JAPON PAVILION at the COP21/CMP11
Transformation! –Low carbon & climate resilient society–

PARIS 2015

UTM UNIVERSITI TEKNOLOGI MALAYSIA

NIES

❖ **Date: 7 December 2015(Mon)Time: 12:15pm – 13:00pm Venue: Japan Pavilion**

Lessons from Asia Low Carbon Cities: Initiatives in Iskandar Malaysia Economic Region and Putrajaya

By National Institute for Environmental Studies (NIES) &
University of Technology Malaysia (UTM)

We share our advanced lessons from Asian cities such as Iskandar Malaysia region, Putrajaya city in collaboration with AIM research team, Japanese cities/environment organizations, central governments, other stakeholders. This is typical input into Solution Agenda launched by France Government for COP21.

Time	Agenda
	Chairperson: Dr. Junichi Fujino, National Institute for Environmental Studies, Japan
12: 15	**Introduction** Prof. Ho Chin Siong, Professor, Universiti Teknologi Malaysia (UTM)
12:20 – 12:30	**Low Carbon Society Action Plan for 2025 in 5 Local Authorities in Iskandar Malaysia** Y.A.B. Dato' Dr Mohamed Khaled Bin Nordin, Menteri Besar (Chief Minister) Johor State, Malaysia
12:30 – 12:40	**Implementation of Green Technology Policy in Malaysia** Y. Bhg. Datuk Loo Took Gee, Secretary General, Ministry of Energy, Green Technology and Water Malaysia (KeTTHA)
12:40 – 12:50	**Putrajaya Building Sector Carbon Emissions Monitoring & Reporting Program & PGC2025 updates** Datuk Haji Hasim Bin Haji Ismail, President of Putrajaya Corporation (PJC)
12:50 –1pm	**Discussion**
13:00	**Adjourn**

This research is supported by SATREPS (JICA/JST) and MoEJ.

FOR FURTHER DETAILS / CONTACT INFO : Dr. Junichi FUJINO (fuji@nies.go.jp), NIES and Mr. Koichi OKABE (Koichi.Okabe@gmail.com), UTM

Background

Malaysia cities : Key Challenges

Iskandar Malaysia – 1.5 million – 3mil (2020)
Putrajaya – 100,000 to 350,000 (2025)

Voluntary 40% reduction of CO_2 emission intensity by 2020

Issues

_ Rapid urbanization and industrialization (7%pa)

_ Relatively high carbon intensity dependence on fossil fuel

_ High private car ownership

_ Low density development and urban sprawl

_ Low efficiency appliances and Renewabl energy

Government Policy Directions

_ National Green Technology Policy

_ National Policy on Climate Change

_ National Renewable Energy Policy and Action Plan

_ National Policy on the Environment

_ 11th Malaysia Plan (2016-2020)

