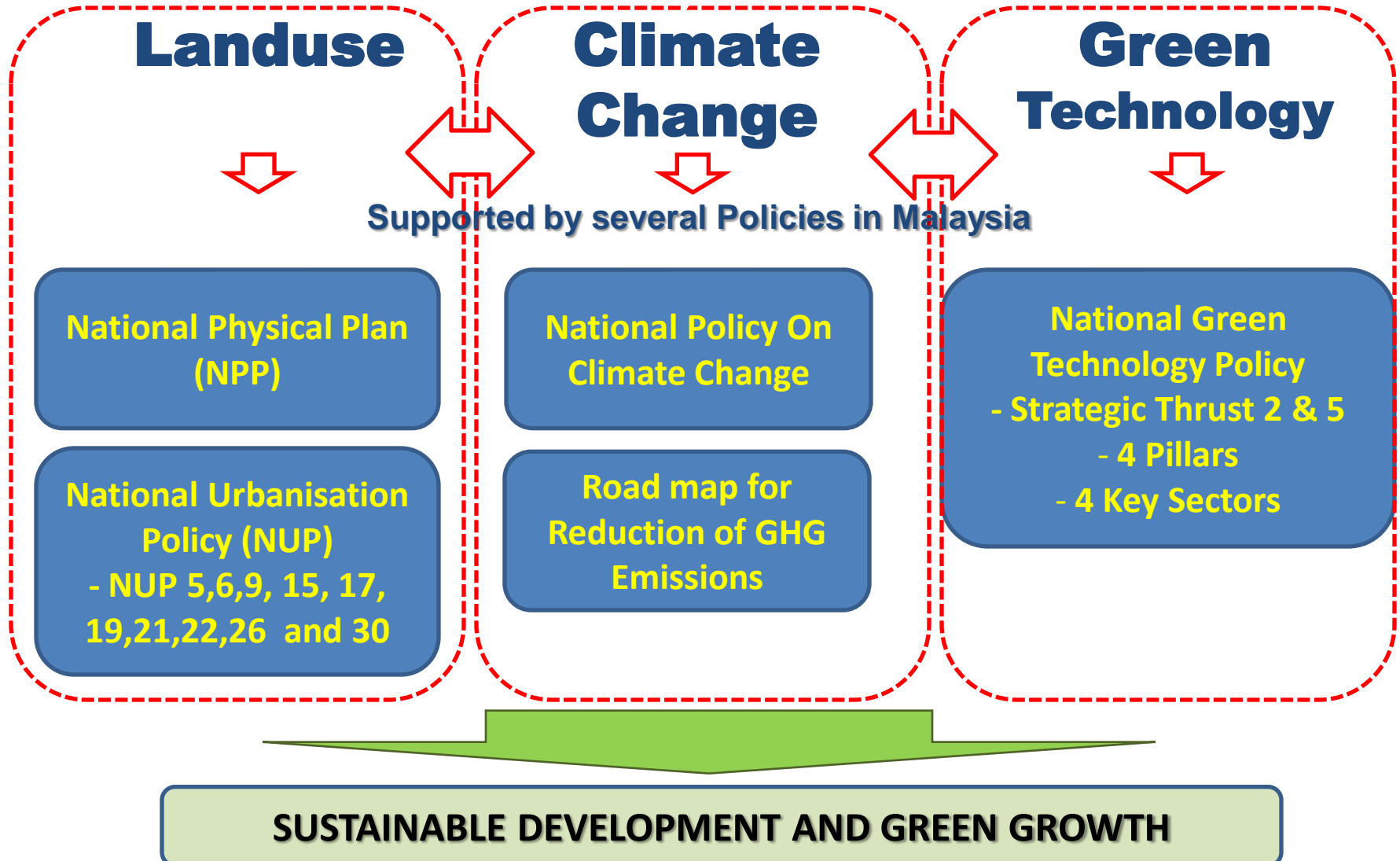
**Chapter 6 - *Developing a Climate Resilient
Growth Strategy***

The quality of life for Malaysians improved through better access to healthcare, public transport, electricity and water.

Measures were also taken to create a caring society and promote community well-being. Economic development was based on sustainability principles to ensure that the environment and natural resources are preserved so that growth will not come at a cost to future generations.

Malaysia: Towards Sustainability

POLICIES



NATIONAL POLICY ON CLIMATE CHANGE

To mainstreaming climate changes through wise management of resources and enhanced environmental conservation resulting in strengthen economic competitiveness and improved quality of life.



