

A GREEN-FOCUSED AGENDA FOR ISKANDAR MALAYSIA: Towards a Low Carbon Society



**LCS Bangkok
19 Nov 2010**

**Boyd Dionysius Joeman
VP Environment Planning
Integrated Planning Division
19 November 2010**

Presentation Outline



1. Brief Introduction to Iskandar Malaysia

2. The IM environment

3. IRDA's Roles and Responsibilities

4. IM: Issues and Challenges

5. IRDA's Proposed Actions for LCS

6. IRDA's Blueprints on LCS

7. Essential Mechanisms to achieve LCS

8. Summary & Conclusion

Malaysia

Johor State

Iskandar Malaysia

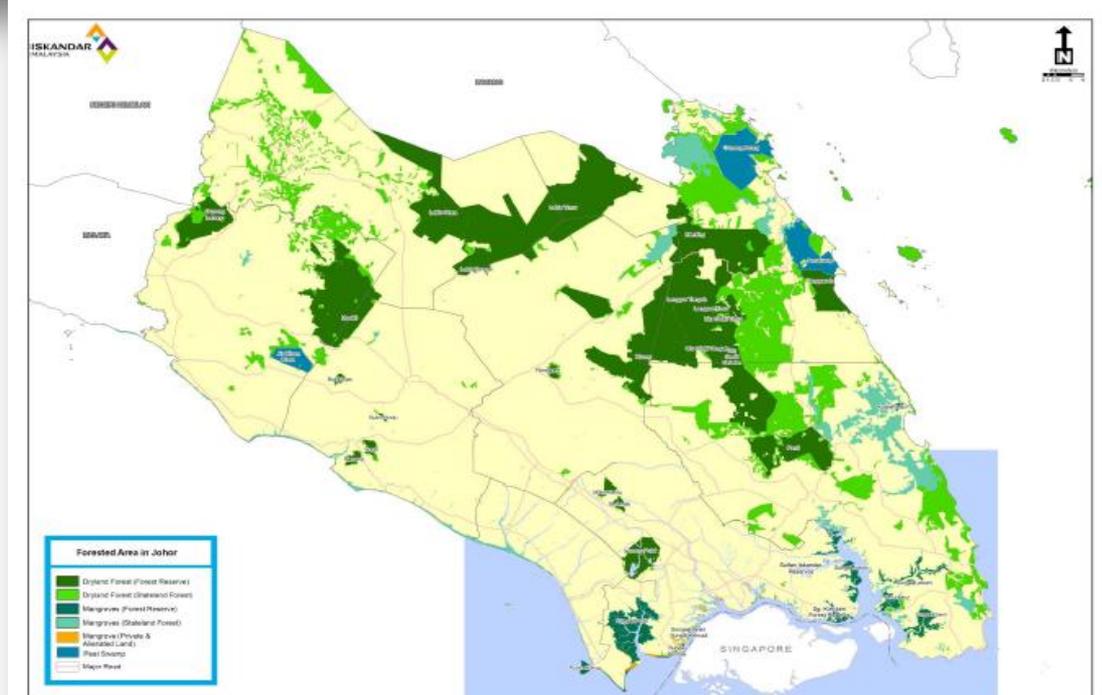


Figure 5.2: Forested Areas in Johor

Introduction: Malaysia's Economic Corridors

Established: 2006

Focus areas: 9 Pillars
5 existing economic clusters;
4 new service sectors

**ISKANDAR
MALAYSIA**



Established: 2007

Focus areas:
Agriculture, Manufacturing &
Tourism

**KORIDOR
UTARA**



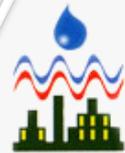
Established: 2007

Focus areas:
Agriculture, Biotech, Tourism
& Logistics

**SABAH
DEVELOPMENT CORRIDOR**



**SARAWAK
SCORE
CORRIDOR OF RENEWABLE ENERGY**



Established: 2008

Focus areas:
Oil-based, Aluminum, Steel,
Glass, Tourism, Palm Oil, Timber,
Livestock, Aquaculture, Marine
Engineering

