

# 20<sup>th</sup> AIM Workshop NIES Tsukuba Japan

23-25 January 2015

## Realization of Blueprint for LCS in Malaysia



Science into Policy – Low carbon Society blueprint



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# Content- Structure of Presentation

## Background

- **Updates CO20**
- **Urban problem and low carbon solution policy in Malaysia**

## Challenges And Solution

- **Low Carbon Society Blueprint for Iskandar Malaysia**
- **Solution- 12 actions**

## LCS Malaysia

- **Local authorities**
- **Conclusions**

# UTM hosted Side-events and exhibition at COP20 Lima, Peru on 2-12 December 2014



Prof Nordin spoke on behalf of VC UTM opening address at COP20 side event jointly organised by UTM-NIES Japan



Prof Ho interviewed by Climate Studio at COP20 UNFCC Lima Peru



HE Ambassador Horie and Y bhg Dato Loo, KSU Kettha invited as keynote at UTM-NIES side event



Prof Ho presentation with other Asian experts on climate change agenda in COP20



Panellists at UTM-NIES side event at COP20 Lima Peru



Our Peruvian guests at UTM exhibition booth 78 at COP20 Lima Peru



# Participation of UTM-Low Carbon centre at six (6) side events of COP20

## Lima Peru Dec 2-12 2014



**5 Dec 2014– Urban Climate change and Finance organised by JICA Tokyo at Japan Pavilion**



**8 Dec 2014 – Achieving Low Carbon Asia organised by IGES Tokyo at Japan Pavilion**



**9 Dec 2014 – AIM modelling application organised by NIES at Japanese Pavilion**



**10 Dec 2014 LoCARNet – GHG Reduction potential in Asia at Indonesia Pavilion by IGES**

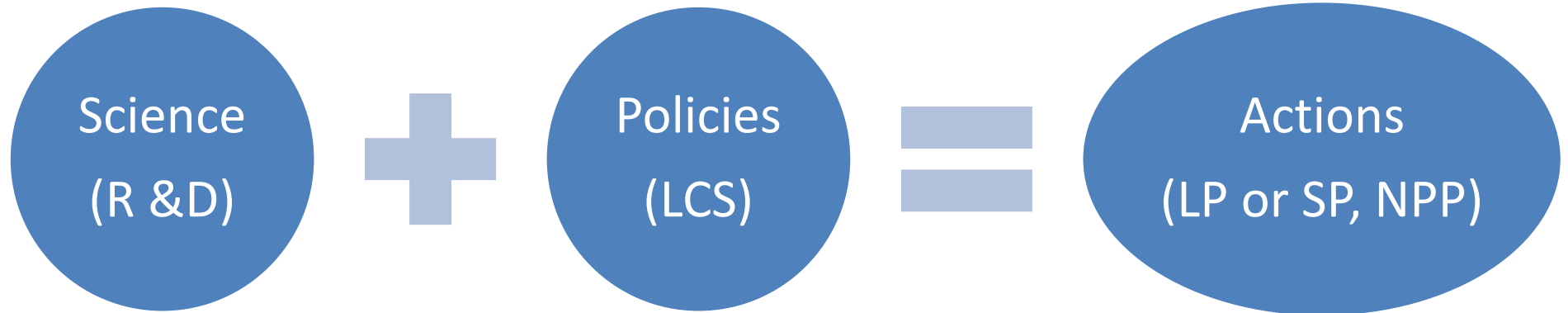


**11 Dec 2014 Realizing Low carbon Societies in Malaysia and Asia organised by UTM-NIES at Caral Room**

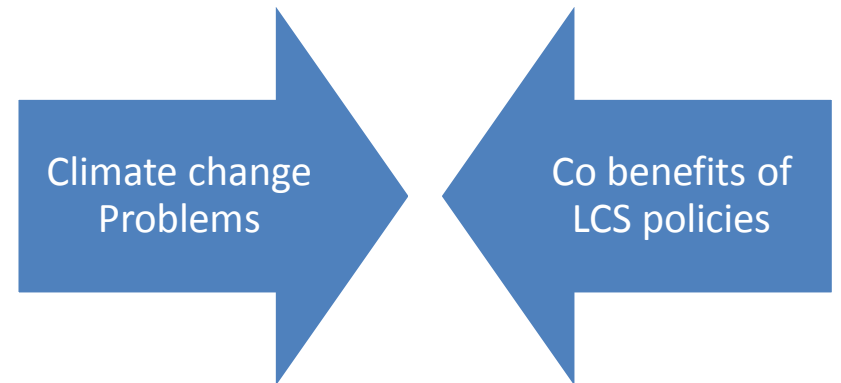
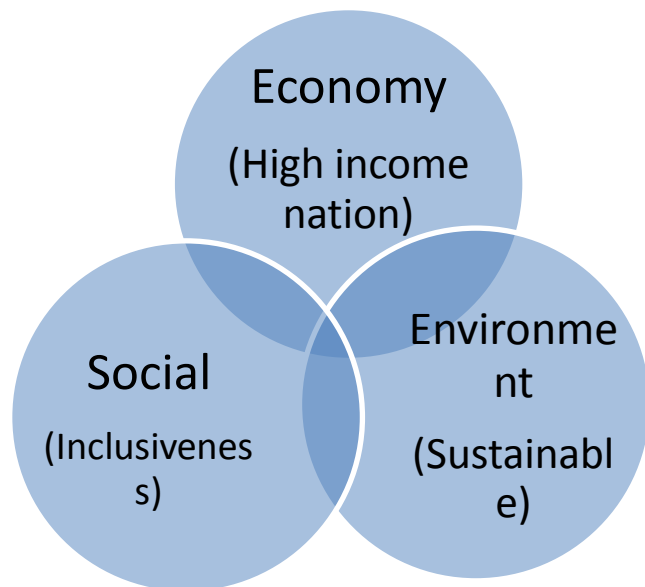


**12 Dec 2014 Transition and Global Challenges towards LCS organised by LCS R Net at EU Pavilion**

# Role of researchers to promote Low carbon sustainable development approach



Key element Sustainable development = PRO GROWTH, PRO JOB , PRO POOR and PRO ENVIRONMENT