NATIONAL GREEN TECHNOLOGY POLICY (NGTP)

- **Strategic Thrust 2 :**
Provide Conducive Environment for Green Technology Development
- **Strategic Thrust 5 :**
Promotion and Public Awareness

TECHNOLOGY FIX vs LOW COST LIFESTYLE CHANGES

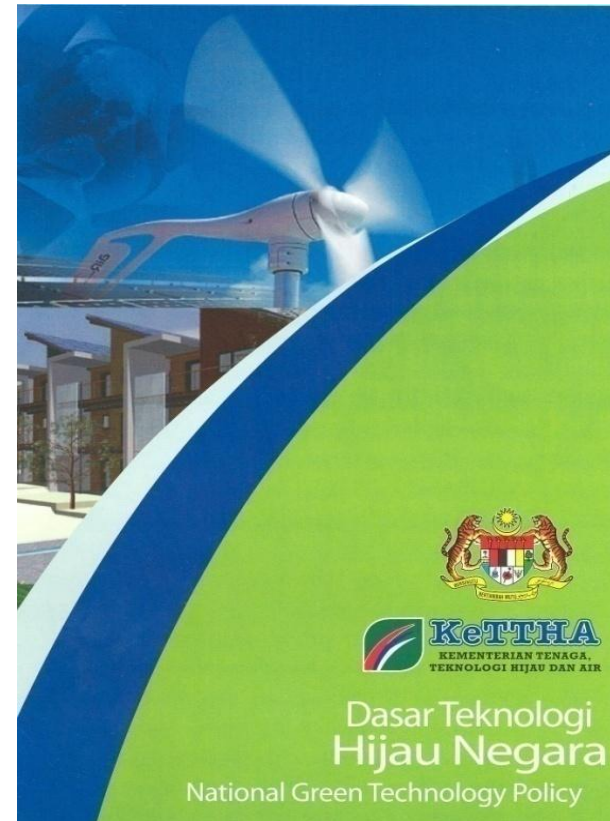




NATIONAL GREEN TECHNOLOGY POLICY (NGTP)

4 Pillars:

- **Energy** - Seek to attain energy independence and promote efficient utilisation;
- **Environment** - Conserve and minimise the impact on the environment;
- **Economy** - Enhance the national economic development through the use of technology; and
- **Social** - Improve the quality of life for all.



NATIONAL GREEN TECHNOLOGY POLICY (NGTP)



4 Key Sectors:



Energy



Buildings



Water and Waste Management



Transportation *

***supported by NKRA Public Transport Initiatives**

New Economic Model (NEM) – Making Malaysia A Rich Country For Everyone For A Long Time

High Income



Quality Of
Life



Inclusiveness

Sustainability

Enables all
community benefits
from the wealth of
the country

Meet present
needs without
Compromising
future generations

HOLISTIC DEVELOPMENT PLANNING SYSTEM

DEVELOPMENT PLANNING

NATIONAL MISSION

Vision 2020

Ninth Malaysia Plan

National Urbanisation Policy

PLANNING MACHINERY

National Planning Physical Council

Chairman ; Prime Minister

Secretariat : DG TCPD

State Planning Committee

Chairman ; Chief Minister

Secretariat : SD TCPD

State Planning Committee

Local Planning Authority

Chairman ; Chief Minister

Secretariat : SD TCPD

State Planning Committee

Local Planning Authority SD or

Town and Country Planning Department

National Physical Plan

State Structure Plan

Local Plan

Regional Growth
Development Area
Special Area Plan



federal department of town and country planning
TOTAL PLANNING
and Development Doctrine

*“Create a balance
between the physical
development and human
development “*

noble universal values of the relationship of man and the creator, man and man, man and the environment.

TCPA 1976

ACT 172



one of the functions of the **National Physical Planning Council (NPPC)** to promote town and country planning as an effective and efficient instrument for the improvement of the physical environment and towards the achievement of sustainable development in the country

The background of the slide is a photograph of lush green ferns, with their fronds filling the frame. The lighting is bright, creating a natural and vibrant atmosphere. The ferns are in various stages of growth, with some fronds appearing more developed than others.

