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PART 6/6

#### COMMISSION STAFF WORKING DOCUMENT

**Technical information** 

Accompanying the document

Report from the European Commission to the European Parliament and the Council

EU and the Paris Climate Agreement: Taking stock of progress at Katowice COP

{COM(2018) 716 final}

# Part 2: Other technical information

# **1. Overview of EU climate targets**

Table 1: Overview of EU climate targets.

	International com	nmitments		EU domestic	legislation		
			2020 Climate an	d Energy Package	2030 Climate and Energy Framework		
	Kyoto Protocol	Paris Agreement	EU ETS	Effort Sharing Decision (ESD)	EU ETS	Effort Sharing Regulation (ESR)	
Target year of period	Second commitment period (2013-2020) (target for EU-28)	Already in force – covers the period post 2020	2013-2020	2013-2020	2021-2030	2021-2030	
Emission reduction	-20 %	at least -40 % in 2030	-21 % in 2020 compared to 2005 for ETS emissions	Annual targets by MS. In 2020 -10 % compared to 2005 for non-ETS emissions	-43 % in 2030 compared to 2005 for ETS emissions	Annual targets by MS. In 2030 -30 % compared to 2005 for non-ETS emissions	
target	target		-	G emissions reduction vs 90"	Overall target: at least - emissions reduc		
		<ul> <li>limiting global warming to well below 2°C.;</li> </ul>	✓ Renewable Energy Direc renewable energy of gross	tive: 20 % share of final energy consumption;	<ul> <li>✓ At least 32 % share of renewable energy in EU energy consumption (with an upward review by 2023);</li> </ul>		
Further targets			✓ Energy Efficiency Directi efficiency by 20 %.	ve : Increase energy	✓ At least 32.5 % improvement in energy efficiency (with an upward review by 2023).		

	International com	mitments		EU domestic	legislation		
			2020 Climate an	d Energy Package	2030 Climate and Er	ergy Framework	
	Kyoto Protocol	Paris Agreement	EU ETS	Effort Sharing Decision (ESD)	EU ETS	Effort Sharing Regulation (ESR)	
		<ul> <li>system.</li> <li>balance between anthropogenic emissions by sources and removals by sinks of greenhouse gases in the second half of this century.</li> </ul>					
Base year	1990, but subject to flexibility rules. 1995 or 2000 may be used as its base year for NF3	1990	targets broken down	reduction target; 2005 for into ETS and non-ETS sions.	1990 for overall emission reduction target; 2005 for targets broken down into ETS and non-ETS emissions		
LULUCF	Included ARD and forest management, other activities if elected (new accounting rules)	Included	Excluded		Included: The LULUCF regulation (Regulation (EU) 2018/841) includes a "no debit rule", i.e. emissions from LULUCF must be compensated by carbon uptake after specified rules.		
Aviation <sup>1</sup>	Domestic aviation included. International aviation not attributed.	Economy-wide action encouraged	EU ETS: Domestic and some international aviation included.	ESD: Aviation generally excluded	EU ETS: Domestic and some international aviation included.	ESR: Aviation generally excluded	

<sup>&</sup>lt;sup>1</sup> May be reviewed in the light of the implementation of ICAO's global measure.

