Development of
Low Carbon Society Scenarios for Asian Regions

COP 18 Side Event
Doha 30 November 2012

Bridging Science and Policy Making: Low Carbon Future

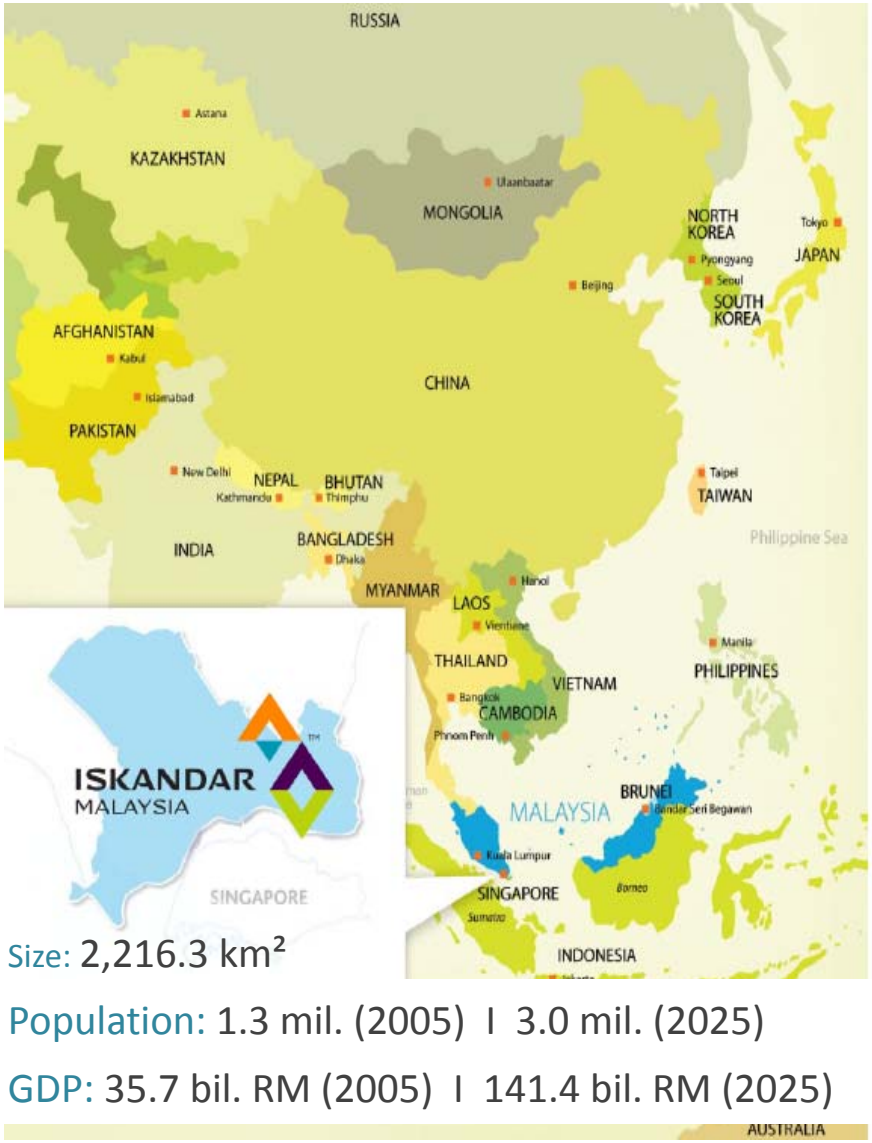
The Case of UTM and Iskandar Malaysia

Ho Chin Siong
Universiti Teknologi Malaysia

Background

Iskandar Malaysia: Key Challenges

Voluntary 40% reduction of CO_2 emission intensity by 2020



Size: 2,216.3 km²

Population: 1.3 mil. (2005) I 3.0 mil. (2025)

GDP: 35.7 bil. RM (2005) I 141.4 bil. RM (2025)

