

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



**LCS Bangkok  
19 Nov 2010**

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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

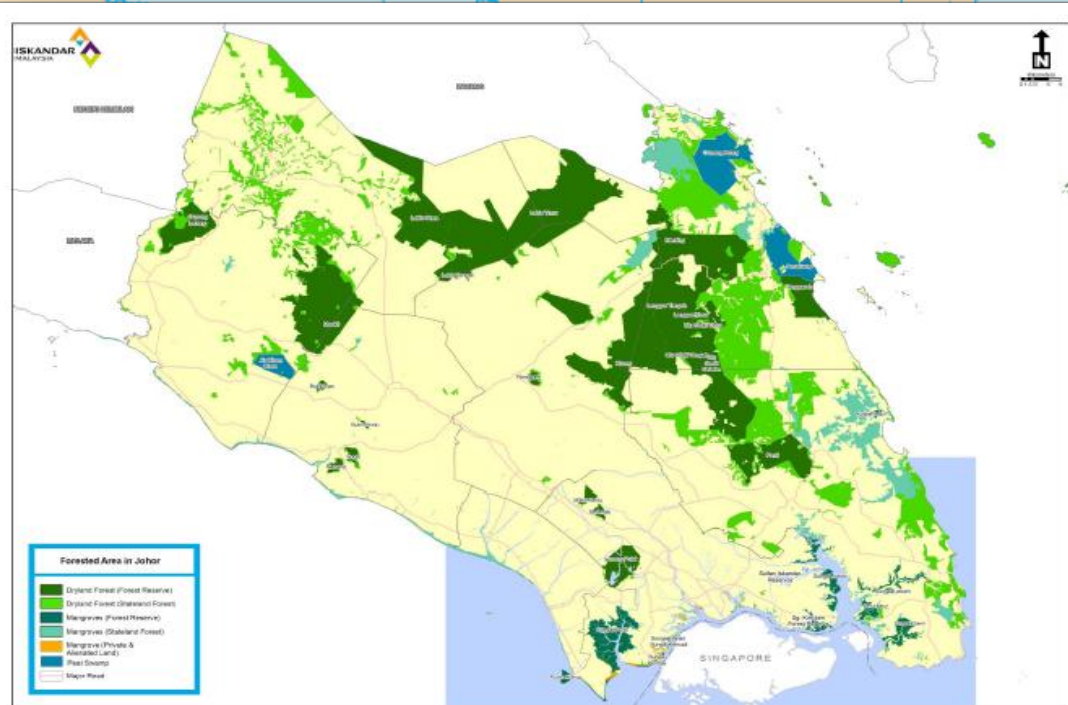
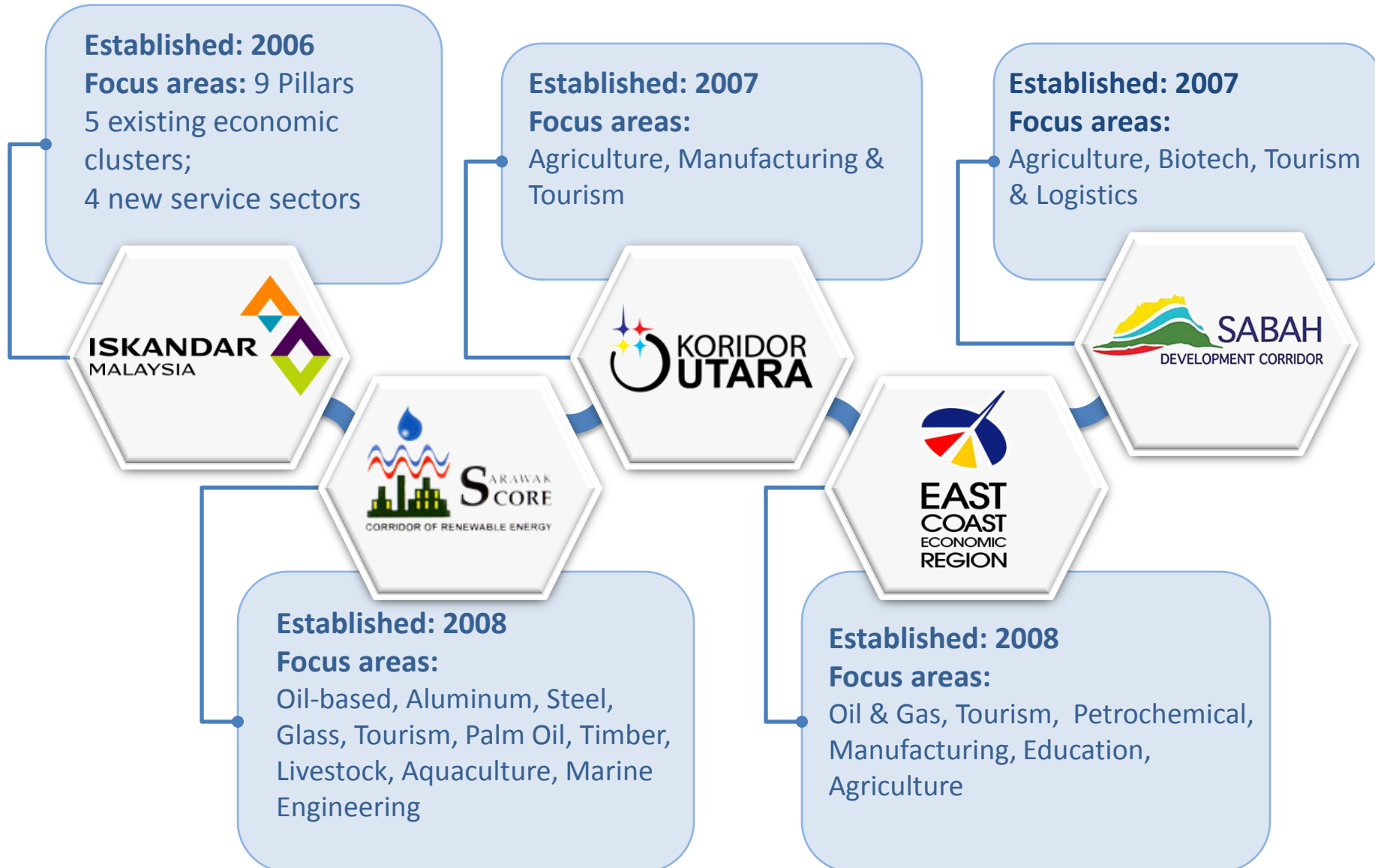


