# Low Carbon Society Implementation:

**Building a Strong and Sustainable Metropolis and Future City** 

International Forum on 'FutureCity' Initiative in Malaysia, 08 Feb 2015



By Datuk Ismail Ibrahim Chief Executive, IRDA



# Background: Chronology of the Need to Develop Low Carbon Cities & a Low Carbon Region





#### Malaysia's Commitment: COP15 Copenhagen (17 Dec 2009)

YAB Datuk Seri Najib Tun Razak, Prime Minister: "... voluntary reduction up-to-40% in terms of emission intensity of GDP by the year 2020 compared to 2005 levels".





### Low Carbon Society Blueprint for Iskandar Malaysia 2025

Global launching COP18 (Doha) Nov 2012; LCSBPIM Roadmap & Book on programme implementation COP19 (Warsaw), Nov 2013; The Economics of Low Carbon Cities, June 2014 (report): Leeds U.





#### Smart City Framework for Iskandar Malaysia – Nov 2012

Green as New Consumer Culture, New Market, New Growth with Green Credentials

**Economics + Environment = the Green Economy** 





# SE4ALL – Sustainable Energy for All initiative (under Global Energy Efficiency Program)

Iskandar Malaysia – selected as 1 of 10 cities/regions; recognised at the Climate Summit 23 Sept 2014 at the UN.

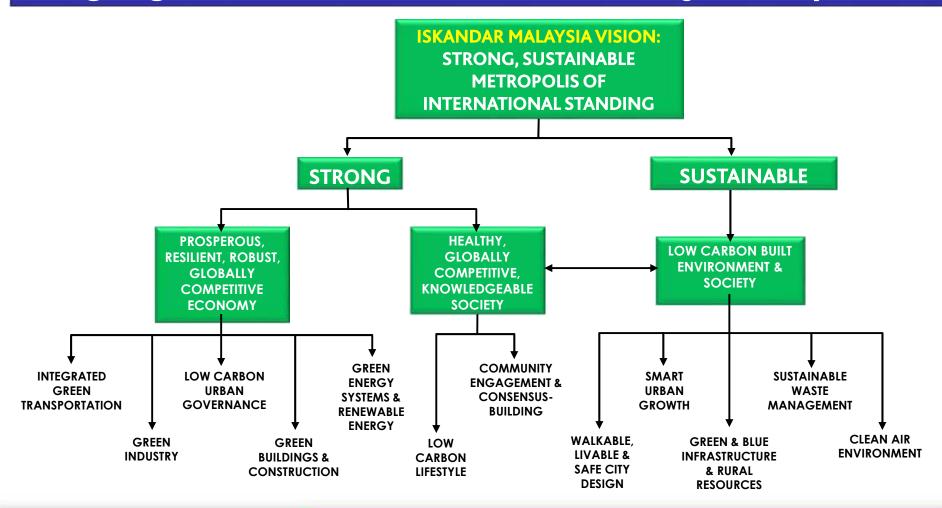
# Iskandar Malaysia Vision

"Strong and Sustainable Metropolis of International Standing"

# Green-focused Agenda - Rationale



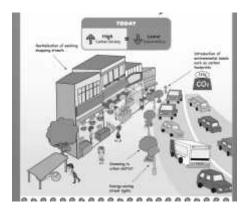
## Aligning IM's Vision with Low Carbon Society Development





## **Towards Low Carbon Iskandar Malaysia 2025**

Sustainability



Low Carbon Society

Tomorrow

Improvement of public facilities

Low

Carter Society

Reofrap genters

Encouragement of screening and active content of public facilities

Solic penals

Encouragement of screening and active content of public facilities

Sheet lightly powered by salar.