_ Green Neighborhood Planning Guideline

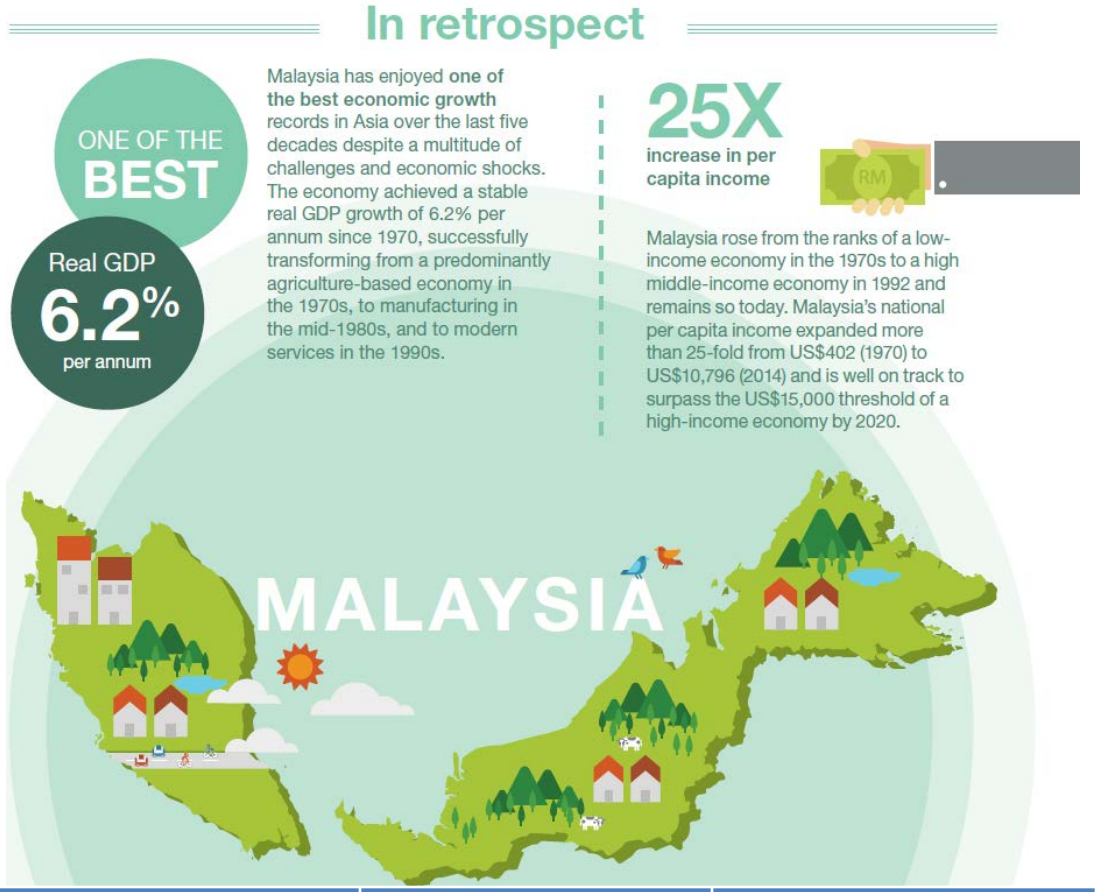
_Low Carbon Cities Framework and Assessment System

Malaysia- background

Journey realizing Vision 2020- A fully developed nation along all dimensions – economically, politically , socially, psychologically and culturally by 2020.

Themes related to low carbon development

- Digital nation,
- Green growth cities
- Competitive cities
- Promote biodiversity
- Environmental awareness,
- Enable energy plan,
- Inclusiveness,
- Enable energy plan



	CO2 emission ('000metric tons	CO2 per capita metric ton	Carbon intensity Kg / kg oil equiv
1990	56,593	3.1	2.6
2000	216,804	7.7	3.0

Vision 2020

The next five years

The Eleventh Plan is formulated with the rakyat as the centrepiece of all development efforts. The people economy will be given priority,

reinforcing the Government's commitment to bring further development to the people by enriching their lives, providing people with dignity, and uplifting their potential to partake in the country's prosperity that is generated. All segments of society must benefit from the country's economic prosperity in order to create an advanced economy and inclusive nation by 2020. In line with this, for the first time in Malaysia's history, national growth targets will include not only GDP growth and per capita income, but also household income and the Malaysian Wellbeing Index to assess the impact of economic growth on people's wellbeing.