	Intern	national com	nmitments	EU domestic legislation					
				2020 Climate an	d Energy Package	2030 Climate and En	ergy Framework		
	Kyoto Pro	itocol	Paris Agreement	EU ETS	Effort Sharing Decision (ESD)	EU ETS	Effort Sharing Regulation (ESR)		
Use of international credits	Use of KP flexible mechanisms subject to KP rules		The EU will not use international credits (according to its NDC)	Upper limit for credit use for period 2008- 2020 at a maximum of 50 % of the reduction effort below 2005 levels	Annual use of carbon credits is limited to up to 3 % of each Member State's ESD emissions in 2005 <sup>2</sup>	No	No		
Carry-over of units from preceeding periods <sup>3</sup>	Subject to KP rules including those agreed in the Doha Amendment		No	EU ETS allowances can be banked into subsequent ETS trading periods since the second trading period	No carry over from previous period	Indefinite validity of allowances not limited to trading periods, no need to carry over.	No		
Gases covered	CO <sub>2</sub> , CH <sub>4</sub> , N <sub>2</sub> O, HF NF <sub>3</sub>	Cs, PFCs, SF <sub>6</sub> ,	CO <sub>2</sub> , CH <sub>4</sub> , N <sub>2</sub> O, HFCs, PFCs, SF <sub>6</sub> , NF <sub>3</sub>	$CO_2$ , $N_2O$ , PFCs,	CO <sub>2</sub> , CH <sub>4</sub> , N <sub>2</sub> O, HFCs, PFCs, SF <sub>6</sub>	CO <sub>2</sub> , N <sub>2</sub> O, PFCs,	CO <sub>2</sub> , CH <sub>4</sub> , N <sub>2</sub> O, HFCs, PFCs, SF <sub>6</sub> , NF <sub>3</sub>		
Sectors included	Energy, IPPU, IPPU, agriculture, agriculture, waste, LULUCF waste, LULUCF		Energy, IPPU,IPPU,Energy, IPPU,Poweagriculture,agriculture,agriculture,agriculture,generatiwaste,LULUCFwaste,LULUCFsectors		Power & heatTransport (excepteneration, energy- ntensive industryaviation), buildings, non- ETS industry, agriculture (non-CO2) and waste		Transport (except aviation), buildings, non-ETS industry, agriculture (non CO <sub>2</sub> ) and waste		
GWPs used	IPCC SAR	IPCC AR4	IPCC AR4	IPCC	CAR4	IPCC AR4			

<sup>&</sup>lt;sup>2</sup> Member States that do not use their 3 % limit for the use of international credits in any specific year can transfer the unused part of their limit to another Member State or bank it for their own use until 2020. Member States fulfilling additional criteria (Austria, Belgium, Cyprus, Denmark, Finland, Ireland, Italy, Luxembourg, Portugal, Slovenia, Spain and Sweden) may use credits from projects in Least Developed Countries (LDCs) and Small Island Developing States (SIDS) up to an additional 1 % of their verified emissions in 2005. These credits are not bankable and transferable. A maximum of approximately 750 Mt of international credits can be used during the period from 2013 to 2020 in the ESD.

<sup>&</sup>lt;sup>3</sup> For the CP2 it refers to carry over from CP1. For the ETS it refers to carry-over from previous trading period under the scheme itself.

	Intern	ational com	mitments	EU domestic legislation				
	Kyoto Protocol Paris A			2020 Climate and	d Energy Package	2030 Climate and Energy Framework		
			Paris Agreement	EU ETS	Effort Sharing Decision (ESD)	EU ETS	Effort Sharing Regulation (ESR)	
Applicable to number of MS	15 (additional KP targets for single MS)	EU-28 and Iceland	28 Member States + possibly Iceland and Norway	284		28		

<sup>&</sup>lt;sup>4</sup> In addition to the 28 MS, Iceland, Liechtenstein and Norway are also covered under the EU-ETS.

## 2. Greenhouse gas emissions covered by the Kyoto Protocol and the EU Climate and Energy package

Table 2: Emissions covered by the EU Climate and Energy Package and by the Kyoto Protocol, second commitment period 1990, 2005, 2016 and 2020 (Mt  $CO_2$ -eq.)<sup>5</sup>

Mt. CO <sub>2</sub> -eq.	1990	2005	2016	2020 projections (WEM)	2020 targets (-20 % compared to base year)
Total GHG emissions covered by EU Climate					
and Energy Package	5 720	5 351	4 441	4 218	4 576
of which domestic aviation	14	20	16		
of which international aviation	69	131	148	146	
Total GHG emissions covered by the Kyoto					
Protocol 2nd commitment period	5 650	5 220	4 293	4 071	4 701 <sup>6</sup>
of which international aviation	69	131	148	146	