NATIONAL **Physical Plan**

Framework for an integrated and
Sustainable Landuse Planning

manage

Environmental Sensitive Areas

safeguard

Water Resources

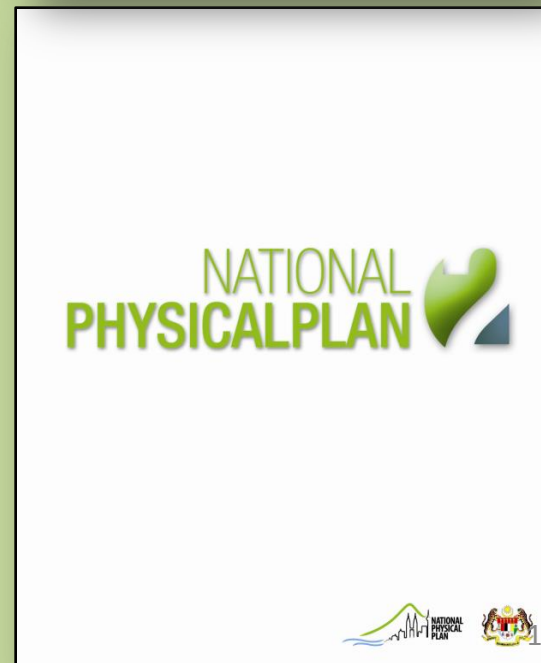
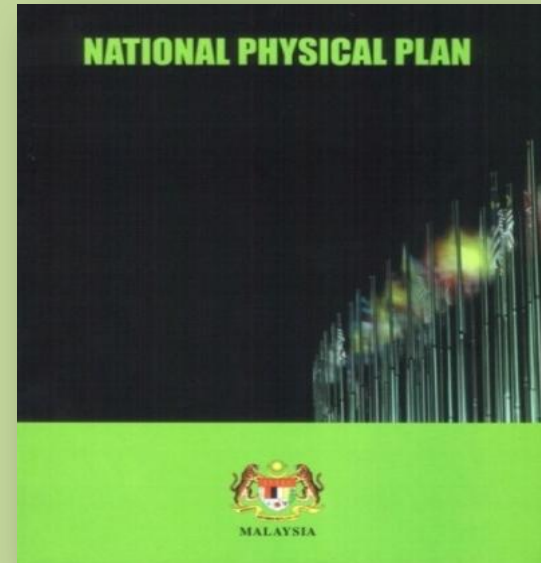
conserve

Prime Agricultural Areas

National Physical Plan

The Establishment Of An Efficient, Equitable And Sustainable National Spatial Framework To Guide The Overall Development Of The Country Towards Achieving Developed And High-income Nation Status By 2020.

- **Safeguard and manage sustainably all surface and ground water resources.**
- **Apply sustainable forest management.**
- **Water resources management based on IWRM, IRBM and ICZM.**
- **CFS as the backbone of the ESA network;**
- **ESA will be integrated in the planning and management of land use and natural resources.**
- **Future settlements and infrastructure in coastal zones will be located away vulnerable to rising sea levels/storm surges**
- **Natural barriers, esp. mangroves, forests and peat lands shall be protected and expanded and further conversion of will no longer be allowed.**





2nd NATIONAL PHYSICAL PLAN

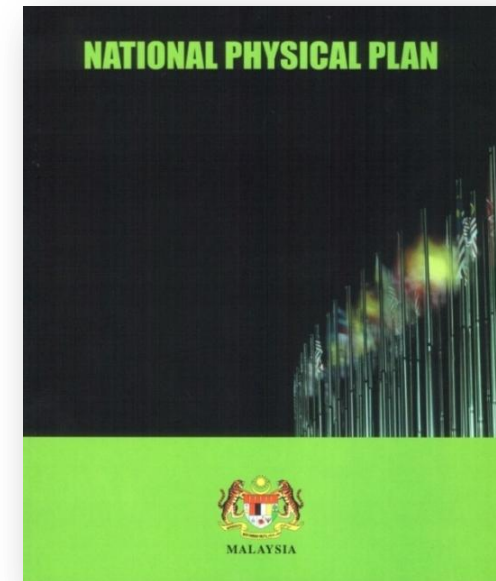
NPP 1 : National spatial framework for sustainable land use planning and development

NPP 2 : Urban development to be concentrated on strategic conurbation

NPP 14 : Urban development in conurbation to be based on National Urbanisation Policy

NPP 16 : Compact cities to be Urban Development Priorities

NPP 19 : Development of affordable scheme, self sufficient, facilities, and stage environment for major urban cities





NATIONAL PHYSICAL PLAN

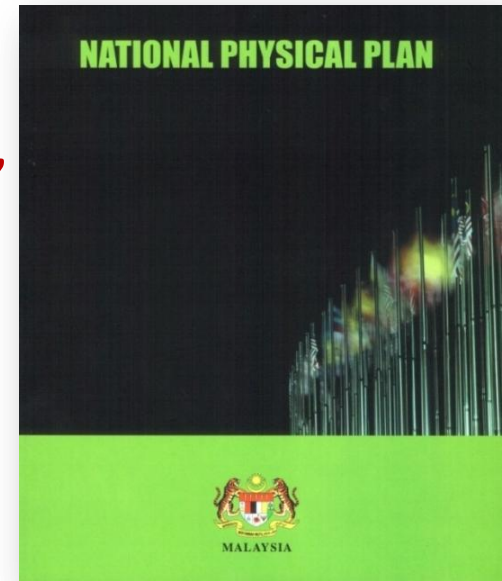
Four policies onlined to facilitated sustainable utilisation, management of nations resources to mitigate and adopt to impact of climate change.

NPP 22 : Environmentally sensitive area (ESA) shall be integrated in the planning and management of land use and natural resources to ensure sustainable development

NPP 23 : A central forest spine (CFS) shall be established to form the backbone of the environmentally sensitive area network.