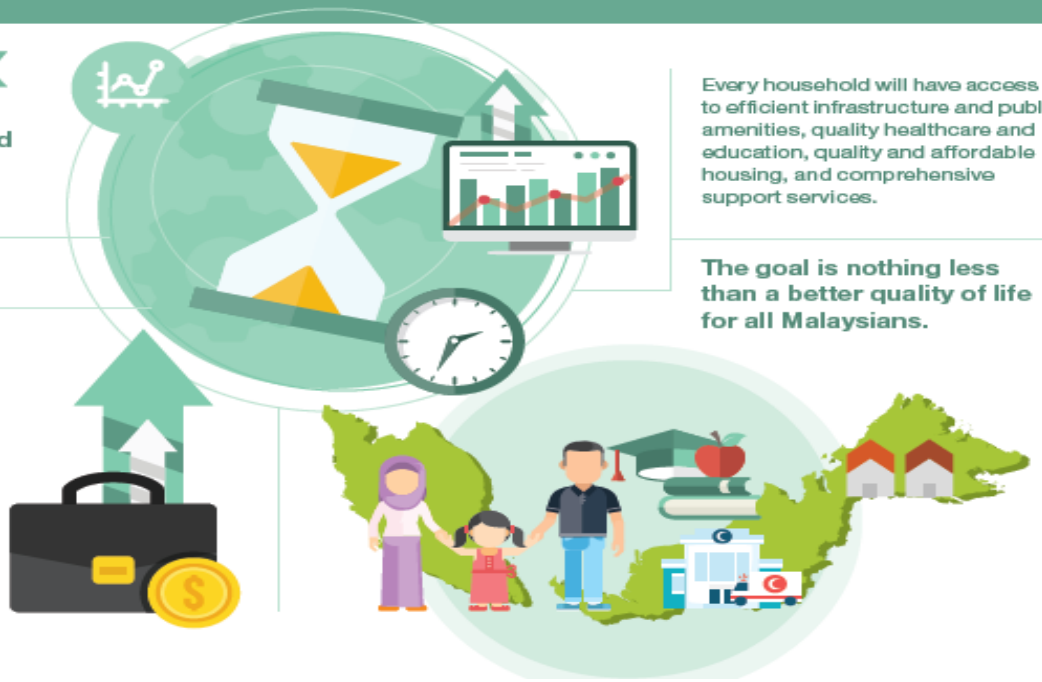
Average national income

The Government aspires for Malaysia to achieve an advanced economy status by 2020, with a national per capita income of

MORE THAN

US$15,000

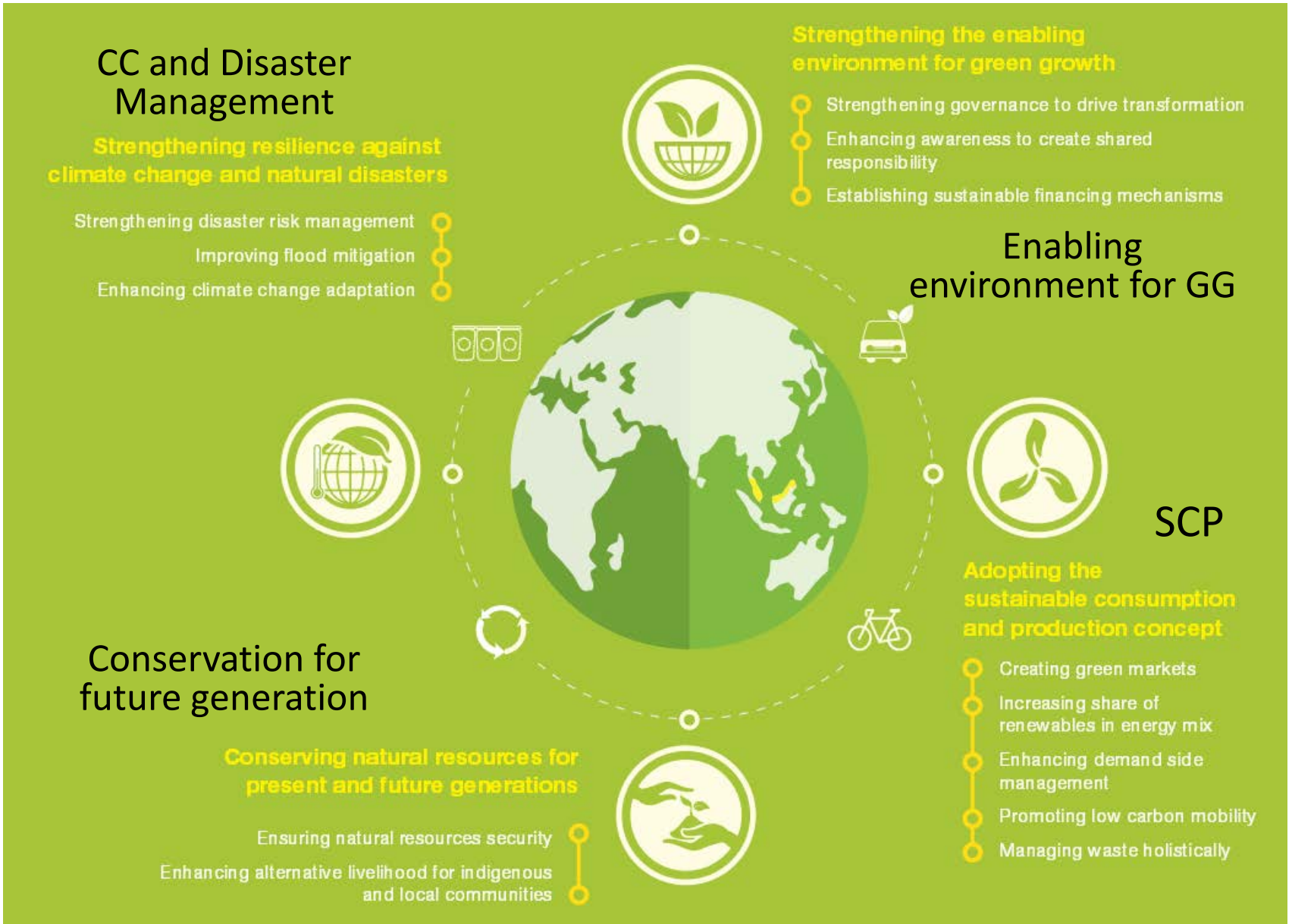
While there will still be people who earn less than this threshold, all segments of society, irrespective of geography, ethnicity, or income level, are expected to experience an increase in their income and wellbeing.



