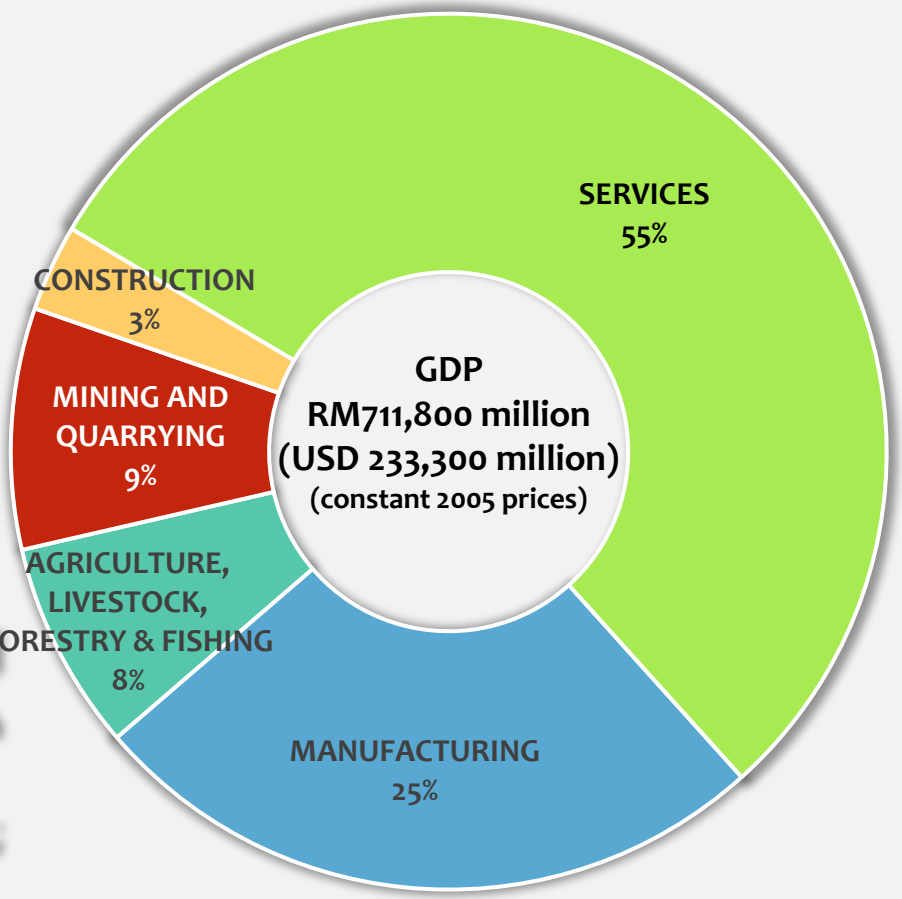
FACILITATIVE SHARING OF VIEWS

MALAYSIA

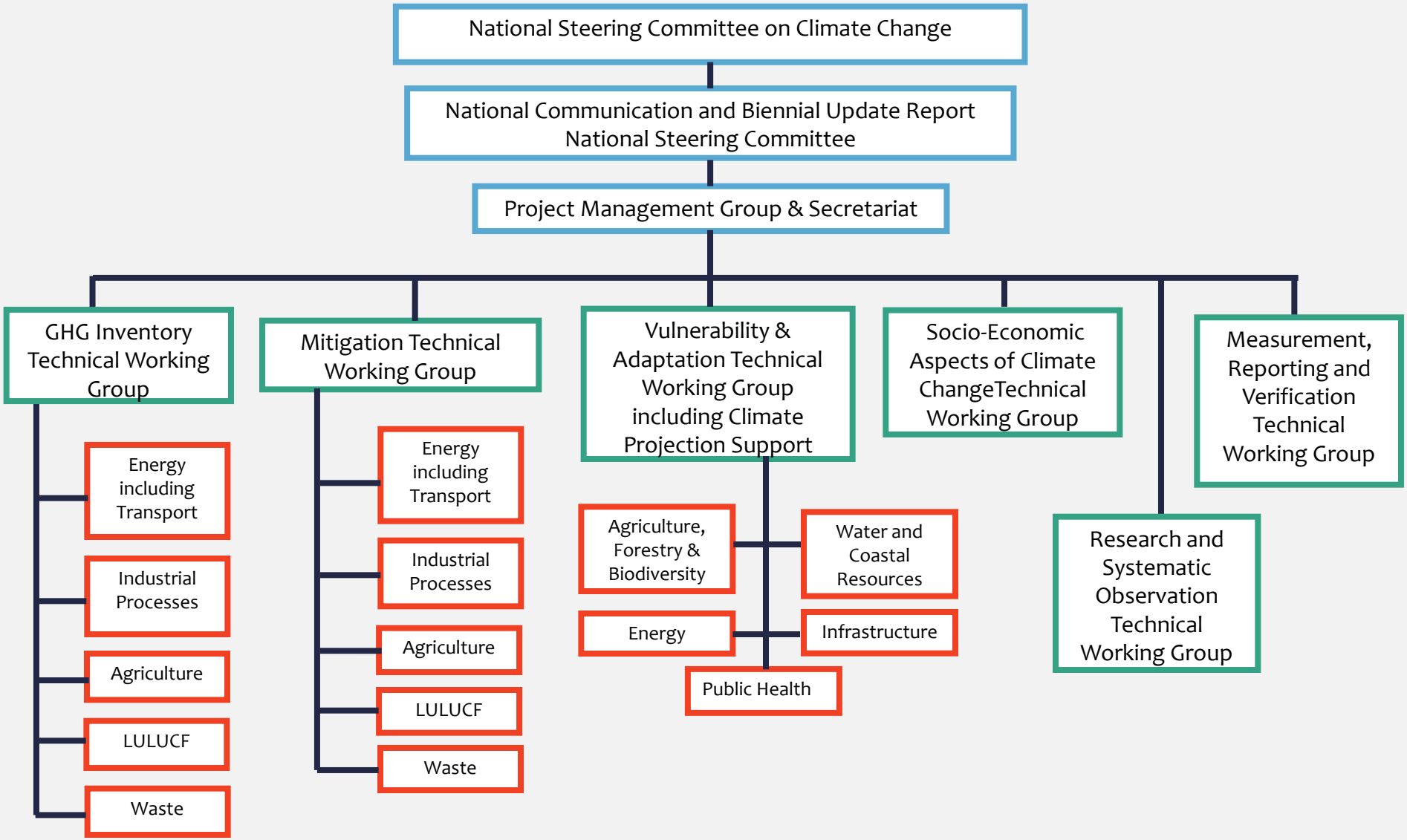
15 MAY 2017