# Projected Greenhouse Gas Emission Reduction in Iskandar Malaysia

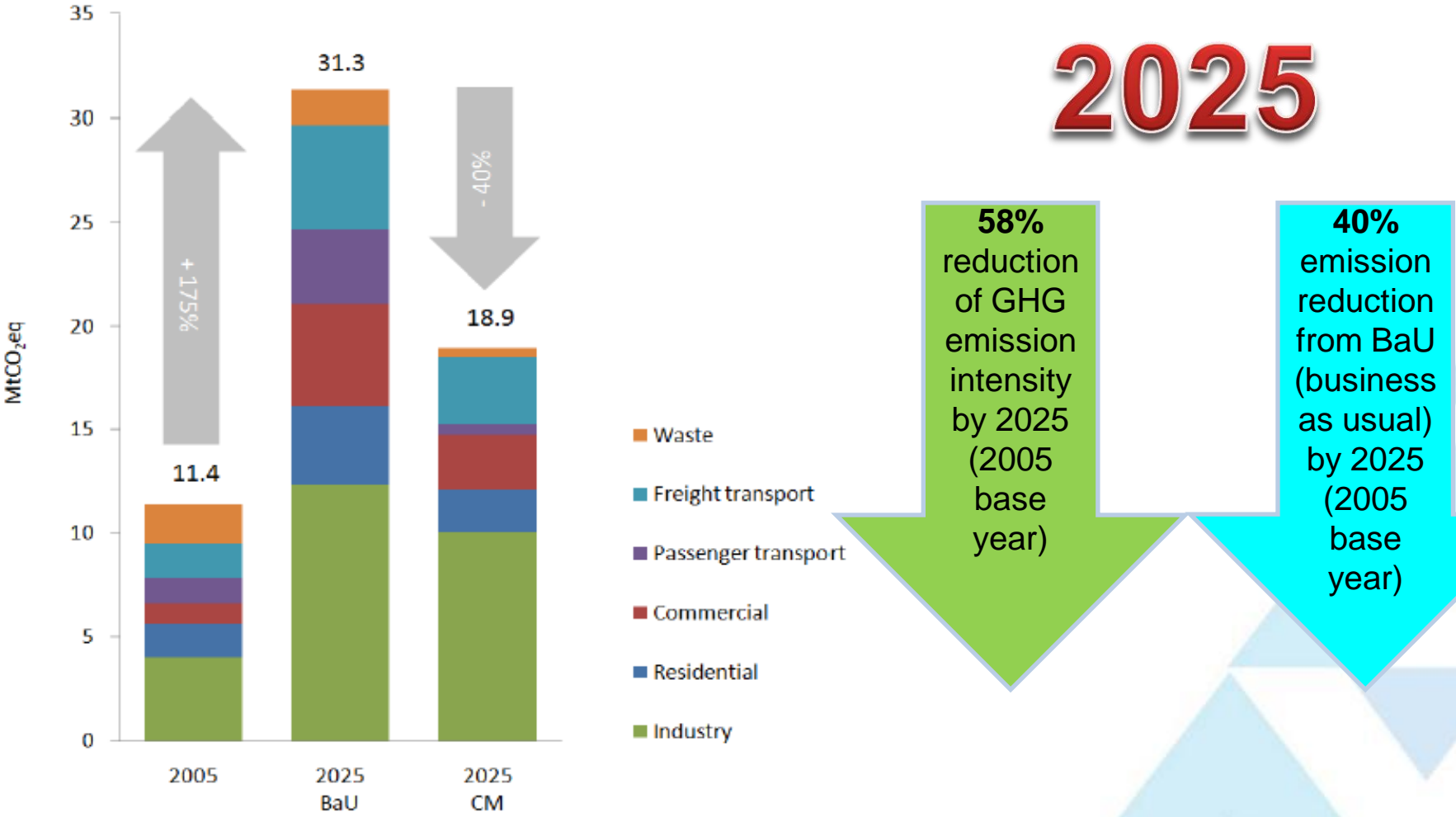


Figure 1: GHG emissions by sectors

# 04 Potential Mitigation Options for Iskandar Malaysia

## 12 Actions Towards Low Carbon Future

Mitigation Options	CO2 Reduction	%
<b>Green Economy</b>	<b>7,401</b>	<b>59%</b>
Action 1 Integrated Green Transportation	1,916	15%
Action 2 Green Industry	1,085	9%
Action 3 Low Carbon Urban Governance**	-	-
Action 4 Green Building and Construction	1,338	11%
Action 5 Green Energy System and Renewable Energy	3,061	24%
<b>Green Community</b>	<b>2,557</b>	<b>21%</b>
Action 6 Low Carbon Lifestyle	2,557	21%
Action 7 Community Engagement and Consensus Building**	-	-
<b>Green Environment</b>	<b>2,510</b>	<b>20%</b>
Action 8 Walkable, Safe and Livable City Design	264	2%
