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accompanying the

REPORT FROM THE COMMISSION

PROGRESS TOWARDS ACHIEVING THE KYOTO OBJECTIVES

**(required under Decision 280/2004/EC of the European Parliament and of the Council
concerning a mechanism for monitoring Community greenhouse gas emissions and for
implementing the Kyoto Protocol)**

{COM(2006) 658 final}

Table 1: GHG emissions in CO₂ equivalents (excl. LULUCF) and Kyoto Protocol targets for 2008–12

MEMBER STATE	Base year ⁽¹⁾	2004	Change base year–2004	Change 2003–2004	Change 2003–2004	Targets 2008–12 under Kyoto Protocol and "EU burden sharing"	Distance to target indicator (index points) In brackets: excluding Kyoto mechanisms and sinks
	(million tonnes)	(million tonnes)	(%)	(million tonnes)	(%)	(%)	(%)
Austria	78.9	91.3	+15.7 %	-1.2	-1.3 %	-13.0 %	+17.9 (+24.8)
Belgium	146.9	147.9	+0.7 %	0.3	+0.2 %	-7.5 %	+1.8 (+5.9)
Cyprus ⁽²⁾	6.0	8.9	+48.2 %	-0.3	-3.0 %	no target	no target
Czech Republic	196.3	147.1	-25.1 %	-0.5	-0.3 %	-8.0 %	-19.9 (-19.5)
Denmark	69.3	68.1	-1.8 %	-6.0	-8.1 %	-21.0 %	+7.9 (+12.9)
Estonia	42.6	21.3	-50.0 %	0.1	+0.7 %	-8.0 %	-44.4
Finland	71.1	81.4	+14.5 %	-4.2	-4.9 %	0.0 %	+13.1 (+14.5)
France	567.1	562.6	-0.8 %	1.5	+0.3 %	0.0 %	-1.2 (-0.8)
Germany	1230.0	1015.3	-17.5 %	-9.1	-0.9 %	-21.0 %	-2.8
Greece	111.1	137.6	+23.9 %	0.3	+0.3 %	+25.0 %	+6.4
Hungary	122.2	83.1	-32.0 %	-0.2	-0.2 %	-6.0 %	-27.8
Ireland	55.8	68.5	+22.7 %	0.1	+0.1 %	+13.0 %	+6.5 (+13.6)
Italy	519.6	582.5	+12.1 %	5.1	+0.9 %	-6.5 %	+9.9 (+16.7)
Latvia	25.9	10.7	-58.5 %	0.0	+0.4 %	-8.0 %	-52.9
Lithuania	50.9	20.3	-60.1 %	3.1	+17.9 %	-8.0 %	-54.5
Luxembourg	12.7	12.7	+0.3 %	1.3	+11.3 %	-28.0 %	+3.3 (+19.9)
Malta ⁽²⁾	2.2	3.2	+45.9 %	0.1	+4.2 %	no target	no target
The Netherlands	214.3	217.8	+1.6 %	2.5	+1.1 %	-6.0 %	-0.7 (+5.8)
Poland	565.3	386.4	-31.6 %	3.7	+1.0 %	-6.0 %	-27.4
Portugal	60.0	84.5	+41.0 %	0.9	+1.0 %	+27.0 %	+14.6 (+22.1)
Slovakia	73.2	51.0	-30.3 %	-0.1	-0.1 %	-8.0 %	-24.7
Slovenia	20.2	20.1	-0.8 %	0.4	+2.0 %	-8.0 %	-1.0 (+4.8)
Spain	289.4	427.9	+47.9 %	19.7	+4.8 %	+15.0 %	+31.2 (+37.4)
Sweden	72.5	69.9	-3.6 %	-1.1	-1.5 %	+4.0 %	-8.4 (-6.4)
The United Kingdom	767.9	659.3	-14.1 %	1.3	+0.2 %	-12.5 %	-5.8 (-5.4)
EU-15	4266.4	4227.4	-0.9 %	11.5	+0.3 %	-8.0 %	+2.3 (+4.7)
EU-10	1104.9	752.2	-31.9%	6.5	+0.9%	no common target	no common target
EU-25	5371.3	4979.6	-7.3 %	18.1	+0.4 %	no common target	no common target

⁽¹⁾ For EU-15 the base year for CO₂, CH₄ and N₂O is 1990; for the fluorinated gases 13 Member States have indicated to select 1995 as the base year, whereas Austria and France have chosen 1990. As the EC inventory is the sum of Member States' inventories, the EC base year estimates for fluorinated gas emissions are the sum of 1995 emissions for 13 Member States and 1990 emissions for Austria and France.

