



Session II-1: Hands-on Training using the new IPCC Inventory Software Summary for Wrap Up

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Participants

(1) On Energy/IPPU

From Cambodia, India, Indonesia, Republic of Korea, Malaysia, Mongolia, Myanmar, Philippines, Thailand, USEPA, US LEAD Program, SEA-Project, Australia, JICA-Indonesia, Kyushu Univ., MURC, SUR, JICA Vietnam

***Over 40 participants**

(2) On Waste

From India, Republic of Korea, China, Lao PDR, Malaysia, Myanmar, Thailand, Australia

***Over 20 Participants**



The new IPCC Inventory Software



- The IPCC has launched its *IPCC Inventory Software*
- The IPCC Software implements the 2006 IPCC Guidelines for National Greenhouse Gas Inventories
- It can also be used for reporting under the 1996 Guidelines
- *It is database based, does not depend on specific versions of MS Windows or MS Office.

On Energy/IPPU

A conclusion at Non-CO₂ Session in WGIA9

- It was recognized by the attendees that F-gases (HFCs) emissions were a potential and important missing emission source, and they showed interest in estimating F-gases (HFCs) emissions even though they are not yet “shall be reported gases”.
- the IPCC TFI TSU suggested that the **Tier.1 method of the “2006GL (NOT the 96GL)”** was very helpful for calculation.

On Energy/IPPU

2.F.1.a: Refrigeration and Air-conditioning

Production	1995	1996	1997	1998	1999	2006	2007	2008	2009	2010
HFC-32	0	0	0	135	650	33238	40356	34509	31471	27925
HFC-125	0	0	0	135	650	33238	40356	34509	31471	27925
HFC-134a	2349	3941	5196	6163	7984	33238	40356	34509	31471	27925
HFC-143a	0	0	0	0	0	0	0	0	0	0
Exports	1995	1996	1997	1998	1999	2006	2007	2008	2009	2010
HFC-32	0	0	0	67.5	325	21619	30178	27255	25736	23963
HFC-125	0	0	0	67.5	325	21619	30178	27255	25736	23963
HFC-134a	1174	1971	2598	3081	3992	30269	39203	35195	37537	34434
HFC-143a	0	0	0	0	0	0	0	0	0	0
Imports	1995	1996	1997	1998	1999	2006	2007	2008	2009	2010
HFC-32	25.17	48.81	74.87	104	152.3	10360	15974	16640	16663	17222
HFC-125	39.94	77.44	118.8	164.9	241.6	13505	19479	20536	20572	21459
HFC-134a	52.36	101.5	155.7	216.2	316.8	13149	15926	18812	23859	25022
HFC-143a	17.45	33.84	51.91	72.07	105.6	3716	4142	4604	4620	5007

On Energy/IPPU

2006 IPCC Software for National Greenhouse Gas Inventories - hirai - [Worksheets]

Application Database Inventory Year Worksheets Reports Tools Export/Import Administrate Window Help

IPCC 2006 Categories

- 2.F1.a - Refrigeration and Stationary Air Conditioning
 - 2.F1.b - Mobile Air Conditioning
- 2.F2 - Foam Blowing Agents
- 2.F3 - Fire Protection
- 2.F4 - Aerosols
- 2.F5 - Solvents
- 2.F6 - Other Applications (please specify)
 - Other Product Manufacture and Use
- 2.G.1 - Electrical Equipment
 - 2.G.1.a - Manufacture of Electrical Equipment
 - 2.G.1.b - Use of Electrical Equipment
 - 2.G.1.c - Disposal of Electrical Equipment
- 2.G.2 - SF6 and PFCs from Other Product Manufacture and Use
 - 2.G.2.a - Military Applications
 - 2.G.2.b - Accelerators
 - 2.G.2.c - Other (please specify)
- 2.G.3 - N2O from Product Uses
 - 2.G.3.a - Medical Applications
 - 2.G.3.b - Propellant for pressure equipment
 - 2.G.3.c - Other (Please specify)
- 2.G.4 - Other (Please specify)
 - Other
 - 2.H.1 - Pulp and Paper Industry
 - 2.H.2 - Food and Beverages Industry
 - 2.H.3 - Other (please specify)
 - 2.I.1 - Agriculture, Forestry, and Other Land Use
 - Livestock
 - 3.A.1 - Enteric Fermentation
 - 3.A.1.a - Cattle
 - 3.A.1.a.i - Dairy Cows
 - 3.A.1.a.ii - Other Cattle
 - 3.A.1.b - Buffalo
 - 3.A.1.c - Sheep
 - 3.A.1.d - Goats
 - 3.A.1.e - Camels
 - 3.A.1.f - Horses