Issues

_ Rapid urbanization and industrialization

_ Relatively high carbon intensity dependence on fossil fuel

_ High private car ownership

_ Low density development and urban sprawl

_ Low efficiency appliances

Government Policy Directions

_ National Green Technology Policy

_ National Policy on Climate Change

_ National Renewable Energy Policy and Action Plan

_ National Policy on the Environment

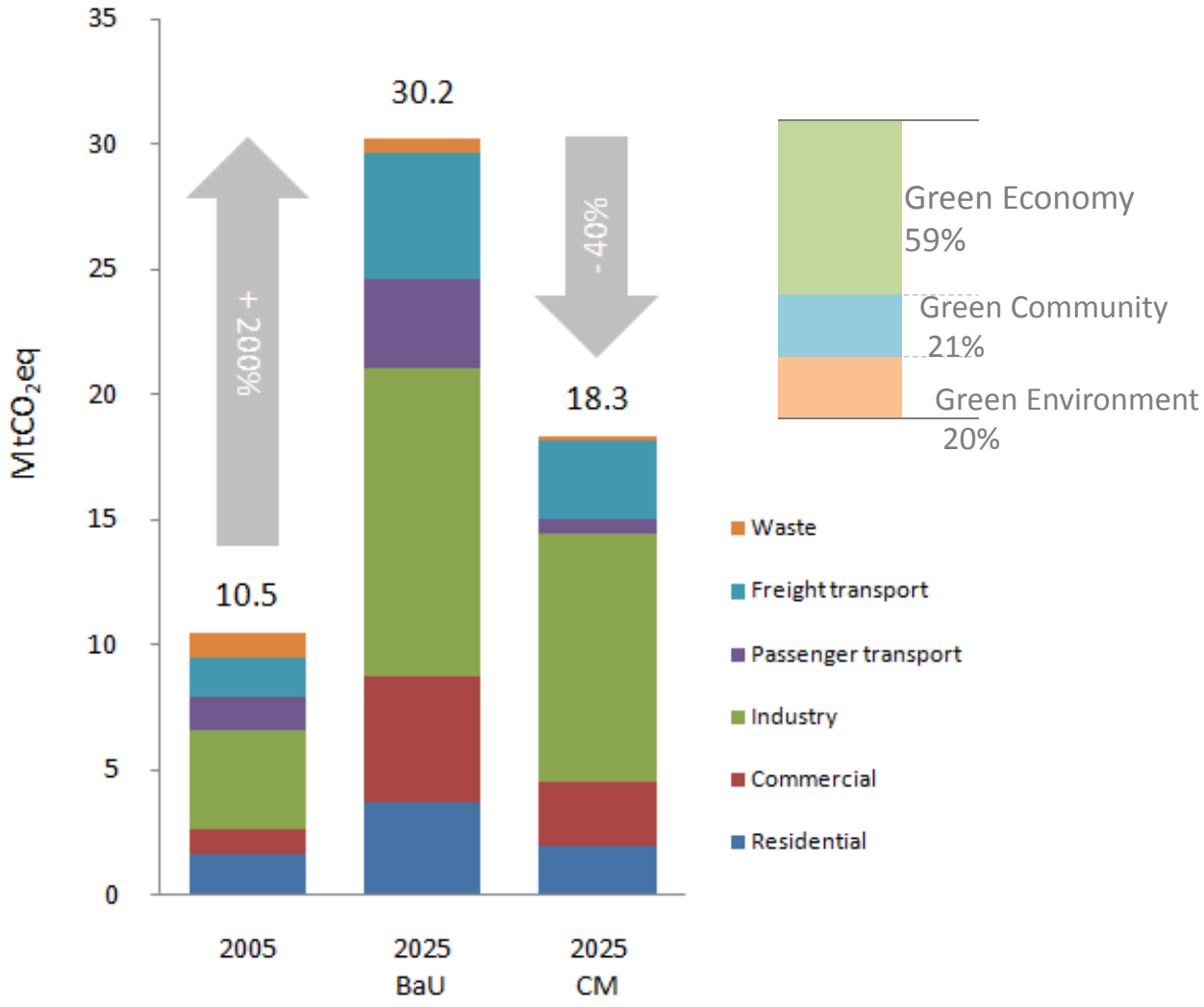
_ 10th Malaysia Plan

_ Green Neighborhood Planning Guideline

_Low Carbon Cities Framework and Assessment System

04 Potential Mitigation Options for Iskandar Malaysia

Green Economy, Green Community and Green Environment



Unit	2005	2025 BaU	2025 CM	2025Ba U /2005	2025CM /2005
Final Energy Demand (Mtoe)	2.5	7.6	5.2	3.11	2.14
GHG emissions (MtCO2eq)	10.5	30.2	18.3	2.88	1.74
Per Capita CO2 Emissions (tCO2eq)	7.7	10.1	6.1	1.30	0.78
GHG Intensity (kgCO2eq/RM)	0.29	0.21	0.13	0.73	0.44