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

Today Iskandar Malaysia High Carbon Society, Lower Sustainability

# Projected Greenhouse Gas Emission Reduction in Iskandar Malaysia

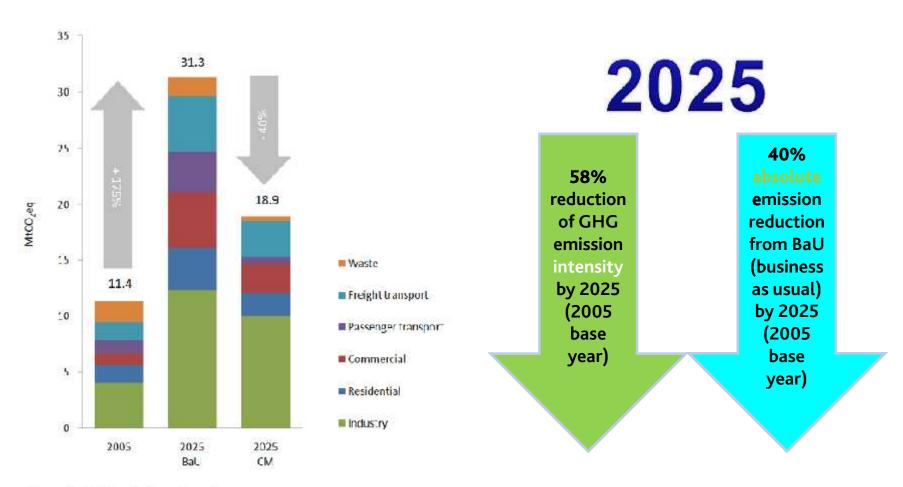


Figure 1: GHG emissions by sectors



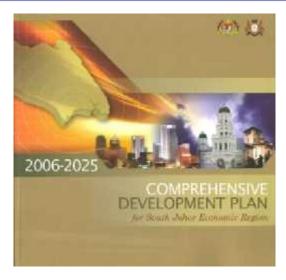
## **Launching of the LCSBPIM - COP18 Doha, 2012**



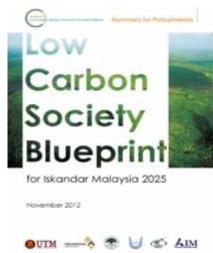


# **Achieving a Low Carbon Society/Future City in Iskandar Malaysia**

Main documents to guide Iskandar Malaysia's economic, social, environmental planning and management towards the fulfillment of a "strong and sustainable metropolis of international standing".









LCSBPIM Booklet: Actions for a Low Carbon Future



## Iskandar Malaysia: Actions For A Low Carbon Future



- The Booklet 'Actions for a Low Carbon Future' – list of 10 programmes which IRDA has been completed or are being implemented.
- Malaysia Prime Minister Dato' Sri Mohd Najib Tun Abdul Razak launched the Boolket on 6th November 2013
- On 15th and 18th November 2013, was the subsequent global launching at COP 19, Warsaw, Poland.

	Programmes					
1	Integrated Green Transportation – Mobility Management System					
2	Green Economy Guidelines					
3	Eco-Life Challenge Project for Schools					
4	Portal on Green Technology					
5	Trees for Urban Parks/Forests					
6	Responsible Tourism and Biodiversity Conservation					
7	Bukit Batu Eco-Community					
8	GAIA – Green Accord Initiative Award					
9	Low Carbon Village FELDA Taib Andak					
10	Special Feature: Smart City –Nafas Baru Pasir Gudang: CLEAN AND HEALTHY CITY					









## **Iskandar Malaysia: Actions For A Low Carbon Future**



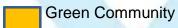
1.	Integrated Green Transportation – Mobility Management System	98%	2. Green Economy Guidelines for Iskandar Malaysia	Comp leted Nov 2014	3. Eco-Life Challenge Project for Schools	Year 3 2015
4.	Development of Portal on Green Technology	30%	5. Trees for Urban Parks/Forests	40%	6. Responsible Tourism and Biodiversity Conservation	Year 3 2015
7. Bukit Batu Eco- Community – bicycling and public footpath development		30%	8. GAIA – Green Accord Initiative Award	15%	9. Low Carbon Village FELDA Taib Andak	Phase 2 in 2015
<b>AN</b> 1.	Special Feature: Smart ID HEALTHY CITY Green Industry II. Green Commu	75%				



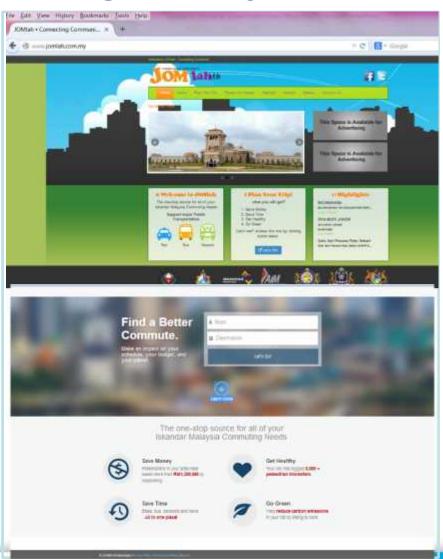








# Integrated Green Transportation – Mobility Management System



Iskandar Malaysia Mobility
Management System (MMS) promotes
sustainable transport and manages the
demand for car use by changing
travelers' attitudes and behaviour.

MMS coordinates information, services and activities to optimise the effectiveness of urban transportation.

Innovative approach in managing and delivering coordinated transportation services to customers, including the elderly, people with different abilities and low income population.

The use of E-Vehicles (recently introduced in IM) is also a good move.

## 2. Green Economy Guidelines



Green Economy Guidelines provide a comprehensive guidance manual for the 9 sector pillars being promoted in Iskandar Malaysia.

GEG provides a way on how companies, businesses and the public can go green by adopting green practices in their business operations, how their factory is run, freight transportation, services and procurements.

GEG will help transform Iskandar Malaysia into a low carbon green growth economy and region.

Public Version of the GEG will be available on IM's website by end Feb 2015.