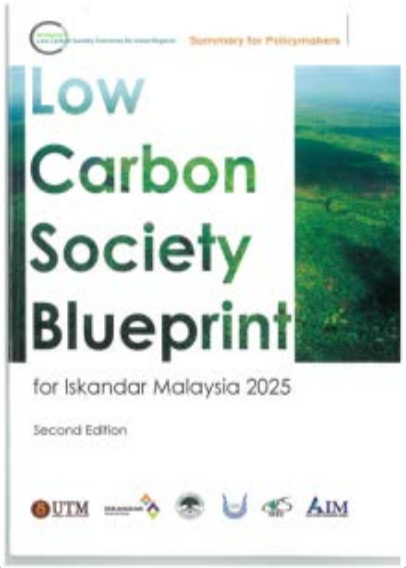
Every household will have access to efficient infrastructure and public amenities, quality healthcare and education, quality and affordable housing, and comprehensive support services.

The goal is nothing less than a better quality of life for all Malaysians.

Focus area of green sustainability



Low Carbon Society Blueprint for Iskandar Malaysia 2025

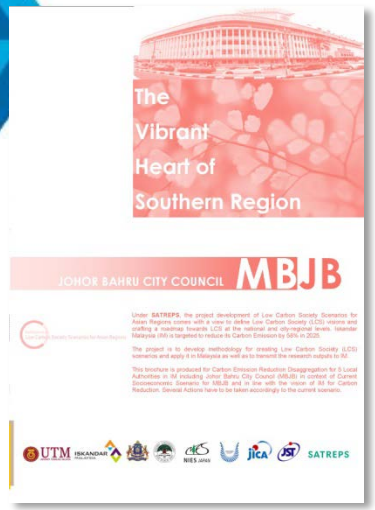


- The LCSBPIM– a quick reference for all policy-makers in both public and private sectors as well as IRDA;
- 12 Actions grouped in 3 parts namely: (Green Economy), (Green Community), and Green Environment);281 programmes;
- Each Chapter contains an analysis, list of programmes and the potential GHG emissions reduction;
- IRDA launched its Low Carbon Society Blueprint for Iskandar Malaysia 2025 on 30 November 2012 at the United Nations Climate Change Conference in Doha, Qatar. The ultimate goal is to reduce Iskandar Malaysia's carbon intensity emissions by 50 per cent by 2025.
- The Blueprint was subsequently endorsed by the Prime Minister of Malaysia in December 2012

	Action Names	Themes
1	Integrated Green Transportation	GREEN ECONOMY
2	Green Industry	
3	Low Carbon Urban Governance	
4	Green Buildings & Construction	
5	Green Energy System & Renewable Energy	
6	Low Carbon Lifestyle	GREEN COMMUNITY
7	Community Engagement & Consensus Building	
8	Walkable, Safe, Livable City Design	GREEN ENVIRONMENT
9	Smart Growth	
10	Green and Blue Infrastructure & Rural Resources	
11	Sustainable Waste Management	
12	Clean Air Environment	