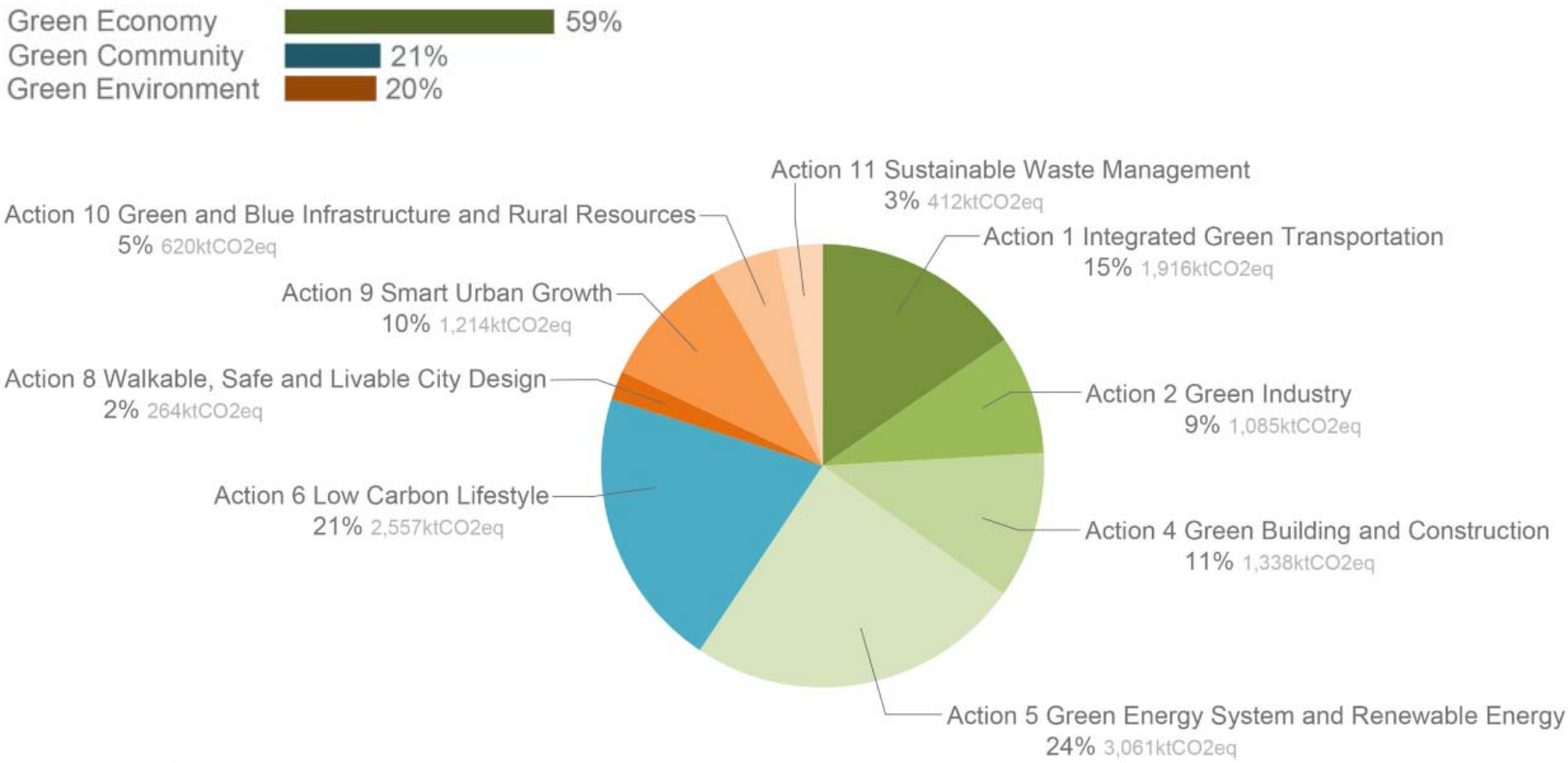
04 Potential Mitigation Options for Iskandar Malaysia

12 Actions Towards Low Carbon Future

Mitigation Options	CO2 Reduction	%
Green Economy	**7,401**	**59%**
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%
Green Community	**2,557**	**21%**
Action 6 Low Carbon Lifestyle	2,557	21%
Action 7 Community Engagement and Consensus Building**	-	-
Green Environment	**2,510**	**20%**
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**	-	-
Total	12,467**	100%

04 Potential Mitigation Options for Iskandar Malaysia

12 Actions Towards Low Carbon Future



05 Conclusion

The Way Forward

Quantification from LCS modeling assist **better understanding** on impact of proposed actions, sub actions and programs.

Good **baseline study, consensus building and low carbon blueprint plan** 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**/ behavior and **Joint effort** between different professions (Planners, architect, engineer and related environmental profession)

Important to have a Asian (eg IGES & AIM workshop) **and International platform** for **research collaboration** between researchers in LCS as well as **capacity building opportunities.**

Thank you for your attention!

Thank You Terima Kasih 谢谢 धन्यवाद ありがとう