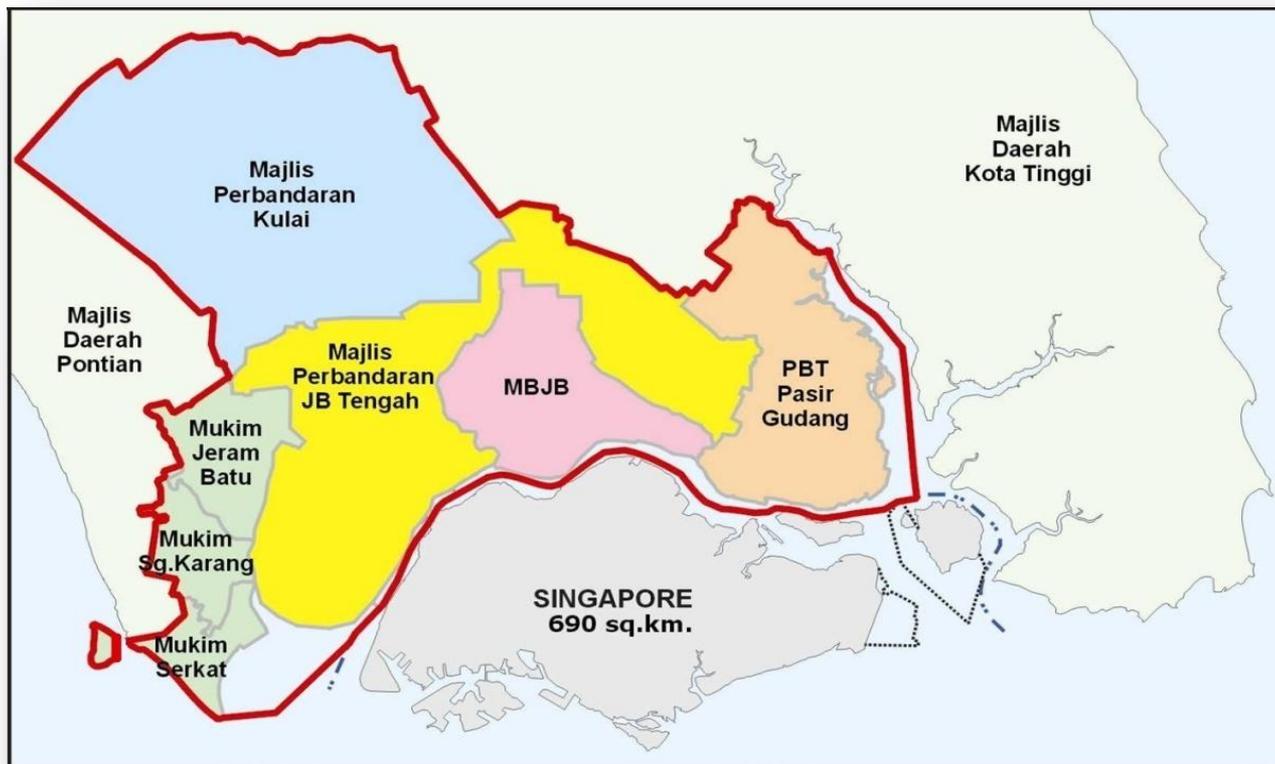


**EAST
COAST
ECONOMIC
REGION**

Established: 2008

Focus areas:
Oil & Gas, Tourism, Petrochemical,
Manufacturing, Education,
Agriculture

Geographical Coverage of Iskandar Malaysia



Area:

- 2,217 km² / 550,000 ac.
- 3 times the size of Singapore
- **Pop: 1.4 million (2009) to 3m by 2025**
- 5 Local Authorities within IM

| Region | Area (km ²) | Population (million) |
|-------------------|-------------------------|-----------------------------------|
| Iskandar Malaysia | 2,217 | 1.4 (Projected 2025: 3.0 million) |
| Singapore | 690 | 4.1 |
| Dubai | 3,885 | 1.2 |
| Hong Kong | 1,095 | 6.9 |

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Iskandar Malaysia – **Wealth** of Environmental Features and Scenic Beauty





- Picturesque landscapes, architectural and historic features, visual expanse of green, fishing villages and coastal settlements.
- 3 Ramsar sites (of 6 in Malaysia); Forest reserves; other forests & mangroves: **Carbon Sinks; REDD+**

Pressures and threats for change emanating from development demands – economic development; tourism and countryside recreation; transport corridors; industry