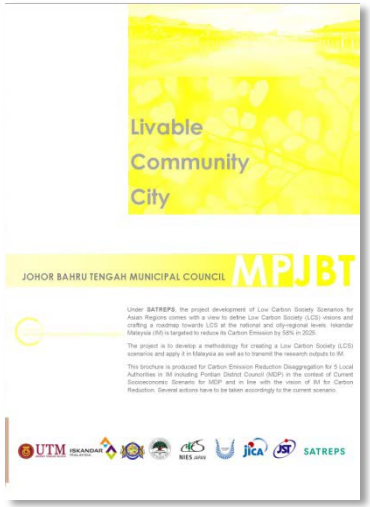
Low Carbon Society Scenarios for Iskandar Malaysia

LCS Blueprints for 5 Local Authorities – First Cuts



Johor Bahru

'The Vibrant Heart of Southern Region'



Johor Bahru Tengah

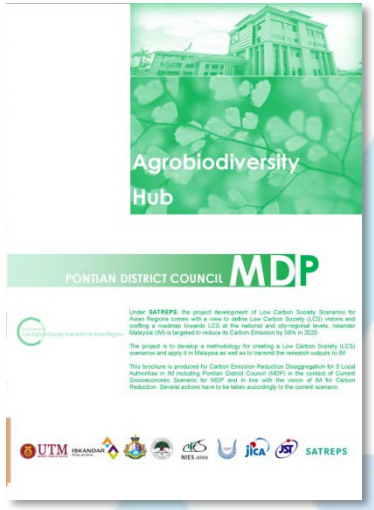
'Livable Community City'

Pasir Gudang

'Green Manufacturing Hub'

Kulai Jaya

'Smart Logistic Hub'



Pontian

'Agrobiodiversity Hub'

Malaysia Green Technology Policy

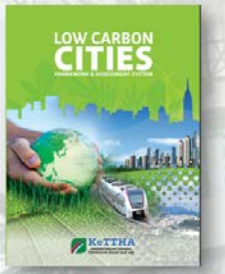
NATIONAL GREEN TECHNOLOGY POLICY

POLICY STATEMENT

Green Technology shall be a driver to accelerate the national economy and promote sustainable development.

"Green Technology is the development and application of products, equipment and systems use to converse the natural environment and resources which minimise and reduces the negative impact of human activities.."

LOW CARBON CITIES FRAMEWORK (LCCF)



