Urban Cities' Challenges for a Green and Smart Economy – The Case of Iskandar Malaysia
- GREEN CITIES/ REGIONAL CORRIDOR-
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Structure of Presentation

01 Introduction
02 Background
03 LCS and Green economy LCS Blueprint for Iskandar Malaysia
04 The Way Forward
• Issues/ Measures/ Barriers/ Future
• Preliminary step/ Infant stage as compared with Japanese cases (Yokohama, Kawasaki etc)
3. Background of Iskandar Malaysia

Location of Iskandar Malaysia

- **Land Area**: 329,750 km²
- **Population**: 28.3 Million (2010)
- **Urban population**: 62% (2000) to 71% (2010)
- **Population Growth Rate**: 2.0% (2000-2010)
- **GDP Growth Rate**: 5.7% per annum (2006-2008)
- **Climate**: Tropical (*Temp*: 24.5°C – 33.7°C)
- **Ethnicity**: Malay & Bumiputra (64%), Chinese(26%), Indian (8%), Others(1%)

1. Introduction

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01 Introduction
Development of Low Carbon Society Scenarios for Asian Regions

Site: Iskandar Malaysia

Objective:
- To draw up key policies and strategies in guiding the development of Iskandar Malaysia in mitigating carbon emission. Transforming Iskandar Malaysia into a sustainable low carbon metropolis by adopting green growth strategies/roadmap.
- To respond to the nation’s aspiration for ensuring climate-resilient development for sustainability.

Target Year: 2025 (2005 – 2025)
COP 15 – Malaysia’s target

- Prime Minister of Malaysia, Y.A.B. Dato’ Sri Mohamed Najib bin Tun Abdul Razak, in COP15 in year 2009 at Copenhagen, Denmark, proposed to reduce CO₂ emission intensity in Malaysia to **40 per cent by the year 2020 compared with its 2005 levels**, subject to assistance from developed countries.

2. **Malaysian Outlook**

The CO₂ emission per capita and emission intensity of selected countries in 2007

<table>
<thead>
<tr>
<th>Countries</th>
<th>Emission per capita tones of CO₂ per capita</th>
<th>Emission Intensity tones of CO₂ per US$1000 of GDP</th>
</tr>
</thead>
<tbody>
<tr>
<td>World</td>
<td>4.35</td>
<td>0.73</td>
</tr>
<tr>
<td>United States</td>
<td>19.1</td>
<td>0.5</td>
</tr>
<tr>
<td>Singapore</td>
<td>9.8</td>
<td>0.3</td>
</tr>
<tr>
<td>Japan</td>
<td>9.7</td>
<td>0.2</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>8.6</td>
<td>0.3</td>
</tr>
<tr>
<td>Malaysia</td>
<td>6.7</td>
<td>1.3</td>
</tr>
<tr>
<td>China</td>
<td>4.6</td>
<td>2.5</td>
</tr>
<tr>
<td>Thailand</td>
<td>3.5</td>
<td>1.3</td>
</tr>
<tr>
<td>Indonesia</td>
<td>1.7</td>
<td>1.6</td>
</tr>
<tr>
<td>India</td>
<td>1.2</td>
<td>1.7</td>
</tr>
</tbody>
</table>

The 10th Malaysian Plan (2011-2015) has outlined 2 major National Policies on Environmental Protection and conservation:

- **National Green Technology Policy**
  - Emphasizes on Sustainable development, development of roadmaps to guide the application of green technologies & establishment of Green Tech Financing Scheme.

- **National Climate Change Policy**
  - Coordinate and streamline policy & legislations, stashed inter-ministrial and cross sectoral committee to facilitate implement and also identify options and strategies to achieve a low carbon economy.
05 Our Research Groups
Development of Low Carbon Society Scenarios for Asian Regions

Geographical Coverage of IM

- Fast growing region in Malaysia.
- Area: 2,217 km² / 550,000 ac.
- 3 times the size of Singapore.
- Five Local Authorities within IM.