Crucial: Continuing protection, conservation and enhancement

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2. **The IM environment**



3. **IRDA's Roles and Responsibilities**

4. **IM: Issues and Challenges**

5. **IRDA's Proposed Actions for LCS**

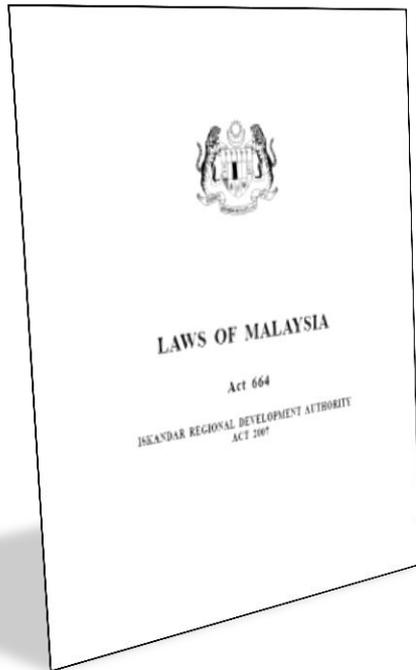
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IRDA's Roles and Responsibilities

- As a regulatory authority, IRDA's roles and responsibilities are to Plan, Promote and Facilitate development in Iskandar Malaysia. IRDA was formed on 23rd February 2007.



IRDA ACT 664

PLAN

- Master Planning (inclusive of Social Planning)
- Economic Planning Clusters
- Recommend policies, laws, actions and incentives

PROMOTE

- Brand guardian of Iskandar Malaysia as an investment destination
- Promote private & public investments in IM
- Disseminate information to investors and public

FACILITATE

- Monitor and align sector developments
- Coordinate and monitor enabler developments
- Principal coordinating agent for approval

Iskandar Malaysia Development Strategy

Vision

A Strong **Sustainable Metropolis**
of International Standing

Five Strategic Pillars

1
International
Rim
Positioning

2
Economic
Drivers
&
Catalyst
Projects

3
Socio
Economic
Equity

4
Institutional
Framework
&
Regulatory
Authority

5
Infra-
structure
Enablers

Three Foundations

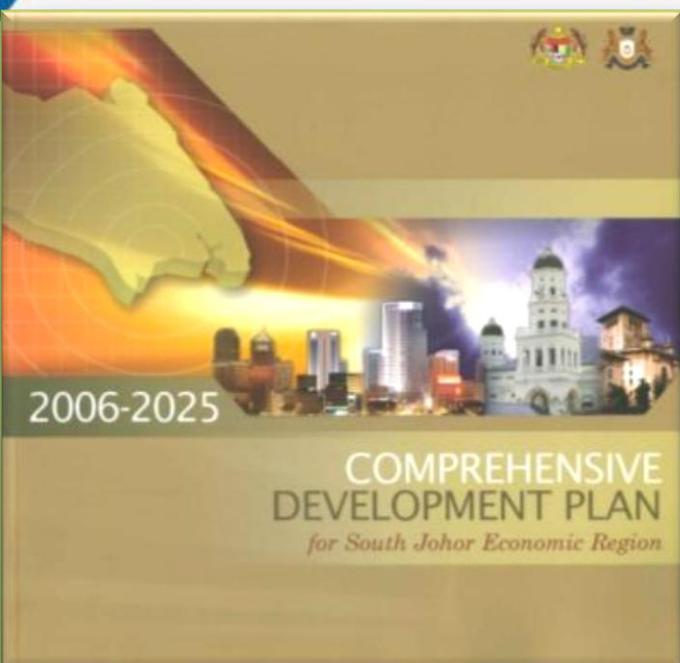
Equitable & Fair Distribution Among Stakeholders

Growth and Value Creation

Nation Building

Comprehensive Development Plan 2006-2025

The CDP is the principal document to guide IM's **economic, social, physical development and environmental planning and management** toward the establishment of a "strong, sustainable metropolis of international standards".



DEVELOPMENT STRATEGIES:

- Balanced Development**
- Protect and Conserve Nature, Historic and Open Spaces**
- Focused Development at Areas with Existing & Adequate Infrastructure**
- Promote Infill & Redevelopment**
- Enhance Accessibility**
- Promote Key Economic Areas as Focal Point For Growth**
- Manage Regional Growth**
- Plan for Innovative & Sustainable Infrastructure & Utilities**
- Promote Planned Communities which produce Quality and Sustainable Neighbourhoods**

