

United Nations Framework Convention on Climate Change



GHG trends and projections: additional info relating to mitigation potentials (to FCCC/TP/2007/1)

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Objective

- Document FCCC/TP/2007/1 contains
 - GHG inventory data from UNFCCC
 - GHG projections data from UNFCCC

- It is important to know:
 - From where the data come and what they mean
 - Whether the data can change and how
 - Where such and, possibly, more data can be obtained
- This will be covered here for projections and inventories

GHG projections

- Provided by Annex I Parties in national communications (every 3–5 years)
- Requirements = UNFCCC guidelines of 1999 (FCCC/CP/1999/7)
- Cover CO₂, CH₄, N₂O, HFCs, PFCs, SF₆ up to 2020 for all sectors
- Latest submissions of projections data:
 - NC4&RDPs (2006–2004): projections for **39** Parties (of 41)
- Structured into 3 scenarios:
 - WM = “with measures” (**mandatory**) – 39 Parties
 - WAM = “with additional measures” (not mandatory) – 22 Parties
 - NM = “without measures” (not mandatory) – 16 Parties
- Use by Parties to:
 - identify most effective GHG mitigation measures and their overall impact
 - estimate future GHG levels => “Kyoto gap” in 2008–2012
 - estimate the need to use KP mechanisms / required amount of units



GHG projections (cont'd): example from TP/2007/1

Table 3. Projections reported by Annex I Parties in their national communications

Party	National total GHG emissions in Convention base year (Mt CO ₂ eq) ^a	Percentage change 'with measures' (%)			Percentage change 'with additional measures' (%)		Effect of additional measures (% of 1990)	
		1990-2005	1990-2010 ^b	1990-2020	1990-2010 ^c	1990-2020	2010 ^d	2020 ^e
		Finland	71	11	10	15	-2	-3
France	567		6	12	0	-2	6	14
Germany	1,275		-21	-21	-29	-41	8	20
Greece	109	31	37	52	28		10	
Hungary	122	28	-28	-28	-29	-23	0	3
Iceland	3		0	38				
Ireland	56	28	30	39				
Italy	1,188	5	11	27	4		8	
Japan	1,188				4			
Latvia	25	-51	46	-35	-49			

France:
WM = +6%

France:
WAM = 0%
(KP target)

Latvia (EIT):
Deep reductions for
WM and WAM

Germany:
WAM = deeper
reductions



GHG projections (cont'd)

- Full compilation and synthesis of the latest Annex I projections data will be available in Bali (secretariat's "Compilation and synthesis report(s) on the 4th national communications")
- Two sets of projections will be presented:
 - For 39 Annex I Convention Parties (FCCC/SBI/2007/INF.6)
 - For 36 Annex I Kyoto Protocol Parties (FCCC/SBI/2007/INF.7)
 - Projections to 2010, 2020 and, for KP Parties, to 2008–2012
- The reports will include:
 - Projections for individual Annex I Parties (with/without LULUCF)
 - Projected changes in GHG emissions for all Annex I Parties taken together (Annex I total, Annex I EITs, Annex I non-EITs)
 - Scenarios "with measures", "with add. measures", "without measures"
 - Expected use of LULUCF credits and flexibility mechanisms
- This information can be used by AWG in its further deliberations

GHG inventories

- Annex I Parties report GHG emissions data annually
- Requirements = IPCC guidelines and IPCC good practice guidance
- Information in FCCC/TP/2007/1:
 - GHG emissions data (1990–2004) from 2006 inventory submissions
- Since April 2007: new (2007) inventory submissions
- Latest Annex I data (1990–2005) will be presented to Parties in Bali
 - SBI, agenda item 3(b), document FCCC/SBI/2007/30
- There are changes to the 2006 data (impact of 2006 review process)
- The new data will be also available online:
 - 1990–2005 data will be placed on the UNFCCC GHG data page;
 - the whole data interface will be changed, too (better access to data, more data available – in accordance with SBSTA guidance) => see next slide...



GHG inventories (cont'd): new UNFCCC data interface



Top level menu (UNFCCC GHG web page)

1. Overview: how to get the GHG data needed
2. GHG data from UNFCCC
 - 2.1. Data sources
 - 2.2. Time series (Annex I only)
 - 2.3. GHG profiles for Parties
 - 2.4. Summary GHG data
 - 2.5. Detailed GHG data by gas
 - 2.6. Detailed GHG data by category
 - 2.7. Flexible queries
 - 2.8. GHG data submissions from Parties
3. GHG data from other sources
4. FAQs
5. Contact

Example: GHG emission profiles can be useful in the discussions of the mitigation potentials

URL: http://unfccc.int/ghg_emissions_data/items/3800.php

UNFCCC



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GHG inventories (cont'd): GHG emission profiles / tables

	Emissions, in Gg CO ₂ equivalent		
	Base year	2000	2004
CO ₂ emissions without LULUCF	61,933.4	66,186.0	77,103.4
CO ₂ net emissions/removals by LULUCF	-11,972.4	-16,036.7	-16,641.3
CO ₂ net emissions/removals with LULUCF	49,961.0	50,149.2	60,462.1
GHG emissions without LULUCF	78,959.4	81,278.8	91,332.6
GHG net emissions/removals by LULUCF	-11,960.7	-16,025.6	-16,629.6
GHG net emissions/removals with LULUCF	66,998.7	65,253.2	74,703.0