<sup>&</sup>lt;sup>5</sup> Emissions from international aviation are covered by the EU climate and energy package, but not by the EU's obligations under the Kyoto Protocol. For further information about the scope of the EU 2020 targets, see <a href="http://unfccc.int/files/national reports/annex">http://unfccc.int/files/national reports/annex</a> i natcom/submitted natcom/application/pdf/459381 europea <a href="http://unicoc.int/files/national-reports/annex">n union-nc7-br3-1-nc7</a> br3 combined version.pdf p. 227-235.

<sup>&</sup>lt;sup>6</sup> Kyoto base year emissions differ from 1990 inventory emissions. Kyoto base year emissions have been set to 5 876 Mt CO2-eq., including deforestation and including Iceland.



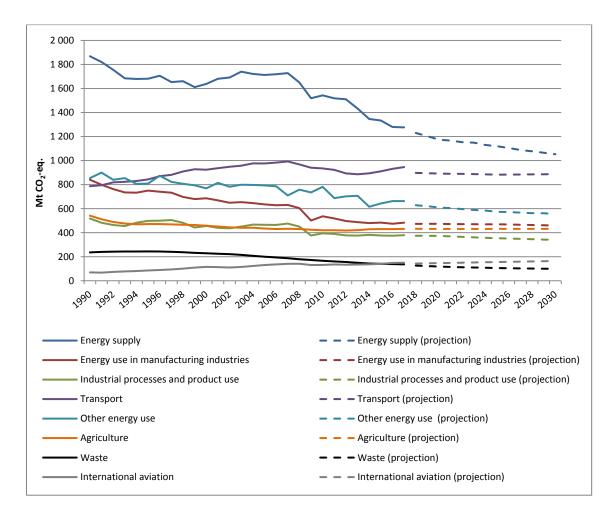


Figure 1: EU greenhouse gas emissions by sector, historical data (1990-2017) and projections (2017-2030).<sup>7</sup>

<sup>&</sup>lt;sup>7</sup> Sources: EU greenhouse gas inventory 1990-2016. EU approximated greenhouse gas inventory 2017 (EEA). Member States projections reviewed by EEA (2018).

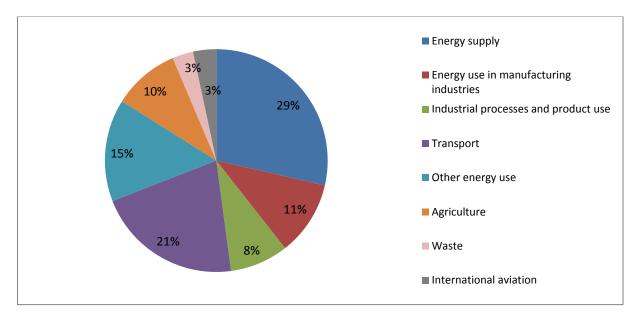
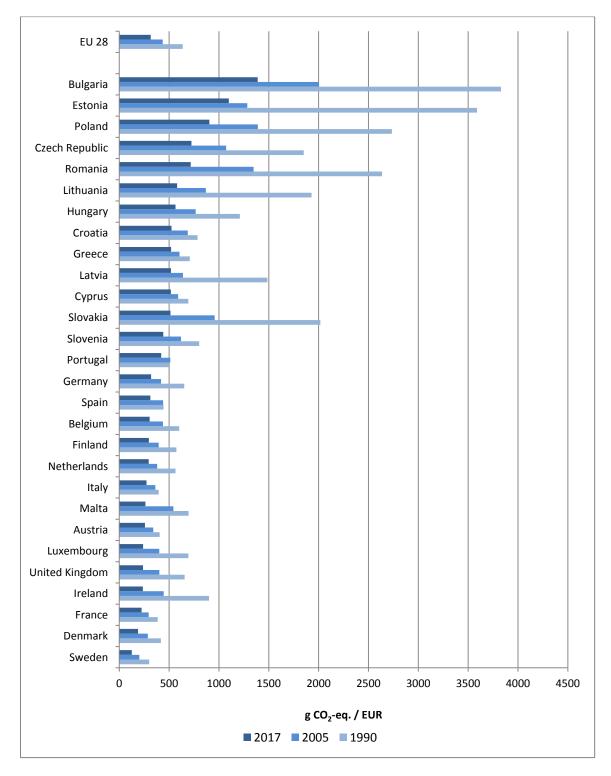