Downloadable at
www.iskandarmalaysia.com.my

Global Issues/regional/local impacts



Red line was the summer ice boundary in 1979; the white area in 2009



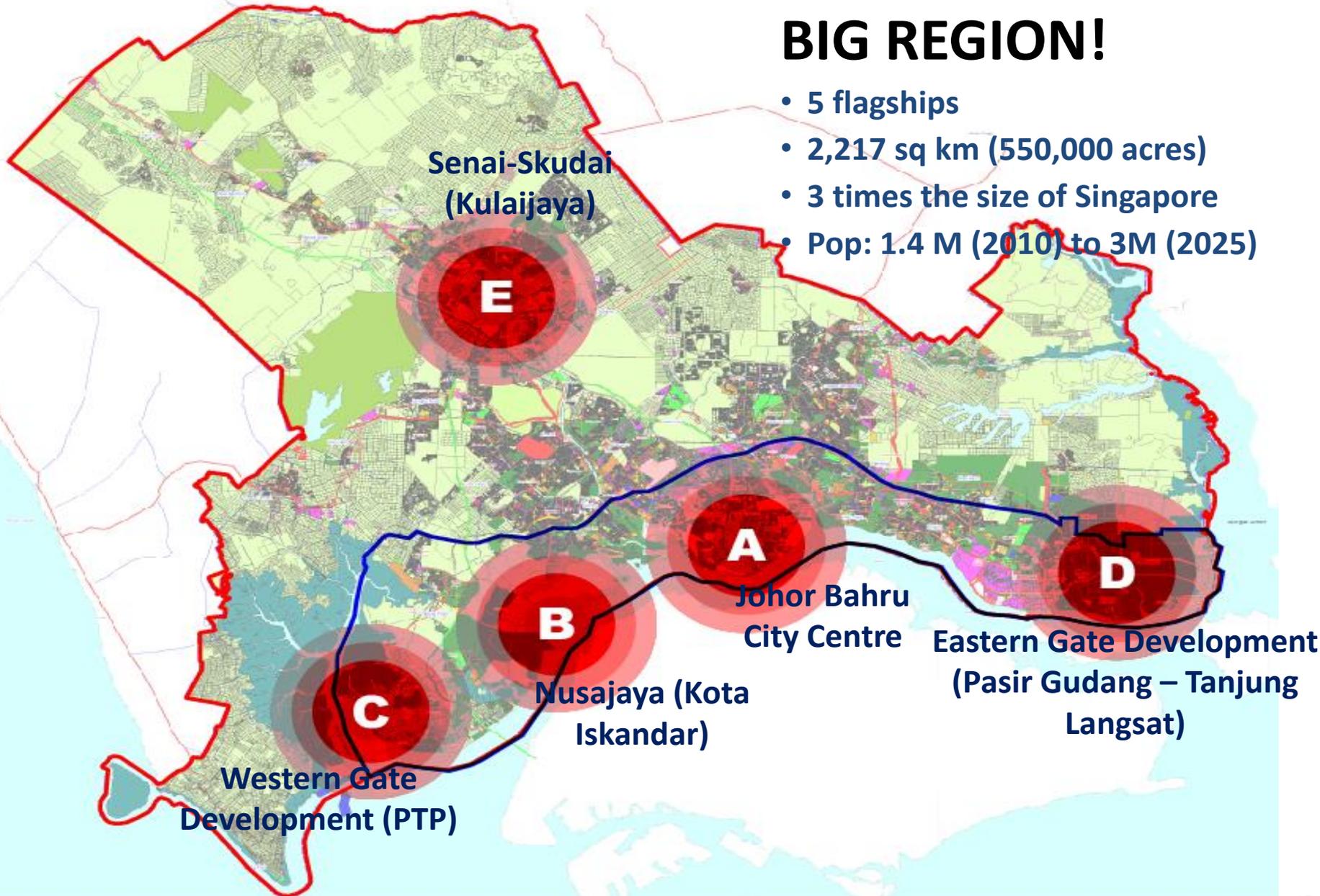
Indonesia – Land clearing; Haze in Malaysia and Singapore



Environmental Issues in IM today

BIG REGION!

- 5 flagships
- 2,217 sq km (550,000 acres)
- 3 times the size of Singapore
- Pop: 1.4 M (2010) to 3M (2025)





GHG emission reduction for Malaysia

“Malaysia is adopting a voluntary national reduction of up to 40% in terms of GDP emission intensity by 2020 compared with 2005 levels.”