NATIONAL CIRCUMSTANCES IN 2011

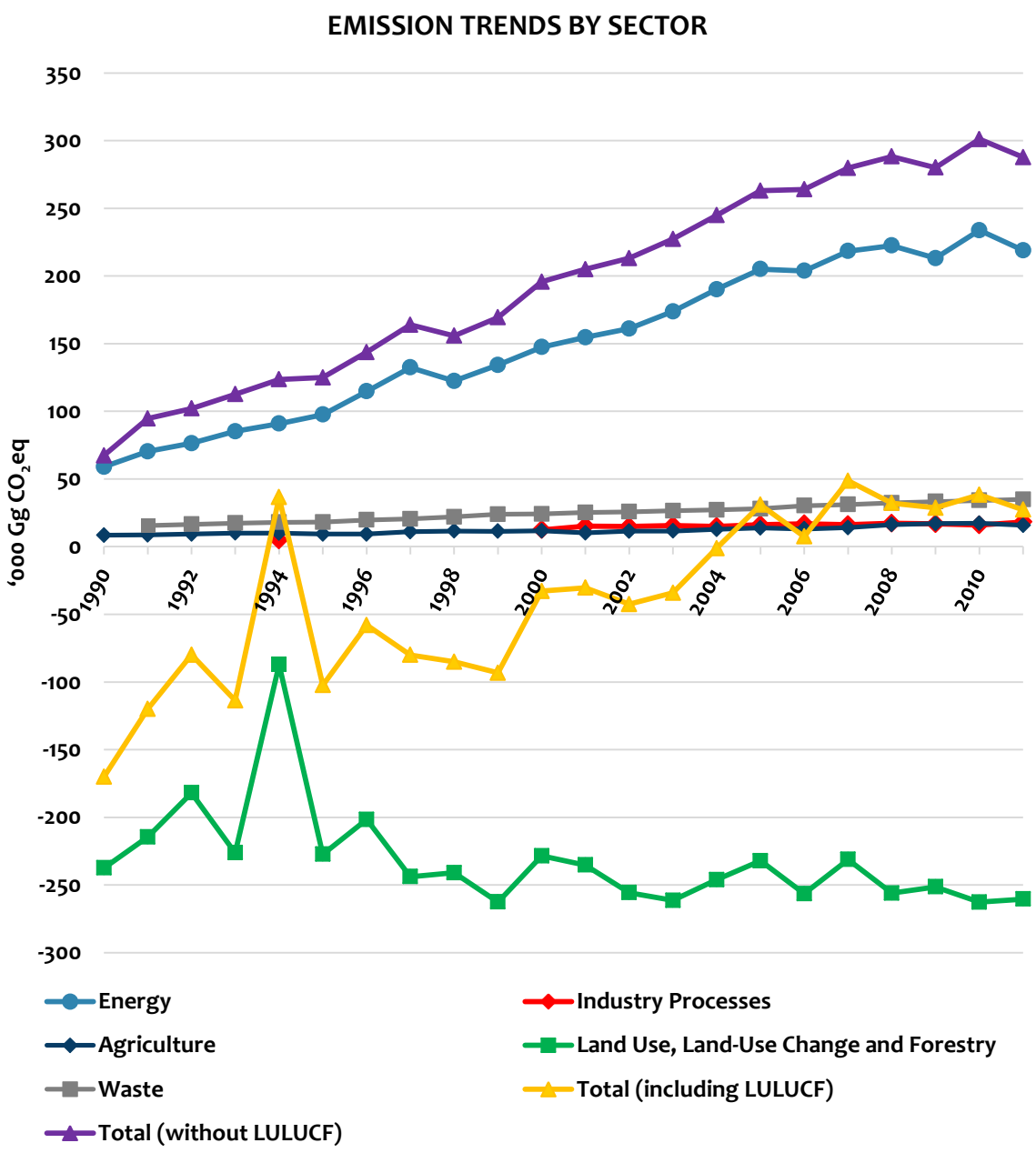


AREA	POPULATION	CLIMATE	FOREST COVER	MAIN AGRICULTURE CROP (OIL PALM)	PRIMARY ENERGY SUPPLY	ENERGY DEMAND
330,183 km²	29.1 Million	Moist Equatorial	54%	5,000,110 ha	79,289 ktoe	43,456 ktoe