⁽²⁾ Cyprus and Malta did not provide GHG emission estimates for 2004, therefore the data provided in this table is based on gap filling.

The base-year emissions reported in this table are the latest data available from national greenhouse gas inventories (6 June 2006). Final data will be available in the report on the EU's assigned amount (pursuant to Article 3, Paragraphs 7 and 8 of the Kyoto Protocol) under the UNFCCC, due end of 2006.

Note: Malta and Cyprus do not have Kyoto targets.

Table 2: EU-25 and Member States' Kyoto Protocol (burden-sharing) targets for 2008–12, compared with emission projections based on existing and additional domestic policies and measures

	GHG emissions for base year	EC burden sharing target		With existing policies and measures		With additional policies and measures		With additional measures, Kyoto mechanisms and carbon sinks					
		Commit- ment	Emissions limit	Projections for 2010		Projections for 2010		Use of Kyoto mechanisms		Use of Carbon Sinks		Projections for 2010	
	(Mt CO ₂) (used for projections assessment)	(in % of base year)	(Mt CO ₂)	(Mt CO ₂)	(in % of base year)	(Mt CO ₂)	(in % of base year)	(Mt CO ₂)	(in % of base year)	(Mt CO ₂)	(in % of base year)	(Mt CO ₂)	(in % of base year)
Austria	78.4	-13.0%	68.2	89.9	+14.8 %	81	+3.3 %	-7	-8.9 %	-0.7	-0.9 %	73.3	-6.5 %
Belgium	146.8	-7.5%	135.8	148.5	+1.2 %	145.7	-0.7 %	-8.6	-5.8 %			137.2	-6.6 %
Czech Republik	192.1	-8.0%	176.8	145.3	-24.4 %	140.8	-26.7 %			-1.2	-0.6 %	139.6	-27.4 %
Denmark	69.6	-21.0%	55.0	72.5	+4.2 %	72.5	+4.2 %	-4.5	-6.5 %	-0.5	-0.7 %	67.5	-3.0 %
Estonia	43.5	-8.0%	40.0	18.9	-56.5 %	17.4	-60.0 %					17.4	-60.0 %
Finland	71.5	0.0%	71.5	78.5	+9.9 %	70.1	-1.9 %	-2.4	-3.4 %	0.9	+1.3 %	68.6	-4.0 %
France	564	0.0%	564.0	600	+6.4 %	567	+0.5 %			-3.2	-0.6 %	563.8	-0.0 %
Germany	1 248.3	-21.0%	986.2	1 000.9	-19.8 %	985.7	-21.0 %					985.7	-21.0 %
Greece	111.7	25.0%	139.6	150.4	+34.7 %	139.5	+24.9 %					139.5	+24.9 %
Hungary	122.2	-6.0%	114.9	87.4	-28.5 %	87.1	-28.8 %					87.1	-28.8 %
Ireland	55.8	13.0%	63.0	72.3	+29.6 %	72.3	+29.6 %	-3.6	-6.5 %	-2.1	-3.8 %	66.6	+19.4 %
Italy	509.4	-6.5%	476.3	580.4	+13.9 %	530.1	+4.1 %	-39.6	-7.8 %	-10.6	-2.1 %	479.9	-5.8 %
Latvia	25.3	-8.0%	23.3	13.7	-46.1 %	13	-48.6 %					13	-48.6 %
Lithuania	50.9	-8.0%	46.9	25.2	-50.5 %	25.2	-50.5 %					25.2	-50.5 %
Luxembourg	12.7	-28.0%	9.2	9.9	-22.4 %	9.9	-22.4 %	-3	-23.6 %			6.9	-46.0 %
The Netherlands	214	-6.0%	201.4	221.7	+3.6 %	215.6	+0.7 %	-20	-9.3 %	-0.1	-0.1 %	195.5	-8.6 %
Poland	498.5	-6.0%	468.6	438.4	-12.1 %	438.4	-12.1 %					438.4	-12.1 %
Portugal	60	27.0%	77.2	88	+46.7 %	85.6	+42.7 %	-1.9	-3.1 %	-4.7	-7.8 %	79.1	+31.9 %
Slovakia	71.9	-8.0%	66.1	55.8	-22.4 %	54.1	-24.8 %					54.1	-24.8 %
Slovenia	20.2	-8.0%	18.6	21.2	+4.7 %	19.9	-1.7 %			-1.7	-8.3 %	18.2	-10.0 %
Spain	288.4	15.0%	331.7	436.3	+51.3 %	436.3	+51.3 %	-20	-6.9 %	-5.5	-1.9 %	410.9	+42.4 %
Sweden	72.2	4.0%	75.1	71.5	-1.0 %	71.5	-1.0 %			-2.1	-3.0 %	69.4	-3.9 %
The United Kingdom	766.7	-12.5%	671.2	622.2	-18.8 %	588.7	-23.2 %			-4.1	-0.5 %	584.6	-23.7 %
EU-15	4 269.4	-8.0%	3 929.2	4 243.1	-0.6 %	4 071.4	-4.6 %	-110.5	-2.6%	-32.6	-0.8%	3 928.3	-8.0 %
EU-10	1 024.8	-	-	805.8	-21.4 %	795.8	-22.4 %	0	0.0%	-2.9	-0.3%	793.0	-22.6%
EU-25	5 294.2	-	-	5 048.9	-4.6 %	4 867.3	-8.1 %	-110.5	-2.1%	-35.5	-0.7%	4 721.3	-10.8%

