Case analysis of the climate change institution

- Case study of Development of Low Carbon Society Iskandar Malaysia

What are the **Key Success Factors for Implementation** of city-level climate change actions?

- S2A Methodology,
- Real Economic growth,
- Political will and community buy in,
- Institutional support **Organization arrangement** for sustainability







- Quarantine Complex (CIQ)

- 2nd Link Access to Singapore
- RAMSAR World Heritage Park
- Tanjung Piai Southernmost Tip of Mainland Asia

#### Maritime Centre

## Blueprint and GHG inventory

SKANDAR MALAYSIA

Figure 1: Past GHG Inventories by IRDA



FLAGSHIP D

. Tanjung Langsat Port

· Pasir Gudang Industrial Park

Johor Port

(Iskandar Regional Development Author

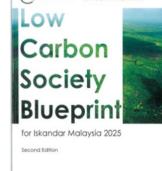
- EASTERN GATE DEVELOPMENT Tanjung Langsat Industrial Complex Senai Airport City
  - . Senai High-Tech Park
  - Sedenak Industrial Park



COP26 Side event JICA RI Nov 4 2021 at 1250 Glasgow







OUTM manage & S W AIM



+ Medical Park

Clusters (S&C)

+ International Destination Resort

. Southern Industrial & Logistics

- LCSBP 2016 Comprehensive Development Plan for **decarbonization with 5 Steps**
- Step1 **Methodology** S2A PDCA

SINGAPORE

- Step2 **Ambitious** City Target setting (58% GHG emission intensity reduction)
- Step 3 **Planned Actions** (Actions, Measures and Programs)
- Step 4 **Buy in** at National, State and City level
- Step 5 **Institutional support** organization arrangement for sustainability













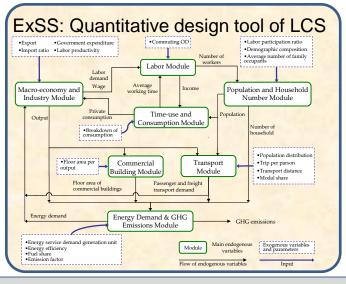




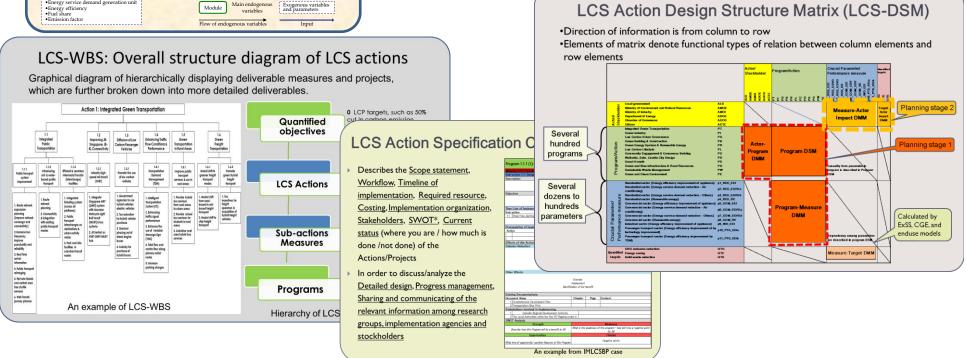


### S2A Methodology - Interactive

Development of supporting tools for designing and managing LCS scenarios



- > Extended SnapShot model (ExSS)
- > LCS Action Reference Database
- ➤ LCS Action Work Breakdown Structures(LCS-WBS)
- LCS Action Specification Cards(LCS-ASC)
- ➤ LCS Action Design Structure Matrix (LCS-DSM)
- ➤ Tool for attributing the Efforts towards Quantified targets to each Action/program (ARIPPLE)
- ➤ LCS Action Backcasting tool (LCS-BCT)



### Documented LCS blueprint – Ambitious target and planned actions

## LCS scenarios for policy development in IM The Low Carbon Society Blueprint for Iskandar Malaysia 2025

2025

 $\mathsf{CM}$ 

BaU



#### **GHG** reductions by Actions

✓ Prepare Document that presents comprehensive climate change mitigation policies and detailed strategies to guide development of Iskandar Malaysia

#### **Impact**

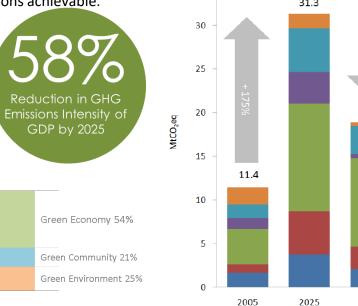
**Objectives** 

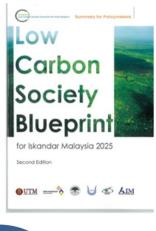
✓ Holistic and integrated approach to decouple economy and environment development

Comprise of two principal components:

I) Narrative on growth scenarios, policies, measures and programs to achieve a minimum targeted 40% reduction in carbon emission by 2025 based on the 2005 level and;

II) **scenario-based modelling** and projection of carbon emission reductions achievable.







Mitigation Options	ktCO <sub>2</sub> Reduction	%
Green Economy	6,937	54%
Action 1 Integrated Green Transportation	1,916	15%
Action 2 Green Industry	1,094	9%
Action 3 Low Carbon Urban Governance**	-	-
Action 4 Green Building and Construction	1,203	9%
Action 5 Green Energy System and Renewable Energy	2,725	21%
Green Community	2,727	21%
Action 6 Low Carbon Lifestyle	2,727	21%
Action 7 Community Engagement and Consensus Building**	-	-
Green Environment	3,094	25%
Action 8 Walkable, Safe and Livable City Design	263	2%
Action 9 Smart Urban Growth	1,214	10%
Action 10 Green and Blue Infrastructure and Rural Resources	392	3%
Action 11 Sustainable Waste Management	1,224	10%
	1,224	10%

Buy In political and global

## Buy in global – Promote IM as Green region investment hub

Iskandar Malaysia LCS Blueprint 2025



Officially launched @ COP 18, DOHA 2012
UN CLIMATE CHANGE CONFERENCE
COP18 CMP8

Doha, Qatar on 30 Nov. 2012

**United Nations** Climate Change Conference

MARRAKECH 2016 COP22 CMP12 CMA1

MATE CHANGE CONFERENCE

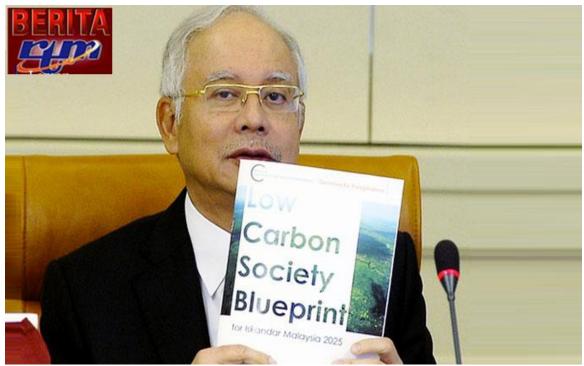
Launching **CASBEE** Iskandar Malaysia on 10 Nov. 2016 at COP22.

-Building -Urban Development -City









Launching officially endorsed by the R.H. Prime Minister of Malaysia on 11 Dec. 2012

### Buy in from private sector



# Iskandar Malaysia

main southern development corridor in Johor, Malaysia

### **GREEN ACCORD AWARDS**



### Buy in from communities- Business, Authoriteis, NGO and School

**Sustainable & Low Carbon Schools / Community** 



### Organizational Arrangement

#### **UTM-Low Carbon Research Centre**





#### **RCE Iskandar**







LCS Research & Training Hub in Asian Region