INSTITUTIONAL ARRANGEMENTS FOR NC & BUR



GHG INVENTORY

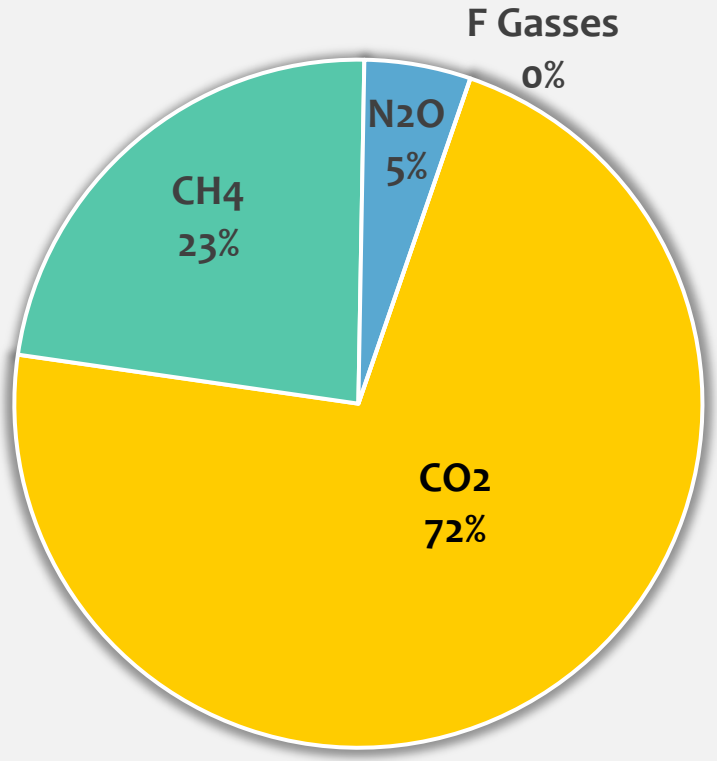


SECTOR	EMISSIONS/ REMOVALS FOR 2011 ($Gg\ CO_2eq$)	PERCENT EMISSIONS
Energy	218,913	76 %
Industrial Processes	18,166	6 %
Agriculture	15,775	5 %
LULUCF (Emissions)	2,489	1 %
Waste	34,885	12 %
Total emissions	290,229	100 %
Total sink	-262,946	
Net total (after subtracting sink)	27,283	