Figure 2: EU greenhouse gas emissions by sector 2017 (in % of total emissions).<sup>8</sup>

The sectors used in the figures correspond to the following IPCC sectors:

- Energy supply: 1A1, 1B and 1C,
- Energy use in manufacturing industries: 1A2,
- Industrial processes and product use: 2,
- Transport: 1A3,
- Other energy use: 1A4, 1A5 and 6,
- Agriculture: 3,
- Waste: 5,
- International aviation: memo item.

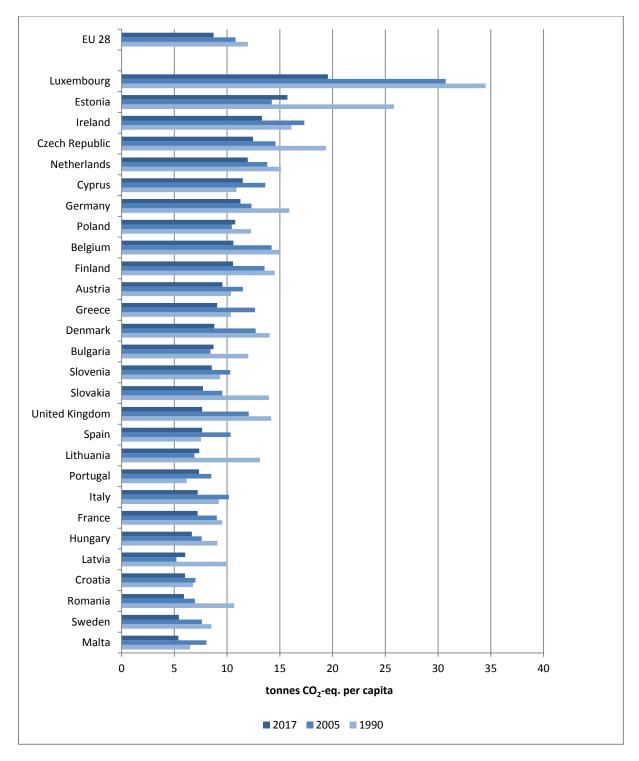
<sup>&</sup>lt;sup>8</sup> Source: EU approximated greenhouse gas inventory 2017 (EEA).



#### 4. Greenhouse gas intensity in the EU and its Member States

Figure 3: Greenhouse gas emissions intensity (i.e. the ratio between emissions and GDP) in the EU and its Member States 1990, 2005 and 2017 (g CO<sub>2</sub>-eq./ EUR).<sup>9</sup>

<sup>&</sup>lt;sup>9</sup> Sources: EU greenhouse gas inventory 1990-2016, EU approximated greenhouse gas inventory 2017 (EEA). GDP data from Ameco database (European Commission, DG ECFIN).



#### 5. Greenhouse gas emissions per capita in the EU and its Member States

Figure 4: Greenhouse gas emissions per capita in the EU and its Member States 1990, 2005 and 2016 (tonnes CO2-eq. per capita).<sup>10</sup>

<sup>&</sup>lt;sup>10</sup> Sources: EU greenhouse gas inventory 1990-2016, EU approximated greenhouse gas inventory 2017 (EEA). Average population (total) (Eurostat (1990 value gap-filled for France by EEA)).

