

## ASIA-PACIFIC SEMINAR ON CLIMATE CHANGE 2016 – Implementation of INDC and Post-2020 Enhanced Transparency Framework

### MALAYSIA'S INDC IMPLEMENTATION UPDATES

20-21 JUNE 2016 PHUKET, THAILAND

### **MALAYSIA – KEY STATISTICS**

Population	29.9 million
Area	329,847 sq km
GDP Growth	5.0%~6.0%
Per capita income	USD11,307
Forested Area	54.3 % (2011)

### GHG Inventory by Sectors (2011) - CO2 eq (Gg)

Energy (including Transport)	218,913
Industrial Processes	18,166
Agriculture	15,775
Waste	34,885
LULUCF (sink)	-262,946
Total	27,283

Source: Malaysia's Biennial Update Report, 2015

### **GROUP DISCUSSION**

Group Discussion 1: Updates on NDC implementation and other related actions as well as long-term low emission development strategies.

- 1. What is the current status of preparation for NDC implementation in each country, including development of roadmap or detailed plan, etc.?
- 2. How does each country plan to implement its NDC in the future?

### Malaysia's Voluntary Indicator

The Prime Minister of Malaysia announced in COP 15 Copenhagen (2009) that:

"Malaysia has adopted a voluntary indicator to reduce its greenhouse gas (GHG) intensity of GDP by up to 40% by 2020 relative to emissions intensity of GDP in 2005, fully conditional upon receipt of climate finance, technology transfer and capacity building from developed countries"

At the United Nations Climate Summit in 2014 – The Prime Minister announced that "Malaysia was well on track to hit a 40% reduction by 2020."

## A ROADMAP OF EMISSIONS INTENSITY REDUCTION IN MALAYSIA

- Completed in 2014
- Provide a detailed analysis of mitigation options and potentials in key emitting sectors till 2030
- A roadmap for each of the key sectors in terms of mitigation suggestions (short, medium and long term)
- includes the technology needs assessment and low carbon economy approaches to climate change mitigation.

### Malaysia's INDC

"Malaysia intends to reduce its greenhouse gas (GHG) emissions intensity of GDP by 45% by 2030 relative to the emissions intensity of GDP in 2005. This consists of 35% on an unconditional basis and a further 10% is conditional upon receipt of climate finance, technology transfer and capacity building from developed countries"

### Mitigation Initiatives for the GHG Reduction

Sector	Mitigation Action
Energy	Renewable Energy development  Feed-in Tariff (FiT) mechanism  non- FiT regulated public and private licensees and other mechanisms  (Off-grid biomass & biogas, hydropower and Utility-scale Solar PV)  Use of palm-based biodiesel for transport sector  Development and application of green technology  Implementation of green building rating scheme

### Mitigation Initiatives for the GHG Reduction

Sector	Mitigation Action			
	Promotion of efficient electricity consumption in all Federal Government ministry buildings			
Energy	Development and usage of energy-efficient vehicles (EEVs)			
	Use of compressed natural gas (CNG) in motor vehicles			
	Rail-based public transport			
LULUCF	Emissions reduction through sustainable management of			
	forest			
	- Gazettement under CFS and HoB			
	- Other gazettement			
	Waste paper recycling			
Waste	Biogas capture from palm oil mill effluent (POME) treatment			

Source: Malaysia's Biennial Update Report, 2015

# GHG EMISSIONS THROUGH LINEAR TREND ANALYSIS (For discussion purposes only)

## ROADMAP OF EMISSIONS INTENSITY REDUCTION IN MALAYSIA STUDY: 2014 (Units: M tonnes)

Sector	2005	2020 BAU	2020 AMB	2030 BAU	2030 AMB
ENERGY)	204.4	314.0	260.63	471.20	331.30
INDUSTRIAL PROCESSES	35.5	35.5	31.5	49.2	40.9
AGRICULTURE	6.6	7.2	5.8	8.3	6.7
WASTE	27.4	46.6	14.7	57.3	17.7
LULUCF net emissions	-215.2	-399.1	-405.7	-381.0	-386.6
Total without LULUCF (Approach 1)	253.9	390.08	302.45	570.64	385.89
Total with LULUCF emissions only (Approach 2)	279.2	422.74	328.48	598.68	408.32
Total with LULUCF (Approach 3)	38.7	-9.06	-103.22	189.68	-0.68

## ROADMAP OF EMISSIONS INTENSITY REDUCTION IN MALAYSIA STUDY: 2014

Sector	2005	2020 BAU	2020 AMB	2030 BAU	2030 AMB
GDP (RM billion 2000 price)	449.250	961.214	961.214	1,463.191	1,461.191
Emission Intensity (without LULUCF) Approach 1	0.565	0.406	0.315	0.390	0.264
Emission Intensity (with LULUCF emissions only) Approach 2	0.621	0.440	0.340	0.409	0.279
Emission Intensity (with LULUCF) Approach 3	0.086	(0.009)	(0.107)	0.130	0.001
Reduction in Emission Intensity from 2005 (without LULUCF)  Approach 1		-28%	-44%	-31%	-53%
Reduction in Emission Intensity from 2005 (with LULUCF emissions only) Approach 2		-29%	-45%	-34%	-55%
Reduction in Emission Intensity from 2005 (with LULUCF)  Approach 3		-111%	-225%	50%	-101%

### **Issues & Gaps**

## Institutional Arrangement

Dedicated institution for CC

Coordination between federal & state governments

#### **Finance**

Access to funding: GCF, GEF

Mitigation:
 REDD+,
reforestation,
transport, RE,
 EE, etc.

Adaptation: flood, infrastructure, agriculture, climate projection, SLR

### **Technology**

Technology Need Assessment (TNA)

New technology: waste management, nuclear power plant, etc.

### **Capacity Building**

Tracking supports received and effectiveness

Capacity
building on
transparency &
accounting, NDC
implementation

### **THANK YOU**