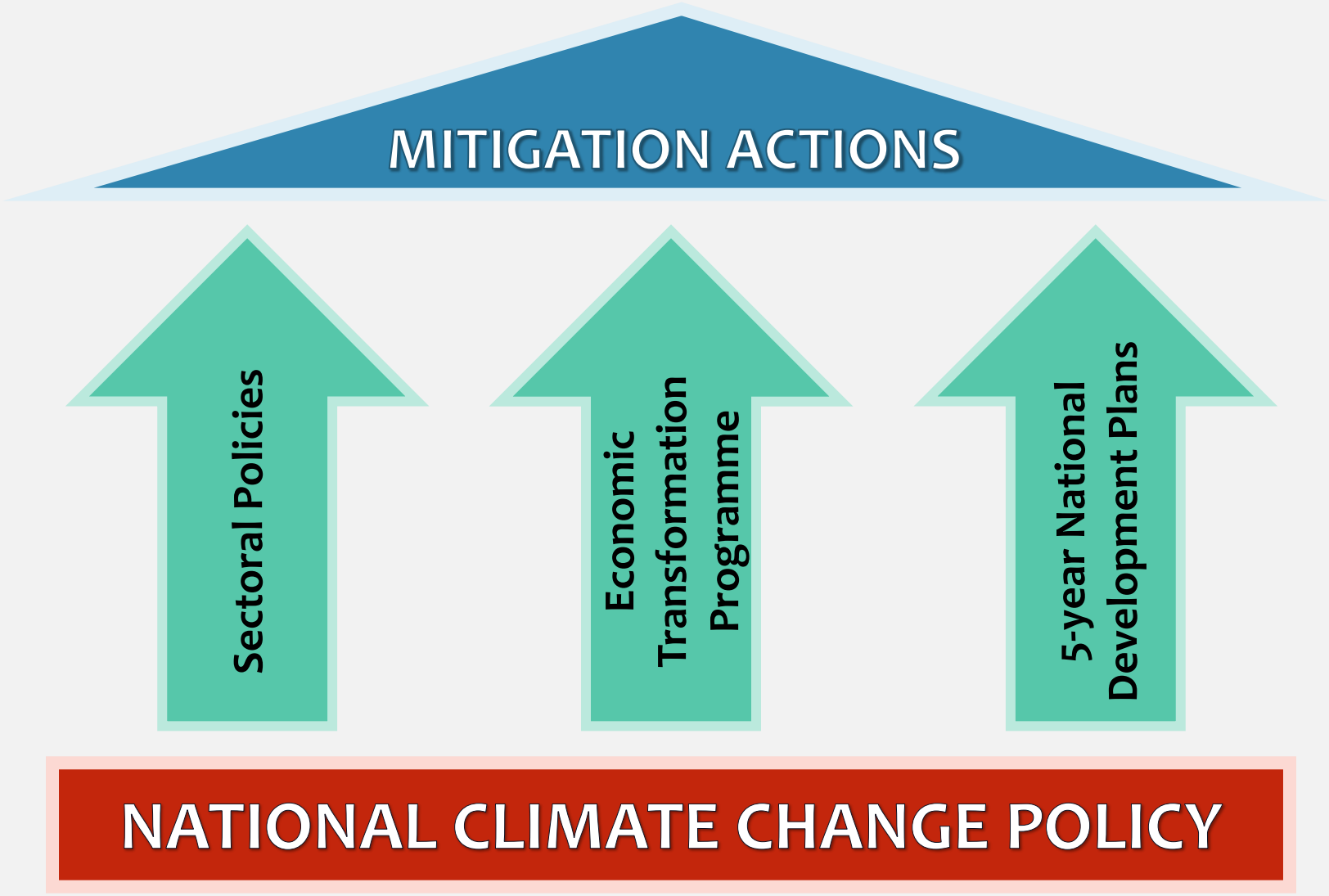
GHG INVENTORY

TOP 8 KEY CATEGORIES – WITHOUT LULUCF (2011)

SECTOR	KEY SOURCE	GAS	CURRENT YEAR ESTIMATE ($Gg\ CO_2eq$)	LEVEL ASSESSMENT (%)
Energy	Energy industries: Public electricity	CO_2	87,885	30.5%
Energy	Transport: road transportation	CO_2	41,601	14.4%
Waste	Solid waste disposal sites	CH_4	31,127	10.8%
Energy	Fugitive emissions from oil and gas operations	CH_4	29,536	10.2%
Energy	Manufacturing industries and construction	CO_2	23,003	7.9%
Energy	Energy industries: Natural gas transformation	CO_2	22,920	7.9%
Agriculture	Agricultural soils	N_2O	10,943	3.8%
Industrial Processes	Mineral products: Cement production	CO_2	7,766	2.7%



MITIGATION RELATED POLICIES AND PLANS



MITIGATION RELATED POLICIES AND PLANS (con't)

Sectors	Interventions	Policies & Plans
Energy	RE as Fuel Mix Energy Efficiency in Industry, Commercial & Residential Sectors	• National RE Policy & Action Plan • National Energy Efficiency Action Plan
Transport	Energy Efficiency in Transport Modal Shift to Public Transport in Urban Areas	• National Transport Master Plan • National Automotive Policy • Biodiesel Policy
LULUCF	Sustainable Forest Management	• National Forestry Policy • National Biodiversity Policy • National Commodity Policy
Agriculture	Good agriculture practices Agriculture productivity Optimum use of fertilisers	• National Agrofood Policy
Waste	Recycling Methane Capture in POME	• National Strategic Plan for Solid Waste Management

MITIGATION ACTIONS AND THEIR EFFECTS

DOMESTIC ACTIONS

SECTOR	ENERGY	LULUCF	WASTE	TOTAL
EMISSION REDUCTION ACHIEVED IN 2013 ($Gg\ CO_2eq$)	2,487	13,797	2,294	18,578
POTENTIAL EMISSION REDUCTION IN 2020 ($Gg\ CO_2eq$)	13,217	13,800	5,161	32,178

INTERNATIONAL MECHANISM

($tonnes\ CO_2\ eq$)

CLEAN DEVELOPMENT MECHANISM (April 2015)

Total CERs issued	9,844,435

VERIFIED CARBON STANDARD (April 2015)

Total VCUs issued	545,319
Total VCUs retired	120,272

MITIGATION ACTIONS AND THEIR EFFECTS

	MITIGATION PROGRESS INDICATORS	Without LULUCF	With LULUCF Emissions only
Percentage Increase between 2005 and 2011	CO_2eq Emissions per Capita	-1.9 %	-9.8 %
	CO_2eq Emissions per GDP	-16.4 %	-23.2 %

