Iskandar Malaysia
Strong Sustainable Metropolis of International Standing

Side Event on 2nd East Asia Low Carbon Growth Partnership Dialogue
Knowledge Platform for Low Carbon Development
Low Carbon Society Blueprint for Iskandar Malaysia: From Science to Policy Implementation

Presented by Boyd Dionysius Joeman
17 May 2013, Tokyo
1) Iskandar Malaysia – a brief introduction
2) IRDA’s Green-focused Agenda
3) The LCS Project – From science to regional policy
4) LCSBPIM 10 Actions
5) LCS 2013 – 10 proposed programmes
6) And Finally ...
Iskandar Malaysia at a Glance
## Iskandar Malaysia in brief

### Indicator
- **2,217 sq km**

### Growth

<table>
<thead>
<tr>
<th>Indicator</th>
<th>2006</th>
<th>By 2025</th>
<th>Annual rate of change (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population</td>
<td>1.6 m</td>
<td>3.0 m</td>
<td><strong>4.63%</strong></td>
</tr>
<tr>
<td>GDP per capita (PPP) in USD</td>
<td>14,790</td>
<td>31,100</td>
<td><strong>5.78%</strong></td>
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<tr>
<td>Labour Force</td>
<td>0.624 m</td>
<td>1.46 m</td>
<td><strong>7.00%</strong></td>
</tr>
<tr>
<td>Employment</td>
<td>0.610 m</td>
<td>1.428 m</td>
<td><strong>7.00%</strong></td>
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### Map of Iskandar Malaysia

- **A** JB Central Business District
  - JB Conservation & Heritage Zone
  - Danga Bay
- **B** Kota Iskandar (Johor New State Admin. Centre)
  - EduCity@Iskandar
  - Medini Iskandar Malaysia
- **C** Port of Tanjung Pelepas (PTP)
  - Free Trade Zone
  - RAMSAR World Heritage Park
- **D** Tanjung Langsat Industrial Park
  - Pasir Gudang Port
  - Tanjung Langsat Port
- **E** Airport City

### Five flagship zones of Iskandar Malaysia

- **A** JB City Centre
- **B** Nusajaya
- **C** Western Gate Dev
- **D** Eastern Gate Dev
- **E** Senai-Skudai
Green-focused Agenda - Rationale

Iskandar Malaysia’s Strategic Environmental Policy Approach

IM VISION:
STRONG, SUSTAINABLE METROPOLIS OF INTERNATIONAL STANDING

STRONG

PROSPEROUS, RESILIENT, ROBUST, GLOBALLY COMPETITIVE ECONOMY

GREEN ECONOMY

HUMAN CAPITAL DEVELOPMENT

GREEN GROWTH CLUSTERS

GREEN INDUSTRIES & TECHNOLOGIES

HEALTHY, GLOBALLY COMPETITIVE, KNOWLEDGEABLE SOCIETY

GREEN EDUCATION & COMMUNITY ENGAGEMENTS & CONSENSUS-BUILDING

LOW CARBON LIFESTYLE

SUSTAINABLE WASTE MANAGEMENT

BLUE & GREEN INFRASTRUCTURE & RURAL RESOURCES

LOW CARBON LAND USE PLANNING

GREEN TRANSPORTATION

WALKABLE, LIVABLE & SAFE CITY DESIGN

GREEN BUILDINGS & CONSTRUCTION

GREEN ENERGY SYSTEMS

SUSTAINABLE

LOW CARBON BUILT ENVIRONMENT & SOCIETY

GREEN INCENTIVES

SOURCE & SECURE FUNDING

LOW CARBON VILLAGES & RURAL TOWNS

GREEN TECHNOLOGY

GREEN INVESTMENT

ISKANDAR REGIONAL DEVELOPMENT AUTHORITY
Rationale on why Iskandar Malaysia has adopted the Green-Focused Agenda

Astute planning & management of resources – on

Issues of climate change & global warming; setting targets for a low carbon footprint; and positive support and promotion of a green economy through increased investments in environmental assets, green technology, innovation & production.

Without the GREEN, there is no SUSTAINABLE DEVELOPMENT.
Background

Development of Low Carbon Society Scenarios for Asian Regions

Research Team: Universiti Teknologi Malaysia (UTM), Kyoto University (KU), Okayama University (OU), National Institute for Environmental Studies (NIES)

Joint Coordinating Committee: Iskandar Regional Development Authority (IRDA), Federal Department of Town and Country Planning (JPBD), Malaysia Green Technology Corporation (MGTC)

Sponsorship: Japan International Cooperation Agency (JICA), Japan Science and Technology (JST)

Period: 2011 - 2016

Research Outputs:

i. **Methodology** to create LCS scenarios which is appropriate for Malaysia is developed.

ii. **LCS scenarios** are created and utilized for policy development in IM.

iii. **Co-benefit of LCS policies** on air pollution and on recycling-based society is quantified in IM

iv. **Organisational arrangement of UTM** to conduct trainings on LCS scenarios for Malaysia and Asian is consolidated, and a network for LCS in Asia is established
LCS Research Groups

Development of Low Carbon Society Scenarios for Asian Regions

Air Quality & Transportation
SWM
Energy
Education/Consensus
IRDA
Scenario Integration/ Land Use Planning
Launching of the LCSBPIM – COP18 Doha

Implementation of LCSBP Actions – 10 programmes in 2013
Significant global milestones of 2012 for LCSIM

11 Dec – The PM endorses the launching of LCSBPIM at COP18 during MOA

LCS Spin-offs

Future City Initiative (Japan)
Ageing Population; Disaster Planning; Green Economy – IRDA will again be attending FCI in Feb 2013