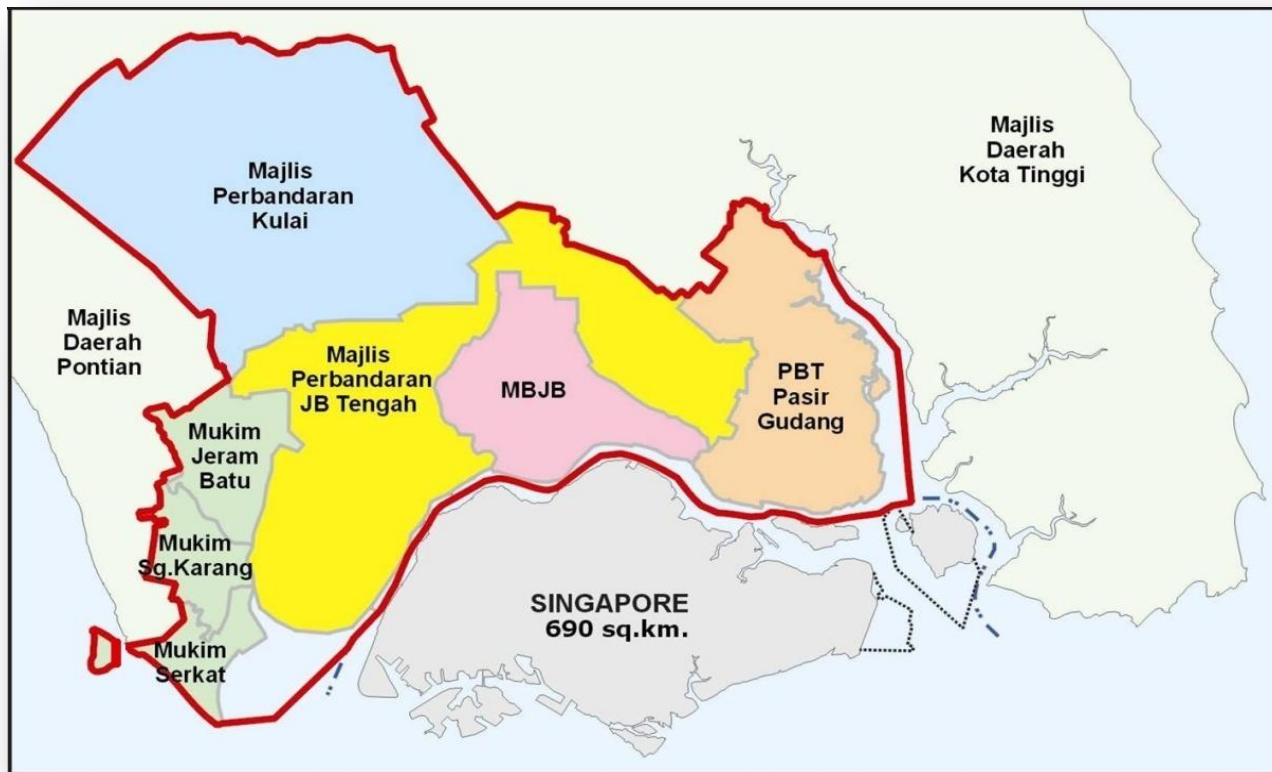
Figure 5.2: Forested Areas in Johor

# Introduction: Malaysia's Economic Corridors





# Geographical Coverage of Iskandar Malaysia



## Area:

- 2,217 km<sup>2</sup> / 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 <sup>2</sup> )	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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# 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 23<sup>rd</sup> February 2007.

## PLAN

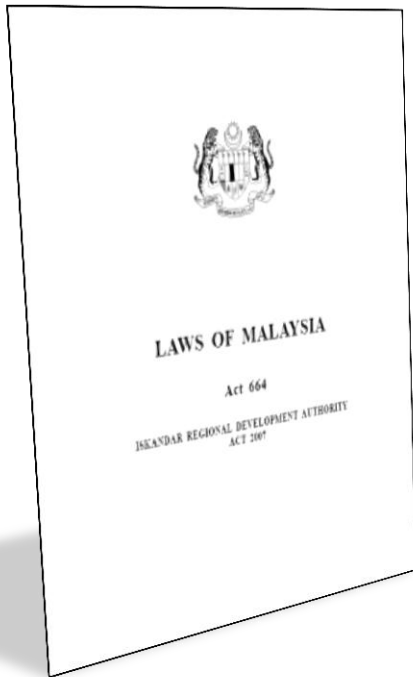
- Master Planning (inclusive of Social Planning)
- Economic Planning Clusters
- Recommend policies, laws, actions and incentives

## 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



**IRDA ACT 664**



# 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

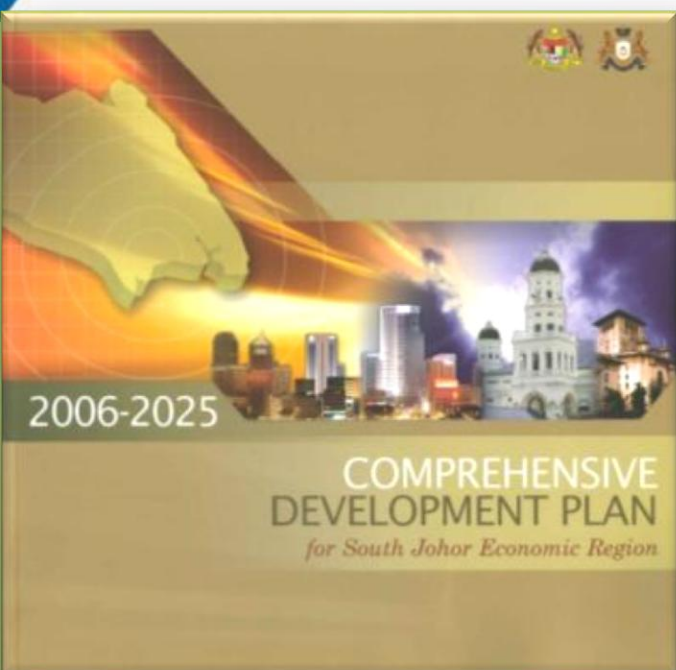
Equitable & Fair Distribution Among Stakeholders