### 6. EU ETS emissions

	2011	2012	2013	2014	2015	2016	2017
Verified total emissions	1 904	1 867	1 908	1 814	1 803	1 751	1 754
Change to year x-1	-1.8%	-2.0%	2.2%	-4.9%	-0.6%	-2.9%	0.2%
Verified emissions from power sector	1 155	1 153	1 101	1 011	1 005	957	949
Change to year x-1		-0.2%	-4.5%	-8.1%	-0.6%	-4.8%	-0.8%
Verified emissions from industrial installations	749	714	807	803	798	794	805
Change to year x-1		-4.7%	-13.1%	-0.6%	-0.6%	-0.5%	-1.4%
Real GDP growth rate EU-2811	1.7%	-0.5%	0.2%	1.7%	2.2%	1.9%	2.4%

Table 3: Verified ETS emissions (Mt CO<sub>2</sub>-eq.) and percentage change from year x-1.

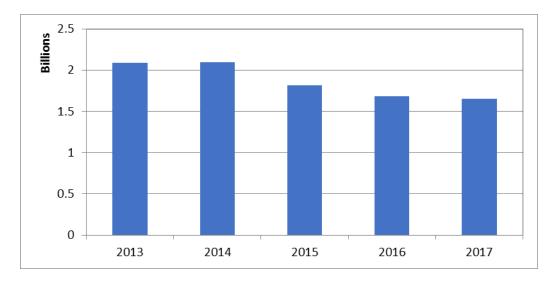


Figure 5: Development of the surplus in the European carbon market 2013-2017.

<sup>&</sup>lt;sup>11</sup> GDP data as reported on:

http://epp.eurostat.ec.europa.eu/tgm/table.do?tab=table&init=1&plugin=1&language=en&pcode=tec00115 (accessed in July 2018).

## 7. Emissions covered by the effort-sharing legislation

Table 4: Member States targets, emissions and distance to targets under the effort-sharing legislation in percentage change from 2005 base year emissions. For distance to targets, negative values indicate overachievement while positive values indicate underachievement.

	2016	2017	2020	2030
Member State	(final)	(preliminary)	(projections)	(projections)
Austria				
Target	-10%	-13%	-16%	-36%
Emissions	-11%	-10%	-14%	-21%
Distance to target	-1%	3%	2%	15%
Belgium				
Target	-8%	-10%	-15%	-35%
Emissions	-8%	-10%	-12%	-14%
Distance to target	0%	0%	3%	21%
Bulgaria				
Target	25%	17%	20%	0%
Emissions	16%	18%	-2%	1%
Distance to target	-10%	1%	-22%	1%
Croatia				
Target	16%	7%	11%	-7%
Emissions	-8%	-8%	-12%	-8%
Distance to target	-24%	-15%	-23%	-1%
Cyprus				
Target	42%	0%	-5%	-24%
Emissions	-2%	3%	7%	23%
Distance to target	-43%	3%	12%	47%
Czech Republic				
Target	5%	6%	9%	-14%
Emissions	2%	4%	0%	-12%
Distance to target	-3%	-2%	-9%	2%
Denmark				
Target	-15%	-13%	-20%	-39%
Emissions	-17%	-19%	-22%	-24%
Distance to target	-2%	-5%	-2%	15%
Estonia				
Target	17%	9%	11%	-13%
Emissions	15%	10%	11%	13%
Distance to target	-3%	1%	0%	26%
Finland				
Target	-11%	-11%	-16%	-39%
Emissions	-8%	-9%	-15%	-22%
Distance to target	3%	2%	1%	17%