CASBEE City
1st Pilot study outside Japan is being done in Iskandar Malaysia (research underway by NIES and Keio University (Tokyo). Results to be presented on 21 Jan 2013 at Expert Talk in KL

UNDP – Low Carbon Cities Project
IRDA’s BP implementation initiatives are proposed to be included as showcases for Green Transportation and Waste-to-Energy.
LCS Actions for IM by Three Main Themes
Development of Low Carbon Society Scenarios for Asian Regions

<table>
<thead>
<tr>
<th>Action Names</th>
<th>Themes</th>
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<tbody>
<tr>
<td>1 Integrated Green Transportation</td>
<td>GREEN ECONOMY</td>
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<td>2 Green Industry</td>
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<tr>
<td>3 Low Carbon Urban Governance</td>
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<tr>
<td>4 Green Buildings &amp; Construction</td>
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<tr>
<td>5 Green Energy System &amp; Renewable Energy</td>
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<tr>
<td>6 Low Carbon Lifestyle</td>
<td>GREEN COMMUNITY</td>
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<tr>
<td>7 Community Engagement &amp; Consensus Building</td>
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<tr>
<td>8 Walkable, Safe, Livable City Design</td>
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<td>9 Smart Growth</td>
<td>GREEN ENVIRONMENT</td>
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<td>10 Green and Blue Infrastructure &amp; Rural Resources</td>
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<tr>
<td>11 Sustainable Waste Management</td>
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<td>12 Clean Air Environment</td>
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PROPOSED 10 PROGRAMMES for 2013

1. Governance
2. Pasir Gudang – Green & Healthy City (covers air quality, visual characteristics, recycling, water-related)
3. Eco-Life Challenge/UNESCO Schools
4. CASBEE
5. Future City Initiative
7. Kulai District: Eco-Town Proposal
8. Public Transport – BRT, electronic information
10. Hybrid car parking
**Green Economy: On-going**

**Green Transportation**
1) Public transport system improvement
   - Bas Iskandar Malaysia - social route
   - BeXTRA - BAS EKSPRES TRANSIT - express, limited transit point
2) Improve JB - Singapore, JB-KL Connectivity

**Low Carbon Urban Governance**
- LCSBPIM Implementation Plan – at COP19 Warsaw
- Implementation of Actions
- Danga Bay proposed waterfront project

**Green Industry**
- Promote the ecological & economic benefits of greening existing industries
  (thru facilitation of investment and new development)
- Danga Bay proposed waterfront project
- Training programme

**Green Building and Construction**
- Promote and Facilitate Green Building in New Construction
- SEDA’s role

**Green Energy System and Renewable Energy**
- Promotion of Renewable Energy for new development
Green Community: On-going

Low Carbon Lifestyle

- Enhancing general public awareness
- Enhancing school awareness on going green
- Promote Energy Efficiency
- (Collaboration with other agencies)

Community Engagement & Consensus-Building

- Input from Stakeholders and LCS Information Sharing with stakeholders in IM
- (FGD, Symposium, workshop, engagements, meetings)
Green Environment: On-going

Walkable, Safe, Livable City Design
- Designing the Safe City (from crime) – CCTV, CPP

Smart Urban Growth
- Promote Compact Urban Development
- Smart City Concepts

Green and Blue Infrastructure & Rural Resources
- Conservation of Mangrove Forests- Ramsar
- Ecotourism and Rural-cultural Tourism

Sustainable Waste Management
- Promote 3R in schools, household Research development with UTM
- Pilot composting project with Local Authority

Clean Air Environment
- Promote low emission vehicle, low emission technologies for industry
Projects/proposals related to LCS

Launched - Iskandar Malaysia Smart City Framework, Nov 2012

Growing interests from Japanese companies to conduct pilots on smart city concepts – Mitsui, Panasonic (Fujisawa Sustainable Smart Town), Nikkei

Launched - Iskandar Malaysia Sustainability Framework
Excellent collaboration between Research + Policy-Maker has led to the preparation of the LCSIMBP, launched at COP18 Doha

Quantification from LCS modeling assists **better understanding** on impact of proposed actions, sub-actions and programmes.

Excellent **baseline study, consensus-building and the Low Carbon Society Blueprint for Iskandar Malaysia** will help to develop an **integrated climate resilient, low carbon framework** for a city or region.

Green cities or local carbon cities need to have a **LOW CARBON SOCIETIES mindset/behaviour and joint effort** between different professions (planners, architects, engineers and related environmental professions)

Important to have an Asian and **International platform for research collaboration** between researchers in LCS as well as **capacity-building opportunities**.
Main Challenges in the implementation

**Governance Structure – coordination of policies**
- Collaboration of all agencies in Malaysia to ensure policy dovetailing and acceptance

**Public awareness & direct involvement**
- Awareness, involvement and readiness of everyone in the implementation of LCS; stakeholders’ preparedness

**Monitoring and review**
- LCSBPM Actions need regular monitoring and review to ensure effectiveness and acceptance

**Visible evidence to create champions of LCS**
- In order to ensure public readiness and acceptance for a high sustainability future and low carbon
Iskandar Malaysia: Today and Tomorrow

**Today Iskandar Malaysia**
High Carbon Society, Lower Sustainability

**Tomorrow Iskandar Malaysia**
Low Carbon Society, Higher Sustainability, Green Growth/ Economy

- Low Carbon Society Blueprint
- Encouragement of commercialization of products featuring carbon footprint certify
- Improvement of public facilities near residential
- Encouragement of commercialization of products featuring carbon footprint certify
- Improvement of public facilities near residential

**Sustainability**
- Present 2010
- Future 2025
THANK YOU

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