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](http://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**

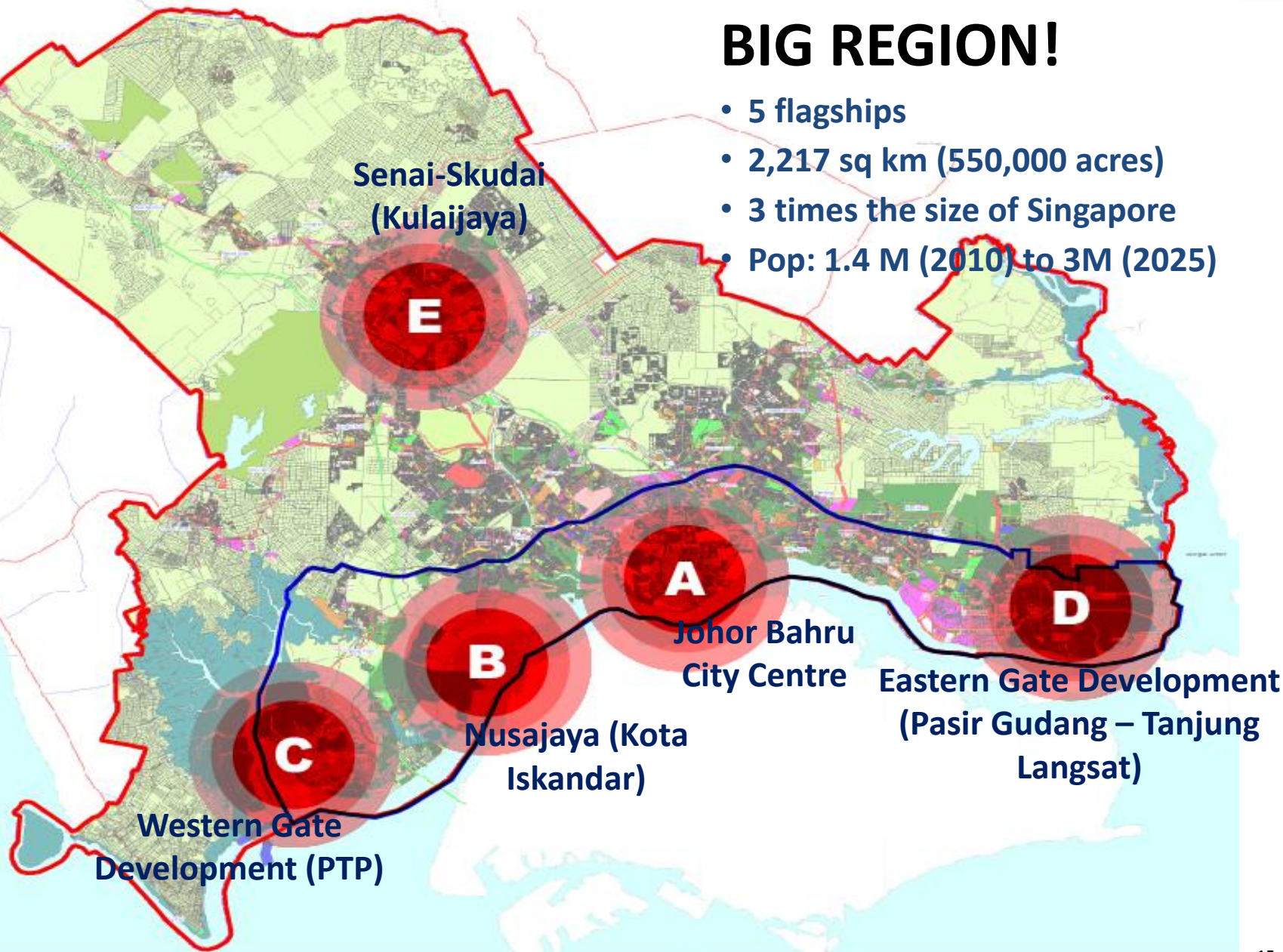




# Environmental Issues in IM today

## 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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