	2016	2017	2020	2030
Member State	(final)	(preliminary)	(projections)	(projections)
France				
Target	-5%	-10%	-14%	-37%
Emissions	-12%	-11%	-20%	-28%
Distance to target	-7%	-1%	-6%	9%
Germany				
Target	-5%	-10%	-14%	-38%
Emissions	-5%	-3%	-11%	-22%
Distance to target	0%	7%	3%	16%
Greece				
Target	-4%	-5%	-4%	-16%
Emissions	-28%	-29%	-22%	-23%
Distance to target	-24%	-24%	-18%	-7%
Hungary				
Target	12%	4%	10%	-7%
Emissions	-12%	-9%	-19%	-18%
Distance to target	-24%	-13%	-29%	-11%
Ireland				
Target	-8%	-13%	-20%	-30%
Emissions	-7%	-6%	0%	1%
Distance to target	1%	7%	20%	31%
Italy				
Target	-10%	-11%	-13%	-33%
Emissions	-19%	-20%	-21%	-25%
Distance to target	-9%	-9%	-8%	8%
Latvia				
Target	12%	14%	17%	-6%
Emissions	7%	8%	8%	13%
Distance to target	-5%	-6%	-9%	19%
Lithuania				
Target	6%	7%	15%	-9%
Emissions	5%	7%	2%	6%
Distance to target	-1%	1%	-13%	15%
Luxembourg				
Target	-12%	-14%	-20%	-40%
Emissions	-16%	-15%	-17%	-20%
Distance to target	-4%	-1%	3%	20%
Malta				
Target	4%	5%	5%	-19%
Emissions	19%	28%	16%	27%
Distance to target	15%	23%	11%	46%

	2016	2017	2020	2030
Member State	(final)	(preliminary)	(projections)	(projections)
Netherlands				
Target	-9%	-11%	-16%	-36%
Emissions	-21%	-21%	-26%	-31%
Distance to target	-12%	-10%	-10%	5%
Poland				
Target	10%	11%	14%	-7%
Emissions	10%	14%	6%	3%
Distance to target	1%	3%	-8%	10%
Portugal				
Target	3%	-1%	1%	-17%
Emissions	-14%	-14%	-17%	-24%
Distance to target	-18%	-13%	-18%	-7%
Romania				
Target	7%	11%	19%	-2%
Emissions	-3%	-2%	1%	10%
Distance to target	-11%	-13%	-18%	12%
Slovakia				
Target	9%	9%	13%	-12%
Emissions	-14%	-14%	-12%	-12%
Distance to target	-23%	-23%	-25%	0%
Slovenia				
Target	5%	3%	4%	-15%
Emissions	-5%	-7%	-9%	-15%
Distance to target	-10%	-10%	-13%	0%
Spain				
Target	-6%	-8%	-10%	-26%
Emissions	-16%	-15%	-20%	-16%
Distance to target	-10%	-8%	-10%	10%
Sweden				
Target	-9%	-13%	-17%	-40%
Emissions	-25%	-25%	-32%	-40%
Distance to target	-16%	-12%	-15%	0%
United Kingdom				
Target	-17%	-14%	-16%	-37%
Emissions	-20%	-21%	-26%	-30%
Distance to target	-3%	-7%	-10%	7%