*YAB Dato' Seri Mohd Najib Tun Abdul Razak,
COP 15 Copenhagen December, 18 2009*

Issues and Challenges for IM



1. Rapid **sprawling** developments; **car-centred cities** and towns

2. **Threats** to designated sites; **degradation** of natural areas and pocket open spaces in towns

3. High private **car** ownership & high dependence on **fossil** fuels e.g. vehicles, goods movements

4. Limited recycling culture; **apathy**; high dependence culture

5. Low efficiency appliances

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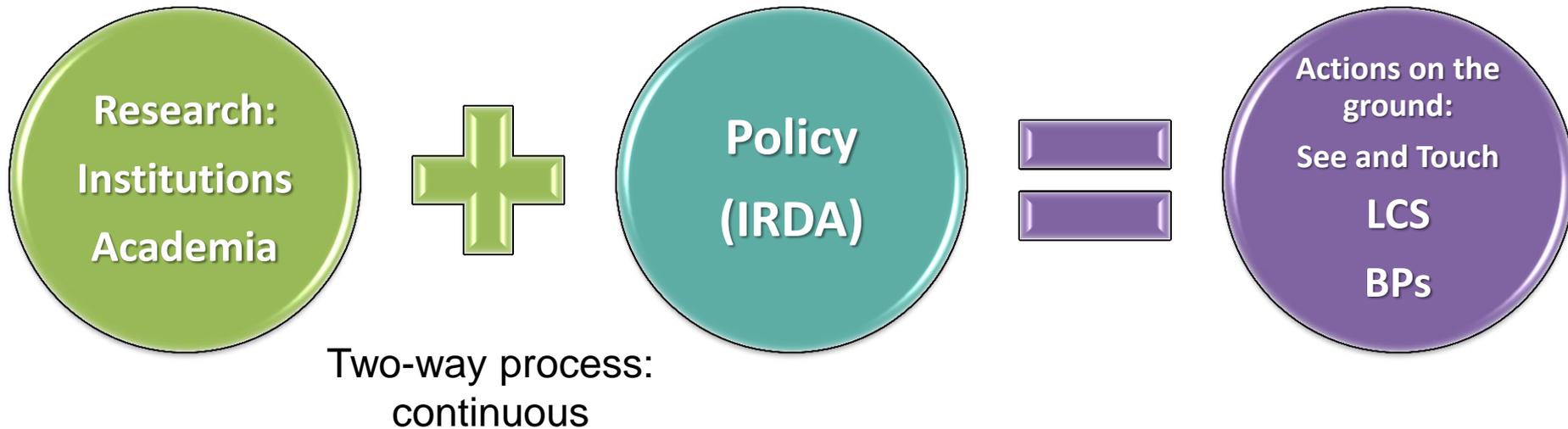
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IM's aspirations from the LCS Study

- How will the LCS Scenarios (AIMs) help to reduce IM's CO₂ emissions between 30-50% by 2025?
- How do we translate the results obtained from the scenarios into policies and proposals for actual action?
- How will the results enhance IRDA's blueprints?
- What do IRDA and stakeholders need to do in order to achieve the target?
- How do we implement the results – when, where, who?