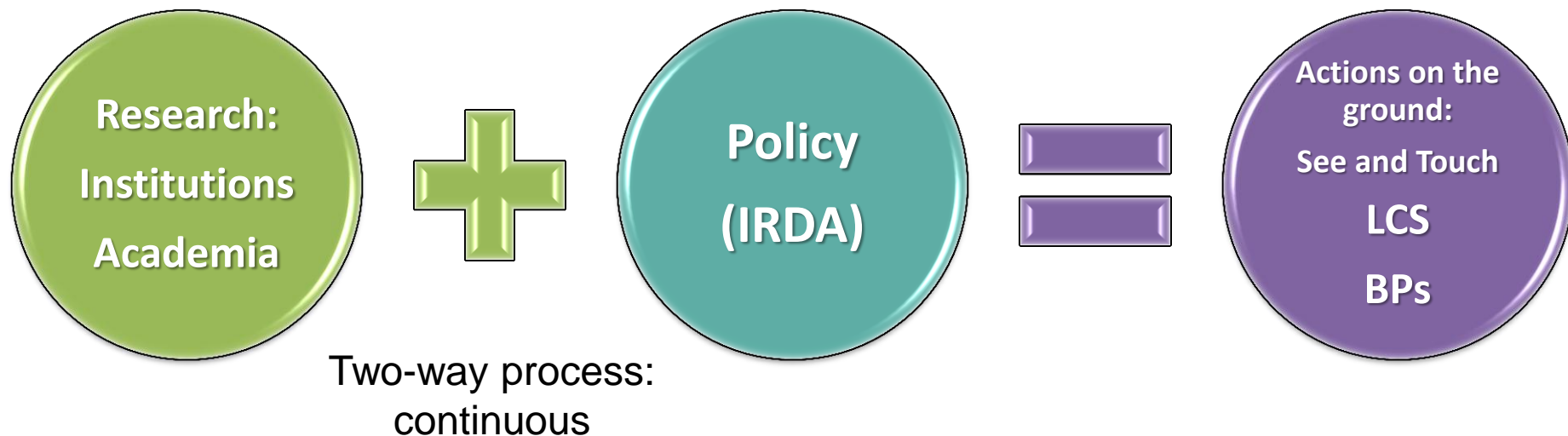
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# IM's aspirations from the LCS Study

- How will the LCS Scenarios (AIMs) help to reduce IM's CO<sub>2</sub> 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