Member State	2005	2013	2014	2015	2016	2017	2018	2019	2020
	Base year emissions		Final data	2013-2016		Preliminary data	Projections 2018-202		020
Austria									
AEAs		52.6	52.1	51.5	51.0	49.5	48.9	48.3	47.8
Emissions	56.8	50.1	48.2	49.3	50.6	51.3	49.4	49.3	49.1
gap to target		2.5	3.9	2.2	0.4	-1.8	-0.5	-1.0	-1.4
Belgium									
AEAs		78.4	76.9	75.3	73.8	72.5	71.1	69.7	68.2
Emissions	80.3	74.3	70.1	72.7	74.1	72.4	71.7	71.5	71.0
gap to target		4.1	6.8	2.6	-0.3	0.1	-0.7	-1.8	-2.8
Bulgaria									
AEAs		26.9	27.2	27.5	27.7	25.9	26.1	26.3	26.5
Emissions	22.1	22.2	22.9	25.4	25.6	26.1	22.2	22.0	21.7
gap to target		4.7	4.3	2.1	2.1	-0.2	3.9	4.4	4.8
Croatia									
AEAs		19.6	19.8	20.0	20.2	18.7	18.9	19.1	19.3
Emissions	17.4	15.1	14.7	15.6	16.0	16.1	15.2	15.2	15.2
gap to target		4.5	5.1	4.4	4.2	2.6	3.7	3.9	4.1
Cyprus									
AEAs		5.9	5.9	5.9	5.9	4.2	4.1	4.0	4.0
Emissions	4.2	3.9	3.9	4.1	4.1	4.3	4.3	4.4	4.5
gap to target		2.0	2.0	1.9	1.8	-0.1	-0.2	-0.3	-0.5
Czech Republic									
AEAs		62.5	63.2	64.0	64.7	65.2	65.9	66.5	67.2
Emissions	61.7	61.5	57.6	61.3	62.8	64.0	60.2	61.1	61.9
gap to target		1.0	5.6	2.7	1.9	1.2	5.7	5.5	5.3
Denmark									
AEAs		36.8	35.9	35.0	34.1	34.8	33.9	33.0	32.1
Emissions	40.1	33.7	32.6	32.5	33.1	32.6	31.8	31.5	31.1
gap to target		3.1	3.3	2.5	1.0	2.2	2.1	1.5	0.9
Estonia									
AEAs		6.3	6.3	6.3	6.4	5.9	6.0	6.0	6.0
Emissions	5.4	5.8	6.1	6.1	6.2	6.0	6.0	6.0	6.0
gap to target		0.5	0.2	0.2	0.2	0.0	-0.1	0.0	0.0

Table 5: Annual emissions allocations<sup>12</sup>, emissions and gap to targets under the Effort Sharing Decision (Mt. CO<sub>2</sub>-eq.). Positive gap to target indicate overachievement, negative values indicate underachievement.

<sup>&</sup>lt;sup>12</sup> AEAs for the years 2017-2020 have been recalculated for all Member States to reflect updates in methodologies for reporting of GHG inventories. This recalculation ensures maintaining of the originally intended effort of each Member State (in % of 2005 emissions).

Member State	2005	2013	2014	2015	2016	2017	2018	2019	2020
Finland	2005	2013	2014	2015	2010	2017	2010	2015	2020
AEAs		31.8	31.3	30.8	30.3	30.2	29.6	29.1	28.5
Emissions	33.9	31.6	30.1	29.9	31.4	30.8	29.4	29.1	28.8
gap to target	55.5	0.2	1.1	0.9	-1.0	-0.6	0.2	0.0	-0.3
France		0.2	1.1	0.5	1.0	0.0	0.2	0.0	0.5
AEAs		394.1	389.5	384.4	379.4	358.2	352.9	347.7	342.5
Emissions	398.2	366.1	353.5	353.0	351.9	354.7	332.1	325.2	318.2
gap to target	550.2	28.0	35.9	31.4	27.5	3.5	20.8	22.5	24.3
Germany						0.0			
AEAs		472.5	465.8	459.1	452.4	432.3	425.2	418.1	410.9
Emissions	477.8	460.2	436.8	444.1	454.2	464.7	436.3	431.2	426.5
gap to target		12.3	29.0	15.1	-1.7	-32.4	-11.1	-13.1	-15.6
Greece									
AEAs		59.0	59.3	59.6	59.9	59.1	59.4	59.7	60.0
Emissions	62.6	44.2	44.4	45.4	44.9	44.3	48.2	48.7	48.9
gap to target		14.8	14.9	14.2	15.0	14.9	11.2	11.1	11.1
Hungary									
AEAs		50.4	51.5	52.6	53.8	50.1	51.0	51.9	52.8
Emissions	48.0	38.4	38.4	41.4	42.1	43.8	40.0	39.5	39.1
gap to target		12.0	13.1	11.2	11.7	6.3	11.0	12.4	13.7
Ireland									
AEAs		46.9	45.8	44.6	43.5	40.9	39.8	38.7	37.7
Emissions	47.1	42.2	41.7	43.0	43.8	44.0	45.9	46.4	46.8
gap to target		4.7	4.1	1.6	-0.3	-3.1	-6.1	-7.7	-9.2
Italy									
AEAs		308.2	306.2	304.2	302.3	298.3	295.8	293.4	291.0
Emissions	334.5	273.3	265.3	273.3	270.7	268.9	267.5	265.1	262.7
gap to target		34.8	40.9	31.0	31.6	29.3	28.4	28.3	28.3
Latvia									
AEAs		9.3	9.4	9.4	9.5	9.7	9.8	9.9	10.0
Emissions	8.5	8.8	9.0	9.0	9.1	9.2	9.1	9.2	9.2
gap to target		0.5	0.3	0.4	0.4	0.5	0.7	0.7	0.8
Lithuania									
AEAs		12.9	13.3	13.7	14.0	14.1	14.5	14.9	15.2
Emissions	13.3	12.4	12.9	13.3	13.9	14.2	13.5	13.6	13.6
gap to target		0.5	0.4	0.4	0.1	-0.1	1.0	1.3	1.7
Luxembourg									
AEAs		9.5	9.3	9.1	8.9	8.7	8.5	8.3	8.1
Emissions	10.1	9.4	8.9	8.6	8.5	8.7	8.4	8.4	8.4
gap to target		0.2	0.5	0.5	0.4	0.1	0.2	0.0	-0.3