Action 9 Smart Urban Growth	1,214	10%
Action 10 Green and Blue Infrastructure and Rural Resources	620	5%
Action 11 Sustainable Waste Management	412	3%
Action 12 Clean Air Environment**	-	-
<b>Total</b>	<b>12,467**</b>	<b>100%</b>

# Iskandar Malaysia: Actions For A Low Carbon Future



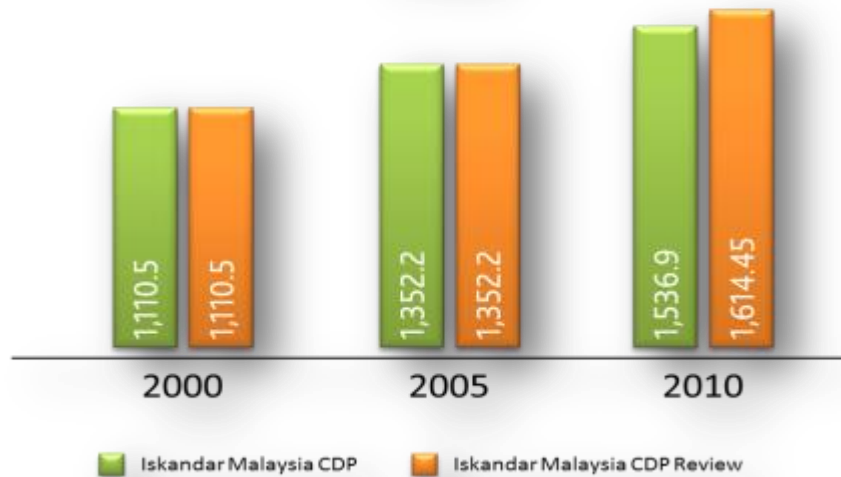
- The Booklet 'Actions for a Low Carbon Future' – list of 10 programmes which IRDA has started implementing or have been completed.
- On 6th November 2013, the Iskandar Malaysia: Actions for A Low Carbon Future is the implementation booklet which outlines the 10 programmes, was launched by Malaysia Prime Minister Dato' Sri Mohd Najib Tun Abdul Razak.
- On 15th and 18th November 2013, was the subsequent global launching at COP 19, Warsaw, Poland.