Effective & Efficient combination for Iskandar Malaysia and for the LCS Study



Establishing a framework of LCS scenario for IM

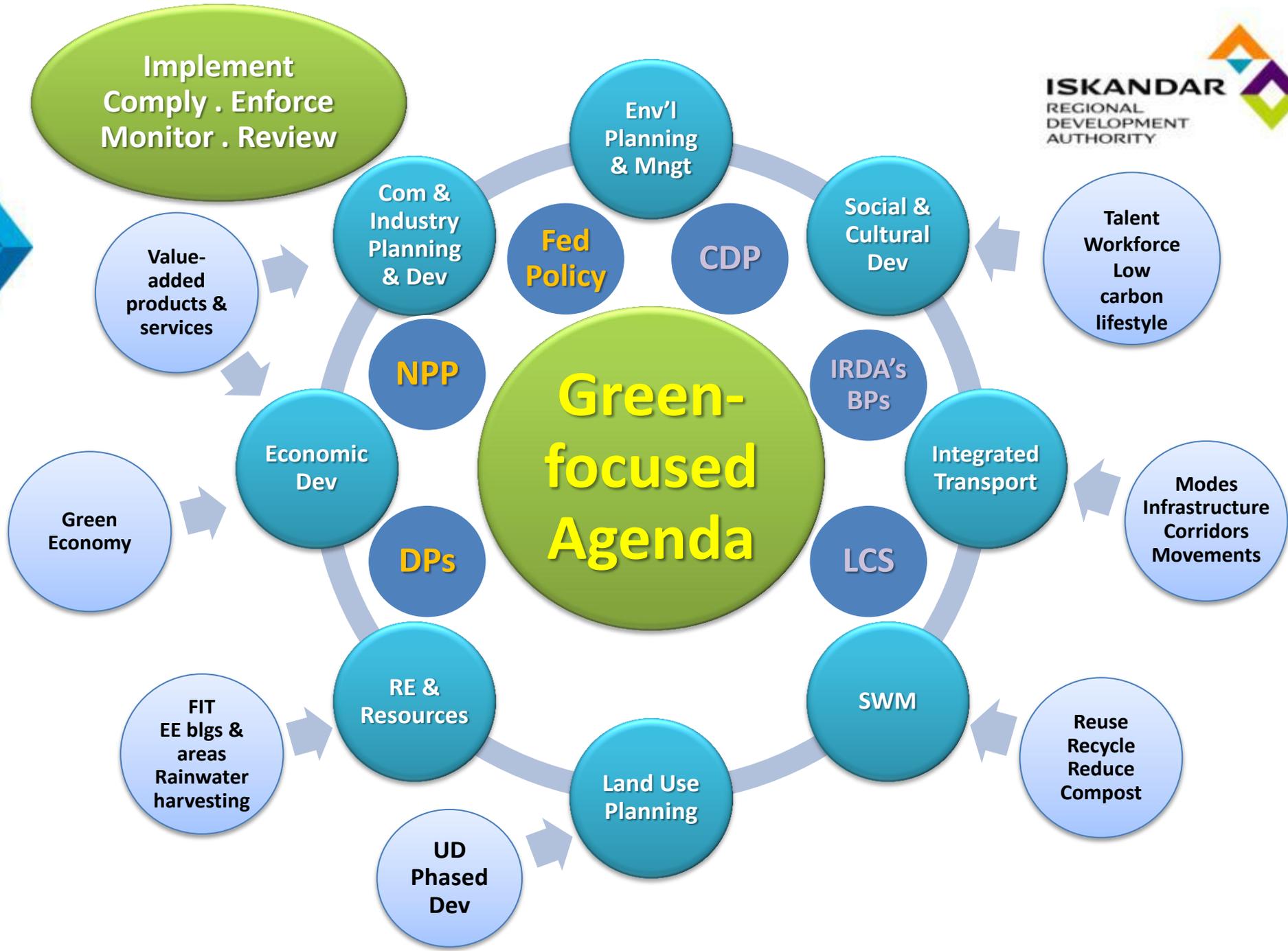
| Item | Description |
|-----------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|
| Region | Iskandar Malaysia 2,217 sq. km (550,000 acres) |
| Base yr/Target yr | 2005 and 2025 |
| Sectors/elements to be considered | Commercial, Industry, Transport, Residential, Power Supply City, Town, Natural Environment, Buildings |
| Emissions | CO ₂ from fuel combustion Emissions from power sector to final energy demand sector Output from buildings e.g. aircon, electricity |
| Proposed targets | Between 30-50% reduction of CO ₂ emission intensity of GDP by 2025, compared to 2005 levels. |

Malaysia: Driving Forces of our Federal Policy

- Government **Transformation** Policy
- Tenth Malaysia Plan 2011-2015 (10MP)
- National Key Results Areas (**NKRAs**).
- **New Economic Model (NEM)** – towards a High Income Economy
- **Climate Change and Innovation Policies** – setting up of the Ministry of Energy, Green Technology and Water (KeTTHA) & Ministry of Science, Technology and Innovation



1MALAYSIA
PEOPLE FIRST
PERFORMANCE NOW





To achieve Low Carbon Society status by 2025,
what do we need to do?

IRDA's Proposed Actions:

- Action 1: Walkable/Liveable/Green City
- Action 2: A Green Environment/nature conservation
- Action 3: Low Carbon Lifestyle
- Action 4: A Green Economy
- Action 5: Integrated Transportation
- Action 6: Energy-efficient buildings
- Action 7: Land Use Planning
- Action 8: Securing Funding

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IRDA Blueprints that promote Low Carbon Society



**INTEGRATED
LAND USE**



**GREEN
BUILDING
DESIGN**



**ENVIRONMENTAL
PLANNING**



**INTEGRATED
SOLID WASTE
MANAGEMENT**



**MASTERPLAN
FOR RENEWAL
ENERGY**



**AREA
CHARACTER
STATEMENT**



**INTEGRATED
PUBLIC
TRANSPORTATION**



**SHORELINE
MANAGEMENT**

Environmental Planning Blueprint: *5 Principles, 7 Strategies & 66 Initiatives*

Environmental Principles

EPB Principle 1 :

Integration of Environment and Development

EPB Principle 2:

Common but Differentiated Responsibility

EPB Principle 3:

Precautionary Principle

EPB Principle 4:

Pollution Prevention

EPB Principle 5 :