DOMESTIC MRV ARRANGEMENTS

- MRV through TWG and external experts
- Members of MRV TWG consists of multi-agency experts
- GHG Inventory MRV follows more robust procedure
- Mitigation actions MRV requires further enhancement

CHALLENGES AND BARRIERS

INSTITUTIONAL FRAMEWORK

- Operationalising robust MRV System

GHG INVENTORY

- Availability of activity data according to IPCC Guidelines requirements
- Country specific emission factors

MITIGATION ACTIONS

- Most mitigation actions arise as co-benefits
- Information not always available for quantification

HUMAN RESOURCE

- Insufficient technical capacity for implementation and quantification

SUPPORT RECEIVED AND NEEDED

Support Received Since 2010

	MITIGATION	ADAPTATION	CAPACITY BUILDING	CROSS-CUTTING
TOTAL	USD20,844,790 & £25,500	USD48,000	USD1,300,132	USD1,758,795 €6,000,000 £35,000

Needs

	FINANCE	TECHNOLOGY	CAPACITY BUILDING
MITIGATION	RE FiT • MYR 580 million one-off • MYR 850 million annually long-term	Geo-thermal	• Robust MRV System • GHG Accounting • Projection Modelling • Needs Assessment
	REDD+ USD 400 million	Forest Monitoring System	
GHG INVENTORY		GHG Inventory System	

PREPARATION OF BUR AND ICA PROCESS

INSTITUTIONAL ARRANGEMENT

- Greater ownership of BUR built across key information providers
- TWGs comprise of key stakeholders to ensure ownership

MRV SYSTEM

- Operationalised a system for continuous data collection and timely reporting
- Tracking progress of mitigation actions
- Improving methodologies for quantifying mitigation effects

CAPACITY BUILDING

- Increased the capacity of national GHG inventory compilers
- International collaboration has enhanced targeted areas

ENHANCED AWARENESS ON CLIMATE ACTIONS AMONGST KEY STAKEHOLDERS WHEN PREPARING FOR ICA

- Increased willingness to share data
- Increased awareness of transparency

AREAS OF IMPROVEMENT SINCE TECHNICAL ANALYSIS

OVERALL

- Improved understanding of the UNFCCC decisions on BUR in particular reporting requirements

GHG INVENTORY

- Stakeholders further improving their data collection and reporting
- Moving towards 2006 IPCC Guidelines
- Increased transparency, completeness and accuracy of Inventory

MITIGATION

- More mitigation programmes planned
- Greater commitment by implementing agencies on quantification.

RESPONSE TO QUESTIONS RECEIVED

Questions from European Union and France

Question on missing historical data for GHG inventory (from EU and France):

- Malaysia is engaging with the relevant stakeholders. Additional data are being collected for the following areas:
  - For the waste sector, the biological treatment of solid waste, open burning of waste and incineration;
  - For the industrial processes sector, historical data for the cement production and petrochemical subsectors have been obtained from 1990 onwards;
  - For the transport sector, engagement with the stakeholders are on-going to improve the historical data.

Question on sinks (from France) :

- Although the total forest area had declined between 1994 and 2011, more forest areas were managed under sustainable management of forest (increased from 12.6 million ha in 1994 to 13.6 million ha in 2011).
- During the same period, the tree crop area increased from 4.15 million ha to 6.05 million ha. These increment contributed to the increase in sinks.

RESPONSE TO QUESTIONS RECEIVED

Questions from European Union

Question on LULUCF sector GHG Inventory :

- Malaysia has provided assumptions for the grassland, wetlands and settlements.
- For those sub-categories, no changes in carbon stocks or management occurred.
- For wetlands no new draining of peatlands and peat extraction activities occurred in 2011.
- Hence no estimates were made.

Question on BUR guidelines:

- Interpretation of the BUR guidelines vary between countries, TTE and UNFCCC secretariat.
- More training would enhance common interpretation of the guidelines.

THANK YOU