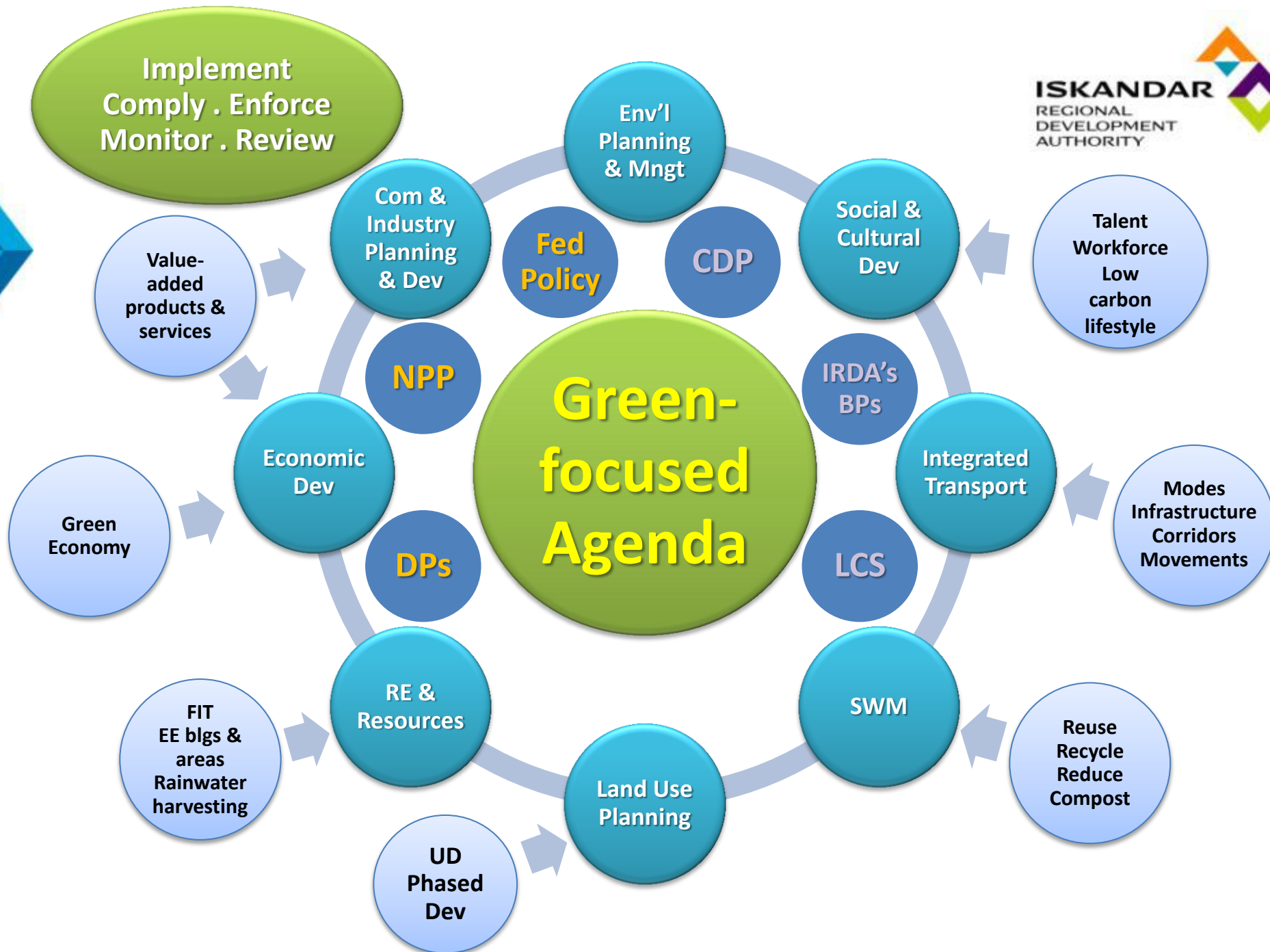


Item	Description
Region	Iskandar Malaysia 2,217 sq. km (550,000 acres)
Base yr/Target yr	2005 and 2025
Sectors/elements to be considered	Commercial, Industry, Transport, Residential, Power Supply City, Town, Natural Environment, Buildings
Emissions	CO <sub>2</sub> from fuel combustion Emissions from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