Emissions from Refrigeration and Air Conditioning

Worksheet

Sector: Industrial Processes and Product Use
 Category: Refrigeration and Air Conditioning
 Subcategory: 2.F.1.a - Refrigeration and Stationary Air Conditioning
 Sheet: CHF3 Emissions

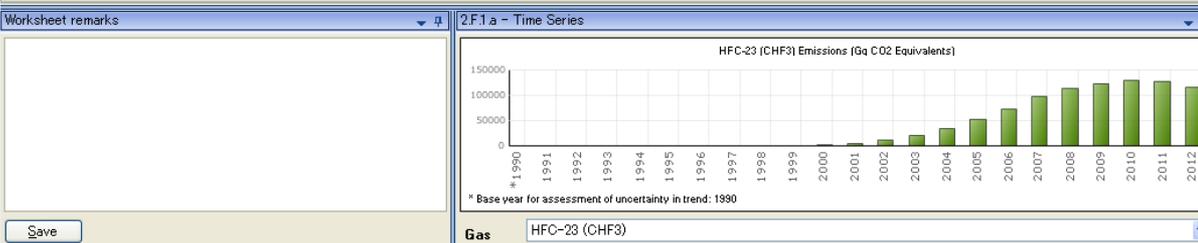
2010

Data

Gas: HFC-23 (CHF3) Intro Year: 1995 Growth Rate (%): 3 Lifetime (years): 15 EF (%): 15 Destroyed (%): 0

	A	B	C	D	E	F	G	H	I						
	Production (tonnes)	Exports (tonnes)	Imports (tonnes)	Total new agent to domestic market (tonnes)	Agent in retired equipment (tonnes)	Destruction of agent in retired equipment (tonnes)	Release of agent from retired equipment (tonnes)	Bank (tonnes)	Emissions (tonnes)						
				D = A - B + C		F = E * Recovery	G = E - F		I = H * EF + G						
			13962.5	13962.5	15.44	0	15.44	73851.06287	11093.09943						
1995	0	0	0	0	0	0	0	0	0						
1996	0	0	0	0	0	0	0	0	0						
1997	0	0	0	0	0	0	0	0	0						
1998	0	0	0	0	0	0	0	0	0						
1999	0	0	0	0	0	0	0	0	0						
2000	0	0	0	0	0	0	0	0	0						
2001	0	0	0	0	0	0	0	0	0						
2002	0	0	0	0	0	0	0	0	0						
2003	0	0	0	0	0	0	0	0	0						
2004	0	0	0	0	0	0	0	0	0						
2005	0	0	0	0	0	0	0	0	0						
2006	0	0	0	0	0	0	0	0	0						
2007	0	0	0	0	0	0	0	0	0						
2008	0	0	0	0	0	0	0	0	0						
2009	0	0	0	0	0	0	0	0	0						
2010	0	0	0	0	0	0	0	0	0						
Production	0	0	0	0	0	0	0	0	0						
Exports	0	0	0	0	0	0	0	0	0						
Imports	1	31.4915	67.5325	863.2149	3599.56028	9376.130455	16619.20178	17254.5157355	13962.5						
Total new agent to d...	1	31.4915	67.5325	863.2149	3599.56028	9376.130455	16619.20178	17254.5157355	13962.5						
Agent in retired equi...	0	0	0	0	0	0	0	0	15.44						
Destruction of agent...	0	0	0	0	0	0	0	0	0						
Release of agent fro...	0	0	0	0	0	0	0	0	15.44						
Bank	1	44.87...	141...	445.4...	1241.65...	3204.40...	6323.24...	11402.7...	19068.3...	29253.5...	41484.5...	55439.8...	64378.3...	70457.1...	73851.0...
Emissions	2	6.713...	21.2...	66.82...	186.248...	480.661...	948.487...	1710.41...	2860.25...	4388.03...	6222.68...	8315.98...	9656.75...	11093.0...	