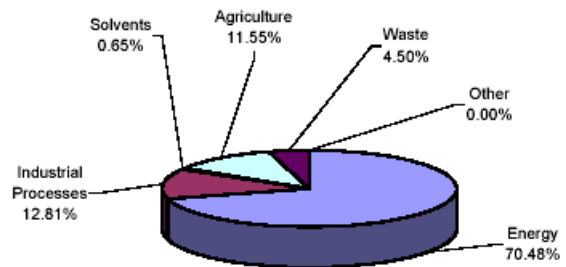
	Changes in emissions, in per cent		
	From base year to 2000	From base year to 2004	From 2000 to 2004
CO ₂ emissions without LULUCF	6.9	24.5	16.5
CO ₂ net emissions/removals by LULUCF	33.9	39.0	3.8
CO ₂ net emissions/removals with LULUCF	0.4	21.0	20.6
GHG emissions without LULUCF	2.9	15.7	12.4
GHG net emissions/removals by LULUCF	34.0	39.0	3.8
GHG net emissions/removals with LULUCF	-2.6	11.5	14.5

	Average annual growth rates, in per cent per year		
	From base year to 2000	From base year to 2004	From 2000 to 2004
CO ₂ emissions without LULUCF	0.7	1.7	3.9
CO ₂ net emissions/removals by LULUCF	9.0	7.0	1.9
CO ₂ net emissions/removals with LULUCF	0.6	1.8	4.9
GHG emissions without LULUCF	0.4	1.1	3.0
GHG net emissions/removals by LULUCF	9.0	7.0	1.9
GHG net emissions/removals with LULUCF	0.0	1.0	3.5

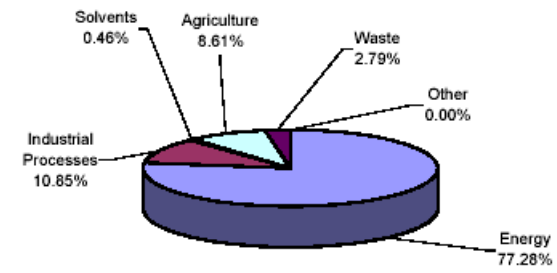


GHG inventories (cont'd): GHG emission profiles / graphs

GHG emissions by sector (without LULUCF)

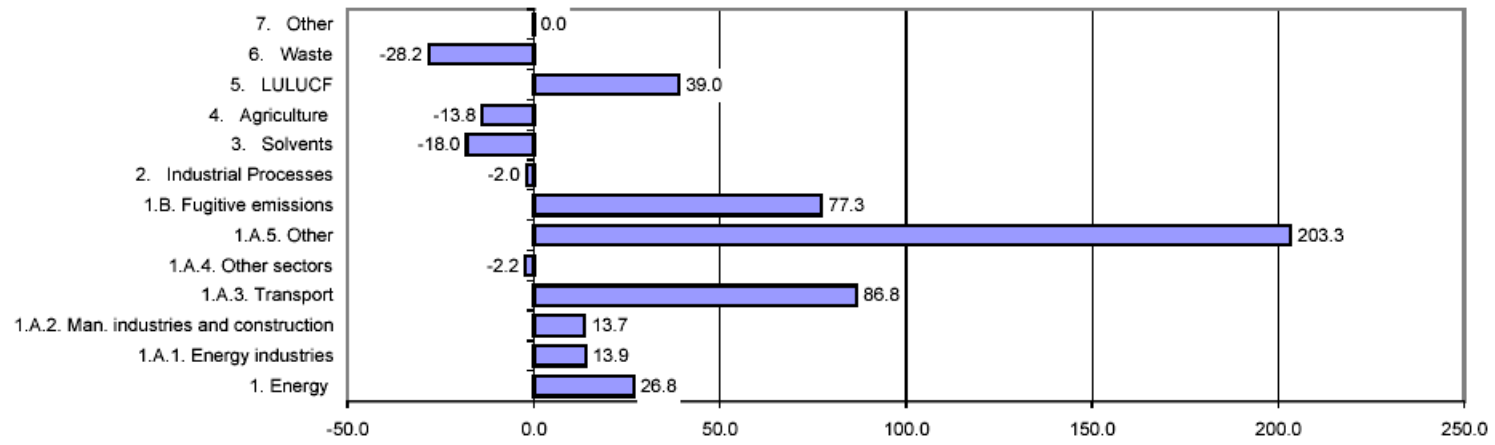


Breakdown of emissions by sector for base year



Breakdown of emissions by sector for 2004

Change in GHG emissions/removals from base year to 2004, %



Summary:

useful references for Bali

- GHG projections:
 - FCCC/SBI/2007/INF.6: Compilation and summary report under the Convention
 - FCCC/SBI/2007/INF.7: Compilation and summary report under the Kyoto Protocol (add. elements)
- GHG trends (inventory data):
 - FCCC/SBI/2007/30: Summary of Annex I inventory data for 1990–2005
 - http://unfccc.int/ghg_emissions_data/items/3800.php: access to UNFCCC GHG data online



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