NPP 24 : Sensitive coastal and marine ecosystem shall be protected and used on a sustainable manner.

NPP 25 : The spatial planning framework shall incorporate mitigation and adaptation measure against the impact of climate change.



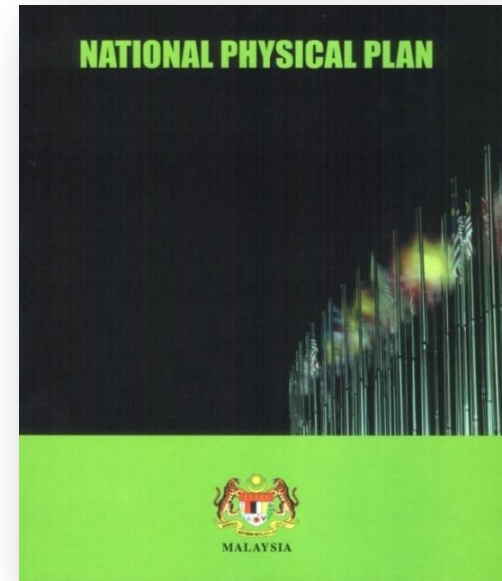
NATIONAL PHYSICAL PLAN

NPP 27 : Spatial planning framework to include adaptation and mitigation or measure of climate change impact.

Integration national transportation system

NPP 32 : Transit Oriented Development as a basis for urban land use planning.

NPP 33 : integrated public transport system for major urban centres.



National Urbanization Policy



the creation of cities with a vision which supports harmonious communities and living conditions through sustainable urban development



NATIONAL URBANISATION POLICY (NUP)

NUP 4 : Urban growth limit it determine based on it carry capacity for all town in the country.

NUP 5 : Optimal and balanced land use planning shall be given emphasis in urban development.

NUP 6: Urban development shall give priority to urban renewal within the urban area.

NUP 9: Open space and recreational areas shall be adequately provided to meet the requirement of the population.





NATIONAL URBANISATION POLICY (NUP)

-continuation-

NUP 15: An integrated, efficient and user-friendly public transportation system shall be developed.

NUP 17: A more comprehensive road network shall be developed to improve accessibility and mobility for inter and intra urban.

NUP 19: A planned, effective and sustainable solid waste and toxic management systems shall be implemented.





NATIONAL URBANISATION POLICY (NUP)

-continuation-

NUP 21: Sufficient housing shall be provided based on the requirement of the population.

NUP 22: Adequate, fully-equipped and user friendly public amenities shall be provided with continuous management and maintenance.



NATIONAL URBANISATION POLICY (NUP)

-continuation-

NUP 26 : A sustainable and environmental friendly development shall form the basis of environmental conservation and improve the urban quality of life.

NUP 30 : The use of innovative technology in urban planning, development and urban services management.



NATIONAL URBANIZATION POLICIES AND STRATEGIES RELATED TO DISASTER RISK REDUCTION & CCA

- **NUP 4, S (i):** Establish the urban growth limit based on its carrying capacity for each town in the local plan;
- **NUP 5, S (iii):** Impose Social Impact Assessment studies when undertaking the planning and approval of all public and private development activities;
- **NUP 18, S (v):** Adopt practices in the Manual for Environment Friendly Drainage Design (MASMA) to improve water quality & reduce the risk of floods;
- **NUP 19, S (v):** Implement the systematic and safe collection, disposal and treatment of solid waste and toxic waste services;

NATIONAL URBANIZATION POLICIES AND STRATEGIES RELATED TO DISASTER RISK REDUCTION & CCA

- **NUP 23, S (iv): Ensure that planning and urban development take into account mitigation measures against the effects of geo-disaster or industrial risk based on the principle of HFA;**
- **NUP 26, S (i): Ensure that urban development is given emphasis to reduce air, noise and water pollution and is compatible with rivers.**
- **NUP 26, S (ii): Enforce legislations, guidelines and standards relating to environmental conservation; and**
- **NUP 26, S (iv): Review guidelines and standards relating to environment.**