Urban Environment

Buildings

Urban Infrastructure

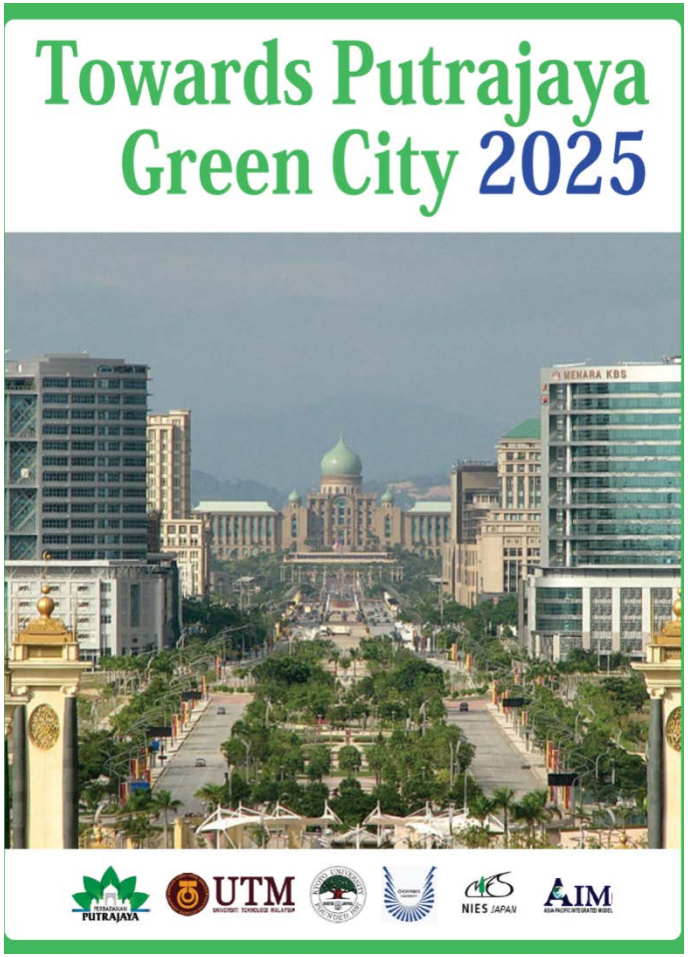
Urban Transportation

Low Energy Office LEO

Green Energy Office GEO

Diamond Building

Putrajaya Low carbon city



GREEN CITY INITIATIVES

Focus Area 1:	Planning, Urban Design & Building
Focus Area 2:	Integrated Nature Into The Urban Fabric
Focus Area 3:	Transportation & Mobility
Focus Area 4:	Energy Usage
Focus Area 5:	Water Usage
Focus Area 6:	Solid Waste Management
Focus Area 7:	City Administration & Management

INVENTORY OF PUTRAJAYA GREENHOUSE GAS EMISSIONS 2012

Inventory Result

Carbon Emissions from Building Sector

Carbon Emissions from Transportation Sector

Carbon Emissions from Waste Sector

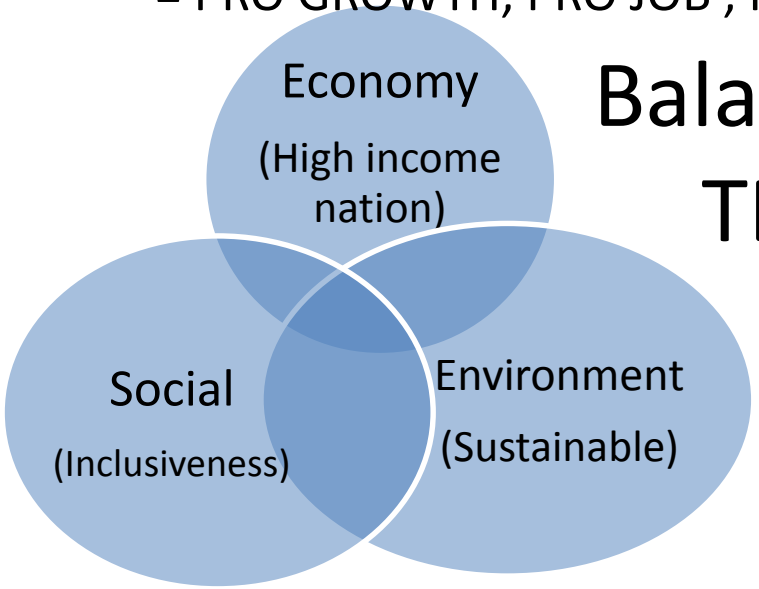
Conclusion

Sustainable development approach/ Climate Actions

Science (R &D) + Policies (LCS) = Actions (LP or SP, NPP)