Table 3: Aggregate of Member States projections for the various scenarios, with and without Kyoto mechanisms, and with carbon sinks

		Without Kyoto mechanisms		With Kyoto mechanisms		With Kyoto mechanisms and carbon sinks	
	1990/ base year Mt CO ₂ eq.	2010 Mt CO ₂ eq.	% Change 1990-2010	2010 Mt CO ₂ eq.	% Change 1990-2010	2010 Mt CO ₂ eq.	% Change 1990-2010
Aggregate of EU-15 MS with measures projections	4269	4243	-0.6%	4133	-3.2%	4100	-4.0%
Aggregate of EU-25 MS with measures projections	5294	5049	-4.6%	4938	-6.7%	4903	-7.4%
Aggregate of EU-15 MS with additional measures projections	4269	4071	-4.6%	3961	-7.2%	3928	-8.0%
Aggregate of EU-25 MS with additional measures projections	5294	4867	-8.1%	4757	-10.2%	4721	-10.8%

Table 4: Status of implementation of important ECCP I identified policies and measures

Measure	Reduction potential EU-15, 2010(Mt. CO2)	Entry into force	Starting to deliver
EU emission trading scheme	~ NAP2	2003	2005
Link JI/CDM to emission trading	~ NAP2	2004	2005/2008
F-Gases Regulation and Directive on Mobile Air Conditioning	23	2006	2008
Dir. on the promotion of electricity from renewable energy sources	100-125	2001	2003
Dir. on the promotion of CHP	65	2004	2006
Dir. on energy performance of buildings	35-45	2003	2006
Dir. on the promotion of transport bio-fuels	35-40	2003	2005
Dir. on the promotion of energy efficiency and energy services	40-55	2003	2006
ACEA voluntary agreement	75-80	1998	1999
Energy labeling directives	20	1992	1993
Total	393-453		

Table 5: CO₂ allowance allocations and verified emissions 2005

Member State	Number of installations covered ⁽¹⁾	CO ₂ allowances per year of the period 2005 to 2007 ⁽²⁾ [million allowances]	Verified emissions [million tonnes of CO ₂]	ETS share in total greenhouse gas emissions ⁽³⁾
EU-15				
Austria	199	32.6	33.4	36.6 %
Belgium	310	59.8	55.4	37.4 %
Denmark	384	31.0	26.5	38.9 %
Finland	595	44.5	33.1	40.6 %
France	1 087	150.5	131.3	23.3 %
Germany	1 850	495.0	474.0	46.7 %
Greece	140	71.1	71.3	51.8 %
Ireland	109	19.2	22.4	32.7 %
Italy	950	207.5	223.6	38.6 %
Luxembourg	15	3.2	2.6	20.5 %
Netherlands	210	86.4	80.4	36.9 %
Portugal	244	36.8	36.4	43.1 %
Spain	825	162.1	182.9	42.9 %
Sweden	705	22.5	19.3	27.8 %
United Kingdom	775 ⁽⁴⁾	209.3	242.5	36.8 %
EU-10				
Cyprus	13	5.6	5.1	57.3 %
Czech Republic	395	96.6	82.5	56.1 %
Estonia	44	18.7	12.6	59.3 %
Hungary	234	30.2	26.0	31.3 %
Latvia	94	4.0	2.9	26.7 %
Lithuania	99	11.4	6.6	32.5 %
Malta	2	2.1	n.a. ⁽⁵⁾	65.6 %
Poland	1 088	239.1	200.8 ⁽⁶⁾	52.0 %
Slovakia	175	30.3	25.2	49.5 %
Slovenia	98	8.6	8.7	43.4 %