PUBLIC Participation



alternative for better planning in the process of preparing development plans

SUSTAINABILITY STUDIES

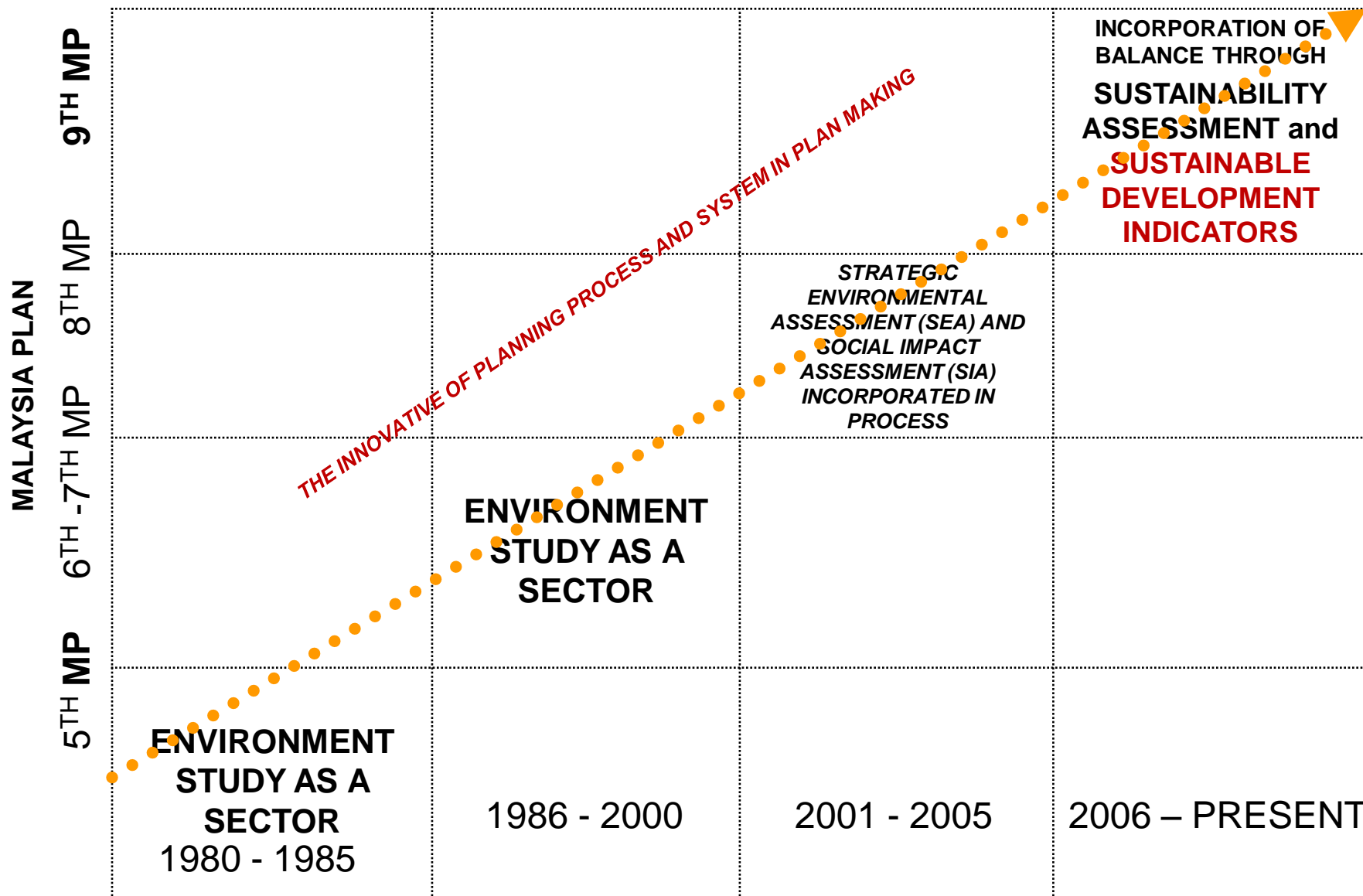
An aerial photograph of a rural landscape. The top half shows a large, flat, brownish field, possibly a dry riverbed or a fallow field. Below this, there's a road and a small settlement with several buildings with red roofs. The bottom part of the image shows a river or stream with a rocky bed and some vegetation along the banks.

1. STRATEGIC ENVIRONMENTAL ASSESSMENT (SEA)

2. SOCIAL IMPACT ASSESSMENT (SIA)

3. SUSTAINABILITY ASSESSMENT (SA)

ADDRESS ON SUSTAINABLE DEVELOPMENT IN THE PROCESS OF PREPARATION OF LOCAL PLAN



DEFINITION OF SUSTAINABILITY ASSESSMENT

- SA is an **evaluation process** for ensuring that a particular plan strives to achieve the objectives of sustainable development.
- Objectives and Proposals in the plan are **assessed for their compatibility with SUSTAINABILITY OBJECTIVES.**
- In the context of Local Plans, the evaluation is carried out in the following preparation stages:
 - Local Plan Objectives
 - Preliminary Proposals
 - Development Strategies
 - Local Plan Proposals
- **SA is the systematic and total approach to balance physical, economic, environment and social needs.**
- It is supported by an indicator system to assist 'problem-solving', identify targets & monitor Local Plans performance