Polluters Pay Principle

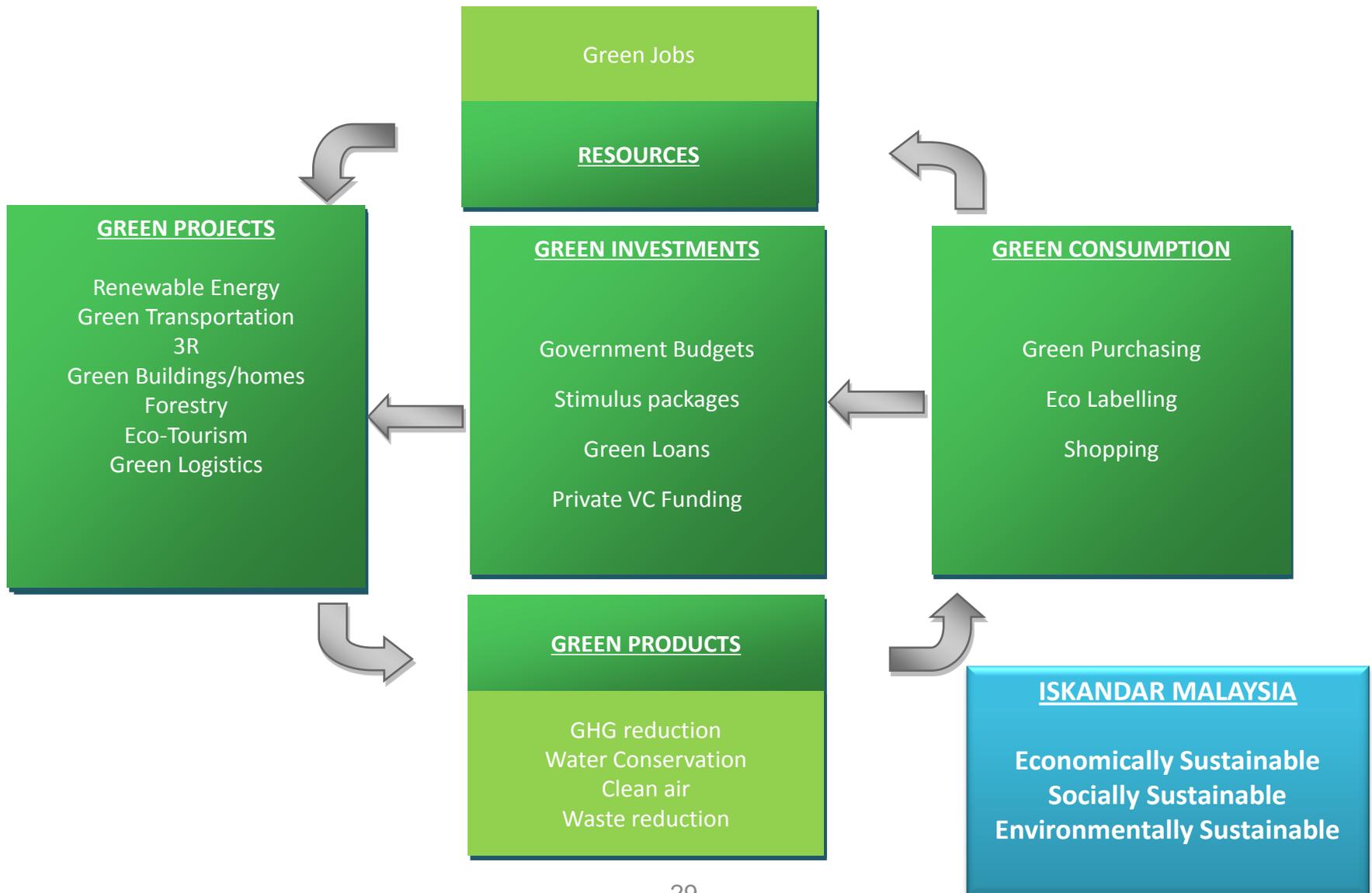
Environmental Thematic Areas

1. Biodiversity and Habitat Management
2. **Climate Change Management**
3. Air Quality Management
4. River Water Quality Management
5. Geo-Terrain, Soil & Groundwater Management
6. Green Economy
7. Environmental Governance