Notes (1) Exact numbers vary slightly continuously due to closures and new entrants. The number of installations and verified emissions are taken from the CITL as of 5 September 2006. In Poland, Malta and Cyprus the registry is either not yet functional or only few operators have opened an account. For these countries the final allocation decision was used as data source.
(2) The average amount of CO₂ allowances 2005–2007 excludes the national new entrants reserves and takes into account temporary exclusion and opt-ins of installations in accordance with Articles 24 and 27 of the Emissions Trading Directive.
(3) The ETS share is calculated as verified emissions in 2005 divided by 2004 national greenhouse gas emissions.
(4) The number of covered installations will be higher in 2007, as some installations were only opted out for 2005 and 2006.
(5) Malta has not yet submitted its verified emissions. For the calculation of the share the total national allocation has been used. For Member States where verified emissions for more than 1 % of allocated allowances are missing the emissions for the outstanding installations have been estimated for the calculation of the share.
(6) This figure comprises verified emissions of 793 installations. For a further 295 installations, which receive an annual average allocation of 3.284.285 allowances no verified emission figures were available at the time of writing this report.

Sources Community Independent Transaction Log (CITL); first national allocations plans of Member States; EC 2005e.

Table 6: Planned use of Kyoto mechanisms

		Which Kyoto mechanisms? (ET, CDM, JI)	Projected emission reduction 2008–12 through the use of Kyoto mechanisms [Million tonnes CO ₂ -equivalents per year]	Allocated budget
Austria	Yes	Priority on JI and CDM	7.0	Up to € 288 million for 2003-2012
Belgium	Yes	ET, CDM, JI	8.55	Federal Government: € 60 million Capital Region: € 9 million Flemish region: € 22 million in 2005 € 15 million in 2006 Walloon region: USD 5 million
Denmark	Yes	CDM, JI	4.5	€ 152 million for public procurement programme of JI and CDM credits 2003-2008
Czech Republic	No	-	-	-
Estonia	No	-	-	-
Finland	Yes	ET, CDM, JI	2.4	Pilot Programme: € 9 million PCF ¹ : USD 10 million BASREC ² : € 1.75 million € 30 million for 2005
France	Yes	Priority on JI and CDM	Not yet decided	No arrangements yet
Germany	Use of Kyoto mechanisms allowed at company level, no acquisition by government planned. (Germany does not intend to use Kyoto mechanisms to reach its target.)	ET, JI, CDM	No projected estimate as the amount will depend on private action	€ 8 million for climate fund € 5 million for BASREC
Greece	Not yet decided	Not yet decided	Not yet decided	No arrangements yet
Ireland	Yes	Not yet decided	3.6	€ 20 for 2006
Italy	Yes	ET, CDM, JI	39.6	€ 169.5 million already allocated: € 58.7 million for World Bank funds € 8.5 million for GEF Trust Fund €10.3 million for MEDREP € 8.5 million for MEDREC € 79 million for China-Italian Facility € 4.5 million for various funds € 1,150 million for the years 2006-2011