SUSTAINABILITY OBJECTIVES



ASSESSMENT OF LOCAL PLAN PROPOSALS

1	1A	1B	1C	1D	1E	1F
2	2A	2B	2C	2D	2E	2F
3	3A	3B	3C	3D	3E	3F
4	4A	4B	4C	4D	4E	4F
5	5A	5B	5C	5D	5E	5F

LEGEND

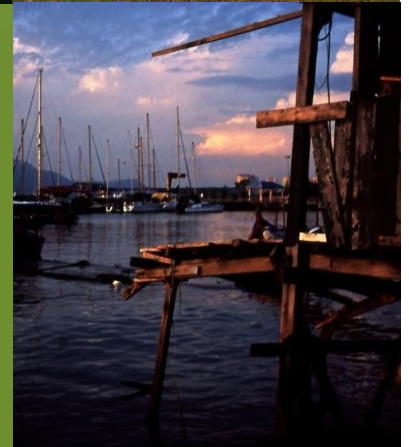
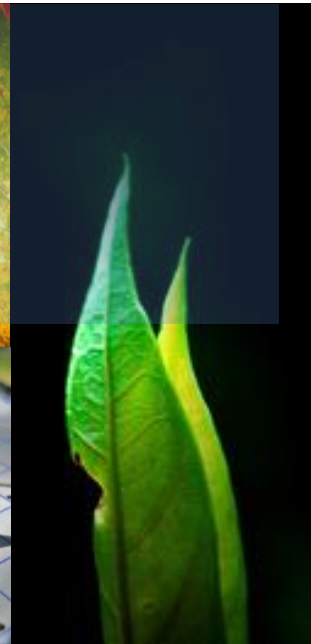
- COMPATIBLE / POSITIVE IMPACT
- NON COMPATIBLE / NEGATIVE IMPACT
- NOT DIRECTLY RELATED / NEUTRAL
- NOT RELEVANT



