Development of National GHG Inventory System: The Malaysia Experience

11th Workshop on GHG Inventories in Asia (WGIA11)



Department of Environment Ministry of Natural Resources & Environment MALAYSIA

OVERVIEW MALAYSIA CLIMATE CHANGE ACTION



INSTITUTIONAL ARRANGEMENTS

National Green Technology and Climate Change Council



National Steering Committee on Climate Change

NC2 Steering Committee

NC2 Program Management Group (chaired by MNRE)

GHG Inventory Mitigation Adaptation

NATIONAL GREEN TECHNOLOGY & CLIMATE CHANGE COUNCIL



DASAR PERUBAHAN IKLIM NEGARA

NATIONAL POLICY ON CLIMATE CHANGE

NATIONAL POLICY ON CLIMATE CHANGE



Kementerian Sumber Asli dan Alam Sekitar Malaysia Ministry of Natural Resources and Environment Malaysia

NATIONAL POLICY ON CLIMATE CHANGE

POLICY STATEMENT Ensure climate-resilient development to fulfil National aspirations for sustainability

OBJECTIVES

1. Mainstreaming climate change for strengthened competitiveness and improved quality of life;

2. Integration of climate change responses into policies, plans and programmes

3. Strengthening of institutional and implementation capacity.

PRINCIPLES

P1: Development on a Sustainable Path	P2: Conservation of Environment and Natural Resources	P3: Coordinated Implementation	P4: Effective Participation	P5: Common But Differentiated Responsibilities
	STRATEGIC	THRUSTS & KEY	ACTIONS	
ST1:Facilitate harmonisation of existing policies & institutions :	ST4: Strengthen environmental &	ST6: Integrate cross-cutting	ST8: Improve collaboration; &	ST10: Strengthen
ST2: Institute measures on	resource conservation: and	issues; and ST7: Support	ST9: Increase Awareness &	involvement in international programmes [4 key actions]
ST2: Support climate resilient	ST5: Consolidate	Knowledge-based	Community participation.	
Investment.	the energy policy.	decision making.		
11 Key Actions	12 Key Actions	10 Key Actions	6 Key Actions	4 Key Actions

GHG INVENTORY WORKING GROUP





Land Use, Land Use Change and Forestry Forest Research Institute Malaysia (FRIM)



Waste Sector Department of Environment (DOE)

NATIONAL COMMUNICATION

Malaysia **Initial National Communication** submitted to the United Nations Framework Convention on Climate Change

MINISTRY OF SCIENCE, TECHNOLOGY AND THE ENVIRONMENT July 2000



MALAYSIA



SUBMITTED IN 2000

SUBMITTED IN 2011

MALAYSIA PLEDGE AT COP 15, COPENHAGEN 2009

UNITED NATION

"...to announce here in Copenhagen that Malaysia is adopting an indicator of a voluntary reduction of up to 40% in terms of emissions intensity of GDP by the year 2020 compared to 2005 level..." "This indicator is conditional on receiving the transfer of technology and finance of adequate and effective levels from our Annex 1 partners..."

COPENHAGEN COP15

INFO

UNITED NATIONS CLIMATE CHANGE CONFERENCE 2009

MAJOR SOURCES OF GHG EMISSION IN MALAYSIA (YEAR 2000)

SOURCES	EMISSIONS (Gg CO ₂ eq)	%
Energy Industries	58,486	30.0
Transport	35,587	18.4
Manufacturing	26,104	13.5
Landfills	24,541	12.7
Fugitive Emissions from Oil & Gas Systems	21,987	11.4
Mineral Products	9,776	5.1
Others	17,060	8.9



IMPROVEMENTS IN SECOND NATIONAL COMMUNICATION

- Revised 1996 IPCC Guidelines were used.
 - INC -1995 IPCC Guidelines
- Key categories disaggregated and expanded in Energy Sector.
 - INC Reference Approach
 - SNC Sectoral Approach
- Additional key categories are included in IPPU & LULUCF sector.
- Good Practice Guidance (2000) characteristics are adopted to improve transparency, consistency, comparability, completeness and accuracy in the inventory.

KEY CATEGORIES	INC 1994	SNC 2000
Industrial Processes		
Mineral Products Cement production Lime production Limestone & dolomite production 	/ - -	
Chemical Industry Ammonia production Nitric Acid production Carbide production Petrochemicals 	- - - -	
Metal Production Iron & Steel production	-	/
Land Use, Land Use Change & Forestry		
Natural Forest Permanent forest reserve State land 		1
Plantation Forest	/	/
Plantation CropsRubberOil Palm	/	/
Urban Forestry	-	1
Bamboo & Rattan	-	1
Abandonment of Managed Land	-	/
Soil	-	/

KEY CATEGORIES COMPARISON BETWEEN INC & SNC

FUTURE IMPROVEMENTS

- Development of National GHG Inventory Software (adapted from IPCC 2006 Inventory Software).
- National Corporate Reporting Program (MyCarbon) on voluntary basis.
- Studies to develop country specific emission factors.
- Knowledge development for GHG inventory compiler in various agencies.