¹ Prototype Carbon Fund of the World Bank

² Baltic Sea Region Energy Co-operation Testing Ground Facility

		Which Kyoto mechanisms? (ET, CDM, JI)	Projected emission reduction 2008–12 through the use of Kyoto mechanisms [Million tonnes CO₂-equivalents per year]	Allocated budget
Luxembourg	Yes	ET, CDM, JI	3.0	
Netherlands	Yes	CDM, JI	20.0 (CDM and JI)	€ 600 million
Portugal	Yes	ET, CDM, JI	1.86	No arrangements yet
Slovakia	No	-		
Slovenia	Yes	ET, CDM, possibly JI	Not yet decided	
Spain ³	Yes	Priority on ET and CDM	20.0	€ 200 million for World Bank Funds € 49 million in CAF € 0.6 million with Inter American development Bank
Sweden	Not yet decided, under consideration (Pilot programme to gain experiences)	ET, CDM, JI	Investments made are estimated to amount to 1 Mt/year in emission credits	€ 10 million (SEK 94 million) in CDM-SICLIP € 6.5 million (SEK 61 million) in JI-SICLIP € 3.5 million in BASREC USD 10 million in PCF
United Kingdom	Use of Kyoto mechanisms allowed at company level, no acquisition by government planned	ET, CDM, JI	No projected estimate as the amount will depend on private action	

³ Figures are being reviewed in conjunction with the NAP 2008-2012 elaboration.

Table 7: Preliminary projected net carbon stock changes under Article 3.3 for the first commitment period

Member State	Net carbon stock change during 2008–12 (million tonnes CO₂ per year)	Type of carbon pools included
Austria	-0.7	Not indicated
Belgium	No net change expected	Not indicated
Czech Republic	Probably small net sink	Not indicated
Denmark	- 0.28	Forest biomass
Finland	+ 0.9	Not indicated
Ireland	- 2.1	Forest biomass
Italy	- 6.48	Not indicated
Luxembourg	Probably net sink	Forest biomass
Netherlands	- 0.11	Not indicated
Portugal	-3.36	Not indicated
Slovak Republic	Probably small net sink	Not indicated
Slovenia	-0.36	Not indicated
Spain	Approx. - 3	Not indicated
Sweden	Probably small net source	Not indicated
United Kingdom	- 2.71	Above-ground and below-ground biomass, litter and soil organic matter
EU-15 total (9 Member States)	-17.8	

Table 8: Potential projected net carbon stock changes from forest management under Article 3.4 for the Kyoto Protocol commitment period

Member State	Forest mgmt.	Cropland mgmt.	Grazing mgmt.	Revegetat ion	Net carbon stock change during 2008–12 (Mt CO ₂ per year)	Max. allowance for Forest Mgmt. (Mt CO ₂ per year)	Carbon pools included
Austria	No	No	No	No	No data provided	- 2.31	
Belgium	No	No	No	No	-3.1 to -3.3	- 0.11	
Czech Republic	Yes	No	No	No	Amount is likely to be larger than maximum allowance	- 1.17	
Denmark	Yes	Yes	Yes	No	- 0.2 to - 0.6	- 0.18	Not clearly indicated
Estonia	No	No	No	No	No data provided	- 0.37	
Finland	No	No	No	No	No data provided	- 0.59	
France	Yes	No	No	No	-3.23	- 3.23	
Germany	Not yet decided	Not yet decided	Not yet decided	Not yet decided	No data provided	-4.55	
Greece	Not yet decided	Not yet decided	Not yet decided	Not yet decided	No data provided	-0.33	
Hungary	Yes	No	No	No	No data provided	- 1.06	
Ireland	No	No	No	No	No data provided	- 0.18	
Italy	Yes	No	No	No	- 4.11	- 10.2	Not clearly indicated
Latvia	No	No	No	No	No data provided	- 1.25	
Lithuania	Yes	No	No	No	No data provided	- 1.03	
Luxembourg	No	No	No	No	No data provided	- 0.04	
Netherlands	No	No	No	No	Unclear whether the country-specific maximum threshold for forest management activities will be fully utilized	- 0.04	Not clearly indicated
Poland	Yes	Not yet decided	Not yet decided	Not yet decided	No data provided	- 3.00	
Portugal	Yes	Yes	Yes	No	- 0.8 from forest management, -0.5 from crop-/grazing land management	- 0.81	Not clearly indicated
Slovakia	No	No	No	No	No data provided	- 1.83	
Slovenia	Yes	No	No	No	- 1.32	- 1.32	Not clearly indicated
Spain	Yes	Yes	No	No	Approx. -3	- 2.46	Not indicated
Sweden	Yes	No	No	No	Amount is likely to be larger than maximum allowance	- 2.13	Not clearly indicated
United Kingdom	Yes	No	No	No	- 8.5	- 1.36	Above-ground and below-ground biomass, litter and soil organic matter