Environmental Planning Blueprint: 66 Initiatives

| No | Environmental Planning Blueprint Thematic Area | Code | Initiatives | Priority |
|----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|-----------------------------------------------------------------------------------------------------|----------|
| 2 | CLIMATE CHANGE MANAGEMENT | | | |
| | <p><u>Policy:</u> Integrate and enhance climate change responses within developments in IM</p> <p><u>Strategy:</u> Climate change management within IM shall adopt a Proactive Approach</p> <p><u>Objective:</u> To achieve lower emissions of greenhouse gases</p> <p><u>Targets:</u></p> <ul style="list-style-type: none"> • The energy from renewable sources must be at least 15% by 2020 • All public transport buses must be converted to cleaner CNG buses • All diesel transportation vehicles (other than buses) used by IRDA, local councils and the Johor State Government must use biodiesel • The carbon intensity target in IM must be a minimum of 40% • The recycling rate within IM to be increased from the current 3-5% to 40% by 2013 | EPB2-1 | Prepare an Integrated Climate Change Action Plan. | Moderate |
| | | EPB2-2 | Promote Renewable Energy By Installing A Pilot Solar Powered Air Conditioning System. | High |
| | | EPB2-3 | Phase Out The Use Of Diesel Public Buses By Either Replacing Or Retrofitting To A CNG Buses. | High |
| | | EPB2-4 | Establish A Pilot Composting Plant At Tanjung Langsat Landfill. | High |
| | | EPB2-5 | Establish a Model Green Building in IM. | Moderate |
| | | EPB2-6 | Formulate Green Shipping Policies For Ships Coming Into PTP, Johor And Tanjung Langsat Ports. | Low |
| | | EPB2-7 | Implement A Carbon Offsetting Programme For The Incoming And Outgoing Flights At The Senai Airport. | Low |
| | | EPB2-8 | Improve The Energy Efficiency In Local Authority Buildings By Conducting Energy Audits. | Low |
| | | EPB2-9 | Establish a GHG Inventory Database in IM. | Moderate |
| | | EPB2-10 | Integrate Climate Change Management in Development Planning. | Moderate |

Green-focused Agenda: Green Economy Framework



Renewable Energy & Energy Efficiency Blueprint: Proposed initiatives and action plan: *3 main strategies and 16 initiatives*

STRATEGIC INITIATIVES:

- **District cooling and ice-storage**
- Co-generation
- GIS for spatial planning
- **Transport design and policy**
- Integrated design and renovation (clusters)

3.
Ensure Energy Efficient in Infrastructure; and Integrated Design

STRATEGIC INITIATIVES:

- Codes and standards:
- **Green building index**
 - Street lighting
 - **Education programmes**
 - Campaigns (labeling, types of appliances that save energy, good habits)
 - Benchmarking
 - Operation & maintenance

1.
Ensure Energy Efficiency in Key Sectors

STRATEGIC INITIATIVES:

- IM's own FIT incentives:
- **Solar farms**
 - Rooftop solar PV
 - **Mini-hydro**
 - MSW
 - Agricultural wastes
 - Liquid wastes

2.
Promote & Support the Development of Renewable Resources

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Essential Mechanisms



“Do you Iskandar Malaysia?”

Old habits die hard! Changed Mindset!
How much do we **care** for our planet?

IRDA: **Promote, lead and work closely** with our Malaysian and Japanese teams in order to realise the aims and objectives of the Low Carbon Society project.

IRDA: **Duty to protect** our natural assets and resources, **promote** a green economy, **integrate** transportation, **promote** renewable energy, **practise** being green, **reduce** pollution, work towards **zero waste**, ensure that buildings are **energy-efficient**.

IRDA: Will **transform** how we shop, work, drive, rest and play. **we will address and tackle GHGs and climate change**.

Everyone must play a part; work together towards a **common goal**, i.e. achieving low carbon for all our societies.

Summary & Conclusion

1. The LCS Project for Iskandar Malaysia – **timely, anticipated & needed**.
2. We know what we want: “strong, sustainable metropolis of international standing”. **We have a robust development plan**.
3. IM will **help Malaysia achieve our PM’s target** of up to 40% reduction in CO₂ emission by 2020. IM proposes a target reduction of between 30-50% by 2025.
4. **IRDA’s Blueprints** esp. EPB, RE, GBI, SWM and ACS, assist in achieving low carbon status. The LCS Project will enhance the BPs.
5. The LCS will support and enhance IRDA’s **Green-focused Agenda** where the environment is at the centre of our development and conservation policy.
6. We will develop IM with our aspirations of a place to **invest, work, live and play**; as reflected in our proposed **Action Plans for a Low Carbon Society**.

Thank You

invest, work, live and play

www.iskandarmalaysia.com.my