<table>
<thead>
<tr>
<th>Region</th>
<th>Area (km²)</th>
<th>Population (million)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Iskandar Malaysia</td>
<td>2,217</td>
<td>1.4 (Projected 2025: 3.0 million)</td>
</tr>
<tr>
<td>Singapore</td>
<td>690</td>
<td>4.1</td>
</tr>
<tr>
<td>Dubai</td>
<td>3,885</td>
<td>1.2</td>
</tr>
<tr>
<td>Hong Kong</td>
<td>1,095</td>
<td>6.9</td>
</tr>
</tbody>
</table>
Iskandar Malaysia at a Glance

Source: Invest Creative Iskandar Malaysia: Asia’s New Creative Destination, 2011

Iskandar Malaysia: Economic Structure

Source: Invest Creative Iskandar Malaysia: Asia’s New Creative Destination, 2011
LCS scenario study using ExSS

Methodology developed by Shimada et al. (2006), Gomi et al. (2007)

Potential Mitigation in IM
Green-focused Agenda

Implement Comply. Enforce Monitor. Review

Value-added products & services

Green Economy

Economic Dev

NPP

Fed Policy

CDP

Env't Planning & Mgmt

Com & Industry Planning & Dev

Social & Cultural Dev

Integrated Transport

IRDA’s BPs

Recom & Resources

LCS

Land Use Planning

SWM

Integrated Transport

Decarbonising development/Development Process

Reusable Recycle Reduce Compost

TODs

Infrastructure Corridors Movements

Talent Workforce; Low carbon lifestyle

FIT EE Mega & areas Rainwater harvesting

UD Phased Dev & DC

IRDA Blueprints that promote LCS

INTEGRATED LAND USE

INTEGRATED SOLID WASTE MANAGEMENT

INTEGRATED PUBLIC TRANSPORTATION

GREEN BUILDING DESIGN

MASTERPLAN FOR RENEWAL ENERGY

SHORELINE MANAGEMENT

ENVIRONMENTAL PLANNING

AREA CHARACTER STATEMENT

LOW CARBON BP

IM Vision: “A Strong, Sustainable Metropolis of International Standing”
09 LCS Blueprint for Iskandar Malaysia
Dozen Actions

| Action 1   | Walkable, Safe, Livable City Design |
| Action 4   | Low Carbon Lifestyle               |
| Action 7   | Green Buildings and Construction   |
| Action 10  | Community Engagement and Consensus Building |
| Action 2   | Integrated Green Passenger Transportation |
| Action 5   | Smart Growth                       |
| Action 8   | Green Energy System and Renewable Energy |
| Action 11  | Green and Clean Environment        |
| Action 3   | Green Economy                      |
| Action 6   | Green and Blue Network/Infrastructure |
| Action 9   | Sustainable Solid Waste Management |
| Action 12  | Low Carbon Urban and Regional Planning Institution |

Examples of Blueprint Actions of IM

**GREEN ECONOMY**
- Decarbonising industries (EE, RE, regulation)
- Human capital development in Green technology
- IM as hub of Green technology development
- Green Freight Transportation (modal split, EV etc)
- Low Carbon farming in rural areas
- Eco tourism and cultural tourism

**SMART GROWTH**
- Promote polycentric growth (Reconcentration)
- Promote compact development (UGB, mixed use)
- Promote transit supportive land use development (TOD)
09 LCS Blueprint for Iskandar Malaysia
The Structure of the Action

**Action 5: Smart Growth**

1. **Reduction in vehicle mile travelled (VMT, lower trips & shorter trip distances)**
   - 1. Reduce trip

2. **Modal shift to public transport**
   - 1. Carbon sink

**Quantifiable Variables**

**Sub Actions**

**Measures**

**Programme**

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**Action 3: Green Economy**

1. **EI (Industry sectors)**
   - 1. EI (Industry sectors)

2. **Green technology diffusion**
   - 2. Green technology diffusion

3. **EDI & model shift in freight transport**
   - 3. EDI & model shift in freight transport

4. **Green social economy**
   - 4. Green social economy

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Challenges

• Strengthen the institutional frameworks (Governance and monitoring)
• Provide Conducive Environment for Low Carbon
• Intensify Human Capital Development in Low Carbon Technology (enhance training and education program)
• Intensify Low carbon Research and Innovations (R& D commercialization)
• Promotion and Public Awareness (Education and info dissemination, inculcate culture)

THANK YOU FOR YOUR ATTENTION!

HO CHIN SIONG

ACKNOWLEDGMENT FOR THE SUPPORT UNDER SATREPS PROJECT SPONSORED BY JICA AND JST