## 3. Eco life Challenge Programmes

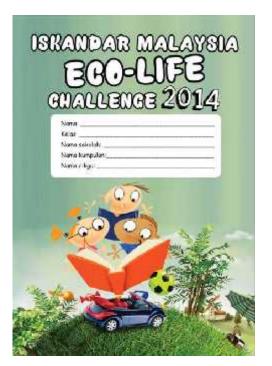
# 198 primary schools in Iskandar Malaysia:

For ELC, a booklet competition, 23 primary schools got involved on 2013; and 80 schools got involved in 2014. The wining schools visited Kyoto City, Japan.

he remaining 95 will compete in 2015.







The Iskandar Malaysia Eco-Life Challenge Project focuses on energy household accounting. School children track the energy consumption, waste generation and management, travelling choices, frugal consumption and utilizing renewable energy resources (sunlight). AIM: to raise children's awareness level on low carbon aspects.

### **5.Trees for Urban Parks/Forests**





The aim is to retain as well as reintroduce endemic tree species in urban parks and forests in the Iskandar Malaysia region, in order to ensure continuing existence of such parks.

It is felt that many parks and urban trees are lost through road and other developments, the re-use of previously zoned areas as green spaces on residential developments, and the emergence of non-endemic species in our parks which are essentially ornamental

## 9. Low Carbon Village Felda Taib Andak



The programme was started by UTM in 2012, together with IRDA and Japan agencies.

Using LCSBPIM 2025 as the platform, the Felda Taib Andak community formulated "A Dozen Actions" document for their area to achieve their combined vision of creating a village that is low carbon.

FTA will become a model Low Carbon village in Malaysia.



# 10. Smart City – Nafas Baru Pasir Gudang: GREEN AND HEALTHY CITY









### **Green Industry:**

To establish framework in addressing gaps between what's in for industry and current available programmes/initiatives by various agencies.

### **Green Community Programme:**

This programme aims to promote green community and green lifestyle among residents of Pasir Gudang.

# Integrated Solid Waste Management (Waste to Energy):

To ensure that all operation and maintenance of sewerage system in the area is under the supervision of MPPG. Application element "Waste to Energy" on solid waste management and sewerage management Carbon Sequestration of Tree Preservation Order (TPO):

This programme will identify the carbon sink and the tree value.

# Why pursue Smart City Concept?

The Smart City Framework and the Low Carbon Society Blueprint are IM's Strategic Environmental Policy.

- Environment Sustainability;
- Pursuing Green Economic Growth through enablers of Investment, Jobs, Innovation through ICT as an enabler; and
- Provide quality of life to the people on Public Safety, Education, Social Care and Wealthsharing.



While many still focus on the role of ICT infrastructure, Iskandar Malaysia has paid particular attention to 6 fundamental elements of the Smart City Concept as important drivers of urban growth in an economic region:

- 1) Smart Economy
- 2) Smart Mobility
- 3) Smart Environment
- 4) Smart People
- 5) Smart Living
- 6) Smart Governance



# Completed and current LCS and Smart City Projects in 2014-2015











Master plan and guideline on connected pedestrian walk and cycle lane Integrated
Coastal
Erosion
Prevention
Plan for
Tanjung Piai

Gazettement
of Sg Pulai
Forest
Reserve as a
State Park

Enhancement
of Pulau
Kukup as a
premier
ecotourism
destination

Formation of the Green Technology & Climate Change Council, Johor State



Strategic Framework to protect sensitive environments in Iskandar Malaysia



Sustainable
Energy
Framework for IM
SE4ALL
RE & EE Blueprint



Project
Collaboration
with Green Tech
Malaysia (MGTC)
- r LCCF pilot
project at PRISMA



Developing cycling lanes in Taman Sri Austin and Seri Alam



# 2015 Projects under the Low Carbon Society Blueprint: preparation of LCS Action Plans for the 5 Municipalities









































#### Johor Bahru

'The Vibrant Heart of the Southern Region'



#### **Johor Bahru Tengah**

*Livable* Community City'



### **Pasir Gudang**

'Green Manufacturing Hub'



### Kulai Jaya

'Smart Logistic Hub'



#### **Pontian**

'Agrobiodiversity Hub'



## LCS Events in 2014

## 10<sup>th</sup> Satreps LCS Meeting, Tsukuba, Ibaraki Prefecture

11th - 15th October 2014







### 3R and Compost Programme in Felda Taib Andak 1st November 2014







## LCS Events in 2014

Iskandar Malaysia Eco-Life Challenge 2014
Grand Final
10th November 2014







Iskandar Malaysia Knowledge Sharing Workshop on Urban Green Growth in Dynamic Asia, with OECD 6th November 2014







## THANK YOU

ISKANDAR REGIONAL DEVELOPMENT AUTHORITY (IRDA)



### **Emails:**

## IRDA's LCS Team (at Environment Division)

boyd@irda.com.my (Project Manager)
choo@irda.com.my (LCS modeling)
shahidah@irda.com.my (on Walkable Cities)
kamisah@irda.com.my (on transportation)
isma@irda.com.my (community engagements)
fadly@irda.com.my (on solid waste, RE & EE)