**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**

**IM Vision: “A Strong, Sustainable Metropolis of International Standing”**



# 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

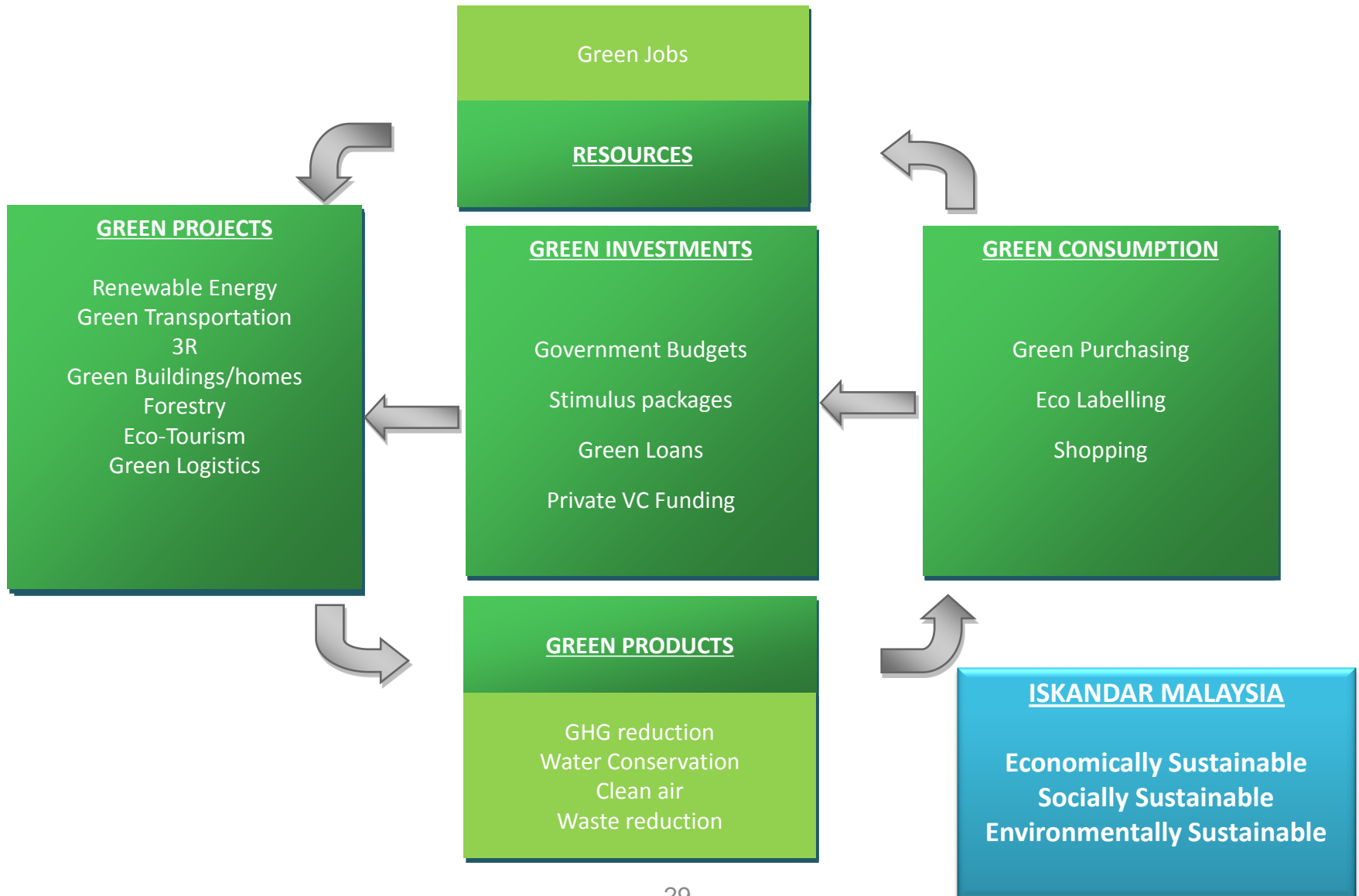
## Environmental Thematic Areas

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	<b>CLIMATE CHANGE MANAGEMENT</b>			
	<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"> <li>• The energy from renewable sources must be at least 15% by 2020</li> <li>• All public transport buses must be converted to cleaner CNG buses</li> <li>• All diesel transportation vehicles (other than buses) used by IRDA, local councils and the Johor State Government must use biodiesel</li> <li>• The carbon intensity target in IM must be a minimum of 40%</li> <li>• The recycling rate within IM to be increased from the current 3-5% to 40% by 2013</li> </ul>	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 CO<sub>2</sub> 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](http://www.iskandarmalaysia.com.my)