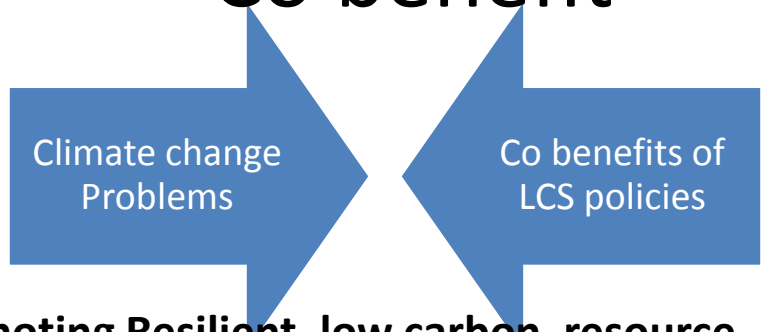
S2A

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



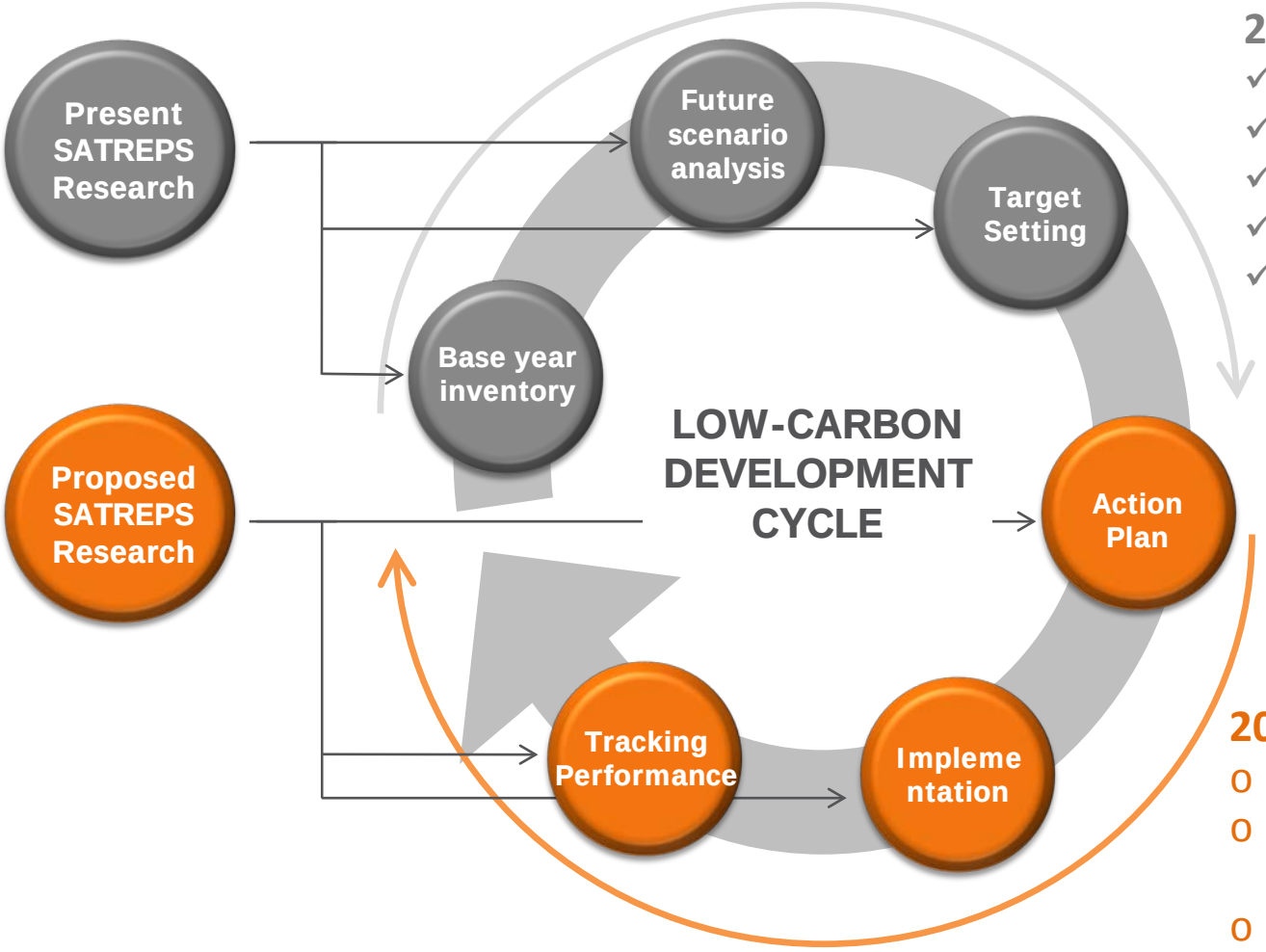
Balanced TBL

Co benefit



Promoting Resilient, low carbon, resource efficient and socially inclusive development

(The importance of Implementation and Monitoring)



2011 - 2016

- ✓ LCS baseline study
- ✓ LCS scenario development
- ✓ GHG modelling
- ✓ LCS policy design
- ✓ IM (regional) level action plan

2016 - 2021

- o City level detailed action plan
- o Sectorial specific strategic mitigation
- o Adaptation
- o Carbon monitoring

Thank You Terima Kasih 谢谢 धन्यवाद ありがとう

Thank you for your attention!

ho@utm.my