‘SUSTAINABILITY ASSESSMENT’
LOCAL PLAN PROPOSALS
VS
SUSTAINABILITY OBJECTIVES

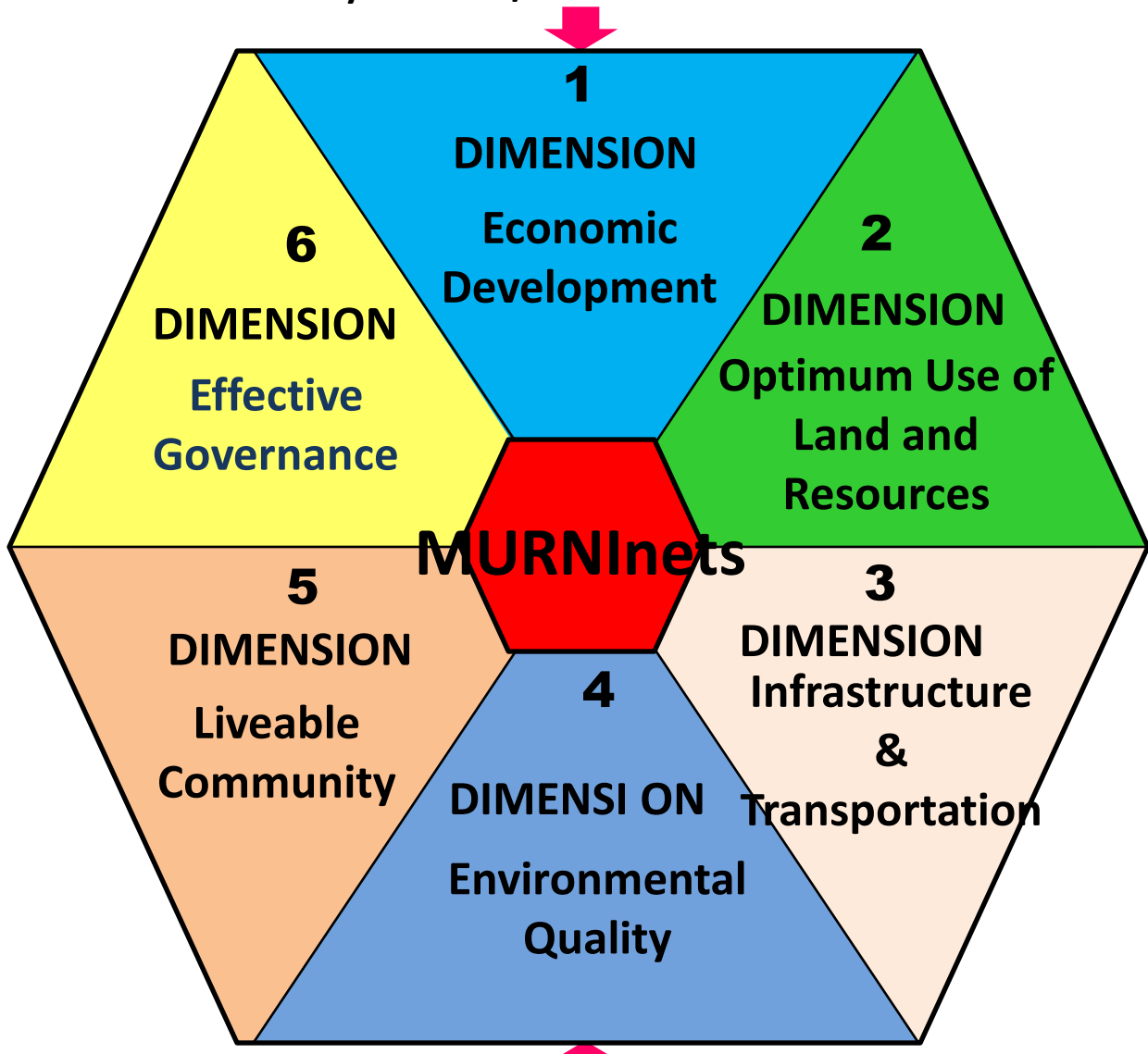
MURNInets

A tool to measure and evaluate sustainability of cities and their associated areas through the usage of urban indicators



MURNInet /Sustainable Development Indicators Framework

Vission 2020, New Economic Model, Five Year Malaysia Plan/
National Physical Plan/ National Urbanisation Plan



Government transformation Programme (NKRA, NKEA, MKRA)

SUSTAINABILITY COMPOSITE INDEX

MURNInet Indicators



5 Strategies



6 Dimensions



Dimension 1: Efficient and Competitive Economic Development	
THEME	Poverty
	Income Distribution
	Employment Distribution
	Economic Growth
	Private Investment
	Industrial, Agro-based and Biotechnology
	Industrial Development
Dimension 2 : Optimum Use of Land and Natural Resources	
THEME	Change of the Land Use
	Urban Development
	Tourism and Heritage Conservation
	Agriculture
	Mineral Resources
	Housing
Dimension 3 : Infrastructure and Transport	
THEME	Utility Efficiency
	Solid Waste Management
	Transportation
THEME	Dimension 4 : Environmental Quality
	Environmentally Sensitive Area (ESA)
	Risk Management
	Environmental Quality
	Environmental Management
THEME	Dimension 5 : Sustainable Community
	Demography
	Residential
	Quality of Life
	Public and Recreation Facilities
THEME	Dimension 6 : Effective Governance
	Delivery System
	Enforcement and Monitoring
	Institutional Strengthening



Economic Sustainability Index



Land Use Sustainability and Natural Resources Index



Infrastructure and Transport Sustainability Index



Environment Sustainability Index



Sustainable Community Index





















Sustainability Administration Index



Sustainability Level

EXAMPLE OF SUSTAINABILITY INDICATORS, COMPARITORS & TARGETS

NO	HEADLINE INDICATOR	INDICATOR BASELINE INFORMATION (2007)	'BEST PRACTICE COMPARISON'		SASARAN TAHUN 2020 BAGI KAWASAN KAJIAN
			PELAN STRUKTUR KUALA LUMPUR 2020	RANCANGAN STRUKTUR NEGERI SELANGOR 2020	
1	POPULATION DENSITY / BUILT UP AREA	 45 people / hek	35 orang / hek	30 orang / hek	 30 orang / hektar
2	UNEMPLOYMENT RATE	 4.3 %	3.4 %	3.6 %	 3.9 %
3	PERCENTAGE OF AGRICULTURE LAND UNTUK TANAMAN MAKANAN	 35 %	10 %	45 %	 40 %
4	AFFORDABLE HOMES	 50,567	276,678	375,856	 213,211
5	MODAL SPLIT	 20 : 80	50 : 50	40 : 60	 40 : 60
6	PERCENTAGE OF PERMANENT FOREST	 28 %	10 %	32 %	 30 %
7	RIVER/WATER QUALITY INDEXS	 Semua Lembangan WQI 50-70	Semua Lembangan WQI 60-90	Semua Lembangan WQI 70-100	 Semua Lembangan WQI 70-100
8	KELUASAN KAWASAN REKREASI (HEKTAR) SETIAP 1000 ORANG PENDUDUK	 0.45	0.50	0.58	 0.52
9	NO. OF CRIME REPORTED/DAY	 100 reports / day	45 reports / day	50 reports / day	 75 reports / day

PLANNING Guidelines



controlling activities in land development for uniform, comfortable and safe execution.

GUIDELINE on Environmental Sensitive Areas (ESA)



to assist in deciding the type of use and activities that can be allowed in areas designated as ESA and the minimum planning standards that must be applied for each use

GREEN NEIGHBOURHOOD

Planning Guideline

Improving the standard and sustainability of quality of life

Low carbon society





Official Site

BUDGET 2010

1 MALAYSIA, TOGETHER WE PROSPER

MALAYSIAN BUDGET 2010

Develop Green Building:

Efficiency of resource use – energy, water, and materials – while reducing building impact on human health and the environment during the building’s lifecycle, through better siting, design, construction, operation, maintenance, and removal.