	Programmes	PIC
1	<b>Integrated Green Transportation – Mobility Management System</b>	<b>Kamisah Mohd Ghazali</b>
2	<b>Green Economy Guidelines</b>	<b>Ivy Wong Ling Ling</b>
3	<b>Eco-Life Challenge Project for Schools</b>	<b>Isma Ezwan Safri</b>
4	<b>Portal on Green Technology</b>	<b>Choo Hui Hong</b>
5	<b>Trees for Urban Parks/Forests</b>	<b>Boyd Dionysius Joeman</b>
6	<b>Responsible Tourism and Biodiversity Conservation</b>	<b>Boyd Dionysius Joeman</b>
7	<b>Bukit Batu Eco-Community</b>	<b>Hamdi Mohd Yusof</b>
8	<b>GAIA – Green Accord Initiative Award</b>	<b>Ivy Wong Ling Ling</b>
9	<b>Low Carbon Village FELDA Taib Andak</b>	<b>Dr Ibrahim Ngah (UTM)</b>
10	<b>Special Feature: Smart City – Nafas Baru Pasir Gudang: CLEAN AND HEALTHY CITY</b>	<b>Sakurah Jamaluddin , Sharifah Shahidah Syed Ahmad, Muhammad Fadly Muhammad Nor, Choo Hui Hong</b>



# Quick update :Eco life Challenge Programmes

Iskandar Malaysia Population Growth 2000-2010  
( '000)



**198** primary schools,  
Phase 1 - **23** schools

**2014**, additional **80** schools  
involved in ELC programme.



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). The aim is to raise children's awareness level on low carbon aspects.

# 03 Low Carbon Society Proposal Plans for 5 Municipalities

## Integrating Iskandar Malaysia and 5 Local Municipalities

Top - down

Low Carbon Society Blueprint for Iskandar Malaysia 2025

Bottom - up

Low Carbon Society Action Plan for Johor Bahru 2025

Low Carbon Society Action Plan for Johor Bahru Tengah 2025

Low Carbon Society Action Plan for Pasir Gudang 2025

Low Carbon Society Action Plan for Kulai Jaya 2025

Low Carbon Society Action Plan for Pontian 2025

Iskandar Malaysia

Direction, Guide and Policy



- Detail Local Action
- Priority and Preference
- Correct Data through Survey
- Chose Implementable measures on the ground
- Pioneering Activities through Pilot Projects

FIVE (5) Local Municipalities



# 03 Low Carbon Society Proposal Plans for 5 Municipalities

## Local Action Plan: Cover and Theme (Example)



**JOHOR BAHRU CITY COUNCIL MBJB**

**JOHOR BAHRU TENGAH MUNICIPAL COUNCIL MPJBT**

**PASIR GUDANG MUNICIPAL COUNCIL MPPG**

**KULAI MUNICIPAL COUNCIL MPKu**

**PONTIAN DISTRICT COUNCIL MDP**

Under SATREPS, the project development of Low Carbon Society, focuses on Johor Bahru Region cover with a view to address Low Carbon Society (LCS) issues and to help in meeting targets of CSO in the region and also to help in meeting targets of CSO in the region and also to help in meeting targets of CSO in the region.

Under SATREPS, the project development of Low Carbon Society, focuses on Johor Bahru Tengah Region cover with a view to address Low Carbon Society (LCS) issues and to help in meeting targets of CSO in the region and also to help in meeting targets of CSO in the region.

Under SATREPS, the project development of Low Carbon Society, focuses on Pasir Gudang Region cover with a view to address Low Carbon Society (LCS) issues and to help in meeting targets of CSO in the region and also to help in meeting targets of CSO in the region.

Under SATREPS, the project development of Low Carbon Society, focuses on Kulai Region cover with a view to address Low Carbon Society (LCS) issues and to help in meeting targets of CSO in the region and also to help in meeting targets of CSO in the region.

Under SATREPS, the project development of Low Carbon Society, focuses on Pontian Region cover with a view to address Low Carbon Society (LCS) issues and to help in meeting targets of CSO in the region and also to help in meeting targets of CSO in the region.



