Greenhouse gas Inventory Office of Japan

Transport WG
Result of Questionnaire

WGIA Secretariat
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14 July 2010, Phnom Penh, Cambodia
9th Workshop on GHG Inventories in Asia

Result of Questionnaire

- Surveyed items are the following.
  - Category & Gas
  - Emission Trend
  - Activity Data and Statistics
  - Emission Factors
  - Bunker Fuel
  - Issue and Challenge

  (- Comment /Question)

- Respondent countries are the following.

  Thailand, Myanmar, China, Laos, Philippine, Mongolia and Japan

  (7 countries)

Category and Gas

➢ Q1. Estimated Categories and Gases

	Road transport	Civil aviation	Railway	Navigation
CHN	E	E	E	E
THA	E	E	E	E
MMR	E	E	CO_2:E CH_4,N_2O:NE	CO_2:E CH_4,N_2O:NE
LAO	E	E	NE	NE
PHL	E	E	E	E
MNG	E	E	E	NE
JPN	E	E	E	E

E: estimated
NE: Not estimated (including ‘Not Occur’ and ‘Not Applicable’)

Emission Trend

➢ Q2. Emission Trend and proportion of transport

	Year	*Proportion* Transport /Total	*Proportion* Road /Transport	Emissions trend during the period
CHN	1994			
THA	1994, 2000-2004	30% of Energy		Increased steadily
MMR	2000-2006	28%	83%	Fluctuated
LAO	2000 (and 1994)		67%	Increased steadily
PHL	(1994 and 2000)		87%	
MNG	1990-2006	17%	79%	Beginning of ’90s decreased, from mid of ’90s increased
JPN	1990-2009	20%	90%	’90s increased, 2000s decreased

Activity Data and Statistics

➢ Q3. Subcategories of AD in Road Transport to estimate CO_2

	Sub-categories in Road transportation	
CHN	Passenger Vehicles (Large, Medium, Small, Minicar) Passenger Car	Freight, Freight Truck and Lorry (Heavy, Medium, Light, Mini)
MMR	Passenger car (Gasoline / Diesel Oil) Passenger Bus (Gasoline / Diesel Oil) Two Wheeler (Gasoline)	Heavy/Light Duty Truck (Gasoline / Diesel Oil,CNG)
PHL	Car Motorcycle/Tricycle(Gasoline) Bus (Gasoline/ Diesel Oil) Utility vehicle ((Gasoline/ Diesel Oil)	Trucks in general (Gasoline/ Diesel Oil)
JPN	Passenger Car (Gasoline, Diesel oil, LPG) Passenger Bus (Gasoline, Diesel oil)	Freight, Freight Truck and Lorry (Gasoline, Diesel oil)
THA, LAO, MNG: Road transport doesn't have any disaggregated level.		

Activity Data and Statistics

- Q3. Statistics of AD in Road Transport to estimate CO_2

	Statistics	Publisher (Ministry / Department)	Collection method
CHN	Energy Statistical Yearbook, Transportation statistical Yearbook	National Bureau of Statistics of China	Sample survey by questionnaire
THA	Statistics of secondary data from national report on energy situation in Thailand	(secondary data) Department of Alternative Energy Development and Efficiency	
MMR		Road Transport Administration Department	
LAO	Statistical Yearbook of Transport	Ministry of Public Work and Transport	Sample survey by questionnaire
	Import and export statistics	Ministry of Industry and Commerce	Though record at the check points
PHL		Dept. of Transport and Communications	
MNG		Road Inspection Agency	
JPN	Statistical Yearbook of Motor Vehicle Transport	Ministry of Land, Infrastructure, Transport and Tourism	Sample survey by questionnaire

Activity Data and Statistics

➢ Q3. Statistics of AD other than Road Transport (to estimate CO_2)

	Statistics	Publisher (Ministry / Department)	Collection method
CHN	Energy Statistical Yearbook, Transportation statistical Yearbook	National Bureau of Statistics of China	sample survey by questionnaire
THA	Statistics of secondary data from national report on energy situation in Thailand	(secondary data) Department of Alternative Energy Development and Efficiency	
MMR		Myanmar Airways, Myanmar Railways, Ministry of Transport	
LAO	Lao aviation annual statistics and report		
	Import and export statistics	Ministry of Industry and Commerce	Though record at the check points
PHL		Dept. of Transport and Communications	
MNG	(Railway)	Railway Management Agency	
	Mongolian civil aviation statistics	(Aviation)	
JPN	Statistical Yearbook of Air Transport, Stat. Yearbook of Railway Transport,	Ministry of Land, Infrastructure, Transport and Tourism	sample survey by questionnaire

Emission Factor

- Q4. Emission Factors to estimate CO_2

		Note
CHN	CS	
THA	D(1996)	
MMR	D(2006)	
LAO	D(1996)	
MNG	D(1996)	
JPN	CS	Described in NIR

CS: Country Specific Emission Factor
D(1996): Revised 1996 IPCC Guidelines
D(2006): 2006 IPCC Guidelines

Bunker Fuel

- Q5. Separate international bunker fuel from national domestic fuel consumption? If yes, please describe statistics and estimation method.

	Shipping		Aircraft	
CHN	Yes	China Customs Statistics Yearbook	Yes	same as on the left
THA	No		No	
MMR	Yes	Myanma Petroleum Product Enterprises data includes national domestic fuel and international bunker fuel. Bunker fuel estimation based on Statistical Year of Myanmar.	Yes	Myanma Petroleum Product Enterprises data includes national domestic fuel and international bunker fuel. Myanma Airways includes only domestic fuel.
LAO	No	*Domestic consumption is NE.*	Yes	Data of fuel used for aviation is separately recorded by Lao Aviation and Import and export department of Ministry of Industry and Commerce.
PHL	Yes		Yes	
MNG	No	*Domestic consumption is NE.*	No	
JPN	Yes	Yearbook of Mineral Resources and Petroleum Products Statistics	Yes	same as on the left

Issue and Challenge

- Q6. Issue and Challenge

CHN	**The activity data collection is main challenge** in China due to the rapidly increase of automobiles. With the enhancement and application of new techniques, the EFs will be adjusted in the future.
THA	**The investigation of data activity** that can support the completion of national communication report with respect to availability of domestic know-how and sufficient technology.
MMR	(1) **Updating inventory data is required** on a continuous basis in order to facilitate various related energy software. (2) **Absence of national air quality standards** make it harder for the authorities to implement pollution control measures. (3) **Monitoring equipment is required** to inspect the actual emission performance of motor vehicles.
LAO	**There is neither record nor study of the fuel combustion** in transport and transport sub-sectors including types of vehicles. Existing imported fuel data is different from one another and seems sensitive to share.
PHL	The Department of Energy is responsible for the calculation of GHG emissions. The GHG emissions from the transport subsector is being managed by the Dept. of Transport and Communications. System of data collection and compilation has to be in place**. Data should be of easy access.** **There should be logistical support for procurement** of quality instruments for measuring GHGs. **Capacity building** for people involved in GHG measurements such as is also necessary.