MALAYSIAN BUDGET 2010

GREENING OF PUTRAJAYA AND CYBERJAYA

“ Develop Putrajaya and Cyberjaya as pioneer townships in Green Technology, as a showcase for the development of other townships”

Give priority to goods and services are environmentally develop Putrajaya and Cyberjaya as friendly and comply with the standard products green technology in Government procurement.

Prime Minister , Budget Speech 2009

**KEY GOALS
FOR 2010**



- * Green Township Guideline.**
- * Green Rating System.**
- * Saving 10% Of Energy And Water Usage In Government Buildings In Putrajaya.**
- * Carbon Footprint Baseline For Putrajaya & Cyberjaya.**

Green Neighbourhood



- Solar Energy
- Energy Efficient
- District Cooling System for neighbourhood area
- Communal Rain Water Harvesting



Human Scale

Walk ability & Eco-mobility

- Transport nodes according to pedestrian cycling catchment area
- Narrow Road
- Solar Vehicle



Connectivity

- Transit Efficiency
- Cycling System
- Safe And Efficiency Road System



Public and Open Space Area

- 30% Green/Landscape Area (National Landscape Policy)
- 10% Green/Open Space (Development Control/ Planning Guidelines)
- 2 hectares/1000 people (Open Space Planning Guidelines)
- Roof Top Garden



Federal Department of Town and Country Planning: RESEARCH PROGRAMMES

- ✿ Preparation of Planning Guidelines: Green Neighbourhood and Green Neighbourhood Index (compliments KeTTHA's LCCF)
- ✿ SUSTAINABLE DEVELOPMENT INDICATORS: Malaysia Urban and Rural Indicator Network for Sustainable Development (MURNInets)
- ✿ Safe City Programme
- ✿ LUPAr (Landuse Appraisal for Risk Areas) Programme
- ✿ Action Plan for Environmental Sensitive Areas
- ✿ Planning Methods in application – Sustainability Assessment (SA) application in plan making process;
- ✿ Research in related international agreements/multi-lateral agreements e.g. Low Carbon City Initiatives



Promoting Initiatives

Green

Community

☀ Eco-mobility

- Walking
- Cycling
- Use Public Transport

☀ Eco-Habits

- Minimise electrical appliance usage
- Limited use of Private Vehicle
- Recycling Activities
- Change of life style & habits
- Local Food Production
- Rainwater Harvesting



Living Green



THE WAY

Forward : SUSTAINABILITY

leadership

governance

collabration

timely delivery

implementable

effectiveness of plan

GREEN NEIGHBOURHOOD PLANNING GUIDELINES



GREEN NEIGHBOURHOOD

Green Development Showcases



Putrajaya



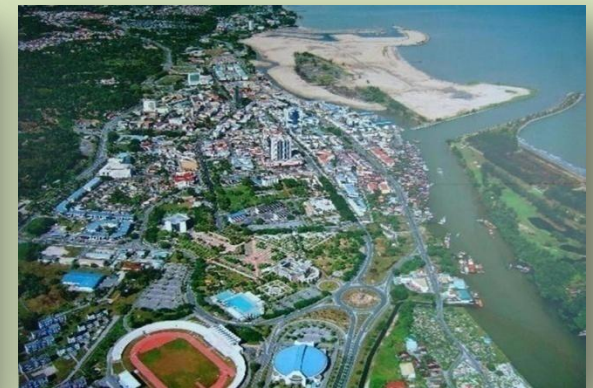
Cyberjaya



Wilayah Iskandar, Johor



Melaka



Miri, Sarawak

**FROM POLICY TO
IMPLEMENTATION—
SOME EXAMPLES**

PEDESTRIAN WALK

- Kuala Lumpur
- Putrajaya



CYCLING INITIATIVE



Chief Minister of Melaka cycling to his office

MELAKA



President of
Perbadanan
Putrajaya cycling
from his office to
attend a meeting



PUTRAJAYA

RAINWATER HARVESTING

**Sandakan Municipal
Council, Sabah**



WASTE COMPOSTING



**Petaling Jaya
City Council**

LOCAL FOOD PRODUCTION/COMMUNITY GARDENING



A photograph of a sunset over a body of water. The sun is low on the horizon, creating a bright yellow glow that reflects on the water. The sky is a mix of green and yellow. A large, semi-transparent yellow square is overlaid on the right side of the image, partially covering the sun and the sky. The foreground shows dark silhouettes of trees and grass.

THANK YOU.....

DR.DAHLIA ROSLY

Federal Department of Town and Country Planning

www.townplan.gov.my

8 OKTOBER 2011