**Johor Bahru**

**Johor Bahru Tengah**

**Pasir Gudang**

**Kulai Jaya**

**Pontian**

*'The Vibrant Heart of Southern Region'*

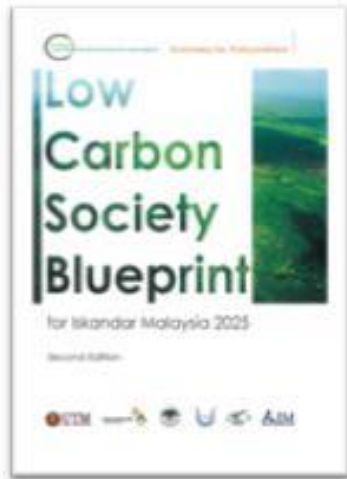
*'Livable Community City'*

*'Green Manufacturing Hub'*

*'Smart Logistic Hub'*

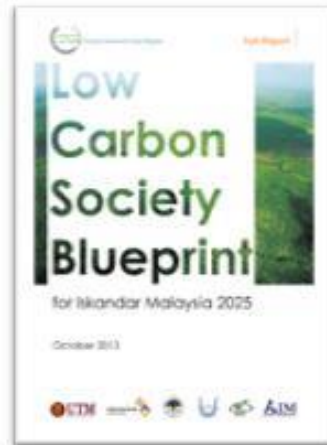
*'Agrobiodiversity Hub'*

# Low Carbon Society for Iskandar Malaysia Publications



Low Carbon Society Blueprint for Iskandar Malaysia 2025- Summary for Policymakers

<http://irdep.irda.com.my/cms/download/documentSharing/18230>



Low Carbon Society Blueprint for Iskandar Malaysia 2025- Full Report

<http://irdep.irda.com.my/cms/download/documentSharing/26570>



A Roadmap towards Low Carbon Iskandar Malaysia 2025

<http://irdep.irda.com.my/cms/download/documentSharing/26563>



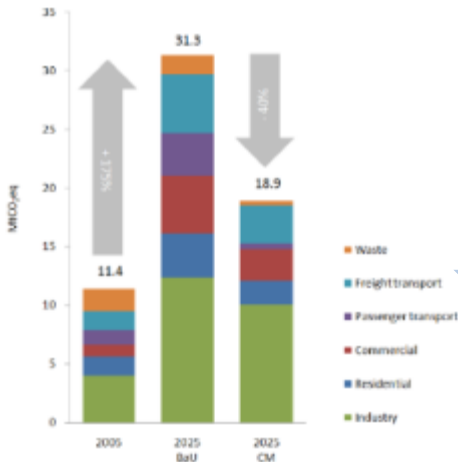
Iskandar Malaysia: Action for a Low Carbon Future

<http://irdep.irda.com.my/cms/download/documentSharing/26571>

# In Progress-Developing a Low Carbon Society Roadmap for Iskandar Malaysia

**Step 1** Low Carbon Society Blueprint for Iskandar Malaysia  
- Clear GHG target for year 2025

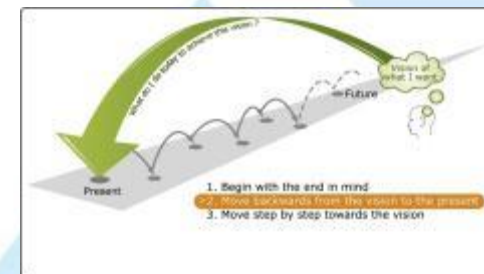
**Step 2** Low Carbon Society Implementation Roadmap 2015-2025 using Backcasting Tool



**58%** reduction of GHG emission intensity by 2025

**2025**

**40%** emission reduction from BaU by 2025



## Conclusion- Way forward

### a) **GOOD PRACTICE and ACTION**

**INTEGRATED and MULTI DISPLINARY**

**SCIENCE-KNOWLEDGE-POLICY- IMPLEMENTATION (completing PDCA cycle)**

### b) **METHODOLOGY**

Good **baseline quantitative study, consensus building and low carbon blueprint plan** will help to develop an **integrated climate resilient , Low carbon framework** for a city by providing **objective** decision.

### c) **MEDIA and BUY- IN**

**Stakeholder participation**

### c) **NETWORK**

The **researchers/scientists** have to work with **local implementation agencies** and **international collaboration** for **capacity building opportunities**.



*Thank you for your attention!*  
ho@utm.my

Thank You Terima Kasih 谢谢 धन्यवाद ありがとう