F-Gases Data Time Series data entry... Uncertainties Import from Excel



Country/Territory: Japan Inventory Year: 2010 Base year for assessment of uncertainty in trend: 1990 CO2 Equivalents: SAR GWPs (100 year time horizon) Database file:

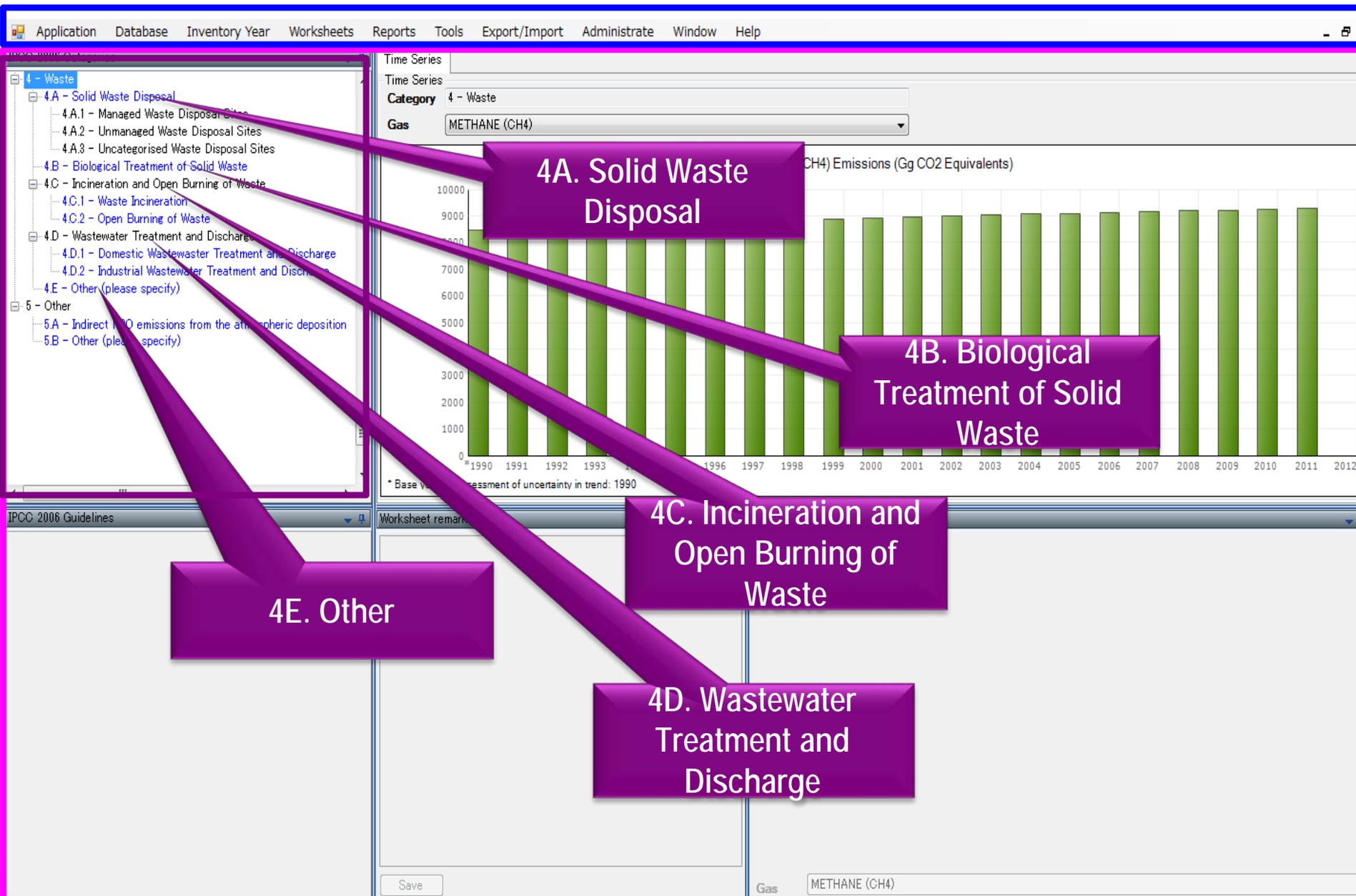
On Waste



This sub-session introduce First Order Decay (FOD) model to estimate emissions from “Solid Waste Disposal on Land (SWDL)”.

- **SWDL is one of the most important source.**
- **The estimations should be improved at most country.**
- **2006GLs requires accurate estimations by using FOD model.**
- **However, FOD model is hard to approach.**
- **New 2006 IPCC software provides basic solution to apply FOD model.**

Waste Sector



Summary on Energy/IPPU



Good points:

- Some countries were encouraged to try estimating F-gas emissions**
- Can use as a data base which were shared among different Ministries and/or Agencies**

Should be improved:

- Currently not so user-friendly. Inputting data needs much time.**

Summary on Waste



- EFs are pre-installed and effect of climate can be set, so the soft is user-friendly, Even though depending on country this is very useful or not.