Member State	2005	2013	2014	2015	2016	2017	2018	2019	2020
Malta									
AEAs		1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
Emissions	1.1	1.3	1.3	1.3	1.3	1.4	1.3	1.3	1.3
gap to target		-0.1	-0.1	-0.1	-0.2	-0.3	-0.1	-0.1	-0.1
Netherlands		0.1	0.1	0.12	0.12	0.0	012	0.12	0.12
AEAs		122.9	120.7	118.4	116.1	114.1	111.8	109.6	107.4
Emissions	127.8	108.3	97.9	101.1	101.3	101.1	96.9	96.0	94.6
gap to target		14.7	22.8	17.3	14.8	13.0	14.9	13.6	12.8
Poland									
AEAs		193.6	194.9	196.1	197.4	200.0	201.7	203.4	205.2
Emissions	180.0	186.1	181.5	186.8	198.7	204.8	189.5	189.8	190.1
gap to target		7.5	13.3	9.4	-1.3	-4.8	12.2	13.6	15.1
Portugal									
AEAs		49.3	49.6	49.9	50.1	47.9	48.3	48.7	49.1
Emissions	48.6	38.6	38.8	40.6	41.6	41.7	41.4	41.0	40.5
gap to target		10.7	10.8	9.2	8.6	6.2	6.9	7.7	8.6
Romania									
AEAs		75.6	77.5	79.3	81.1	84.1	86.0	87.9	89.8
Emissions	75.5	72.7	72.5	74.6	73.1	74.2	75.6	76.0	76.5
gap to target		2.9	4.9	4.7	8.0	9.9	10.4	11.8	13.3
Slovakia									
AEAs		24.0	24.4	24.7	25.1	25.0	25.3	25.6	25.9
Emissions	23.0	21.1	19.8	20.1	19.8	19.7	20.0	20.1	20.2
gap to target		2.9	4.6	4.7	5.3	5.3	5.3	5.6	5.8
Slovenia									
AEAs		12.3	12.4	12.4	12.4	12.2	12.2	12.3	12.3
Emissions	11.8	10.9	10.5	10.7	11.2	11.0	10.7	10.7	10.7
gap to target		1.4	1.9	1.7	1.2	1.2	1.5	1.5	1.6
Spain									
AEAs		227.6	225.6	223.7	221.8	218.3	216.3	214.3	212.4
Emissions	236.0	200.3	199.8	196.2	198.5	199.9	191.2	190.4	189.1
gap to target		27.3	25.9	27.6	23.3	18.4	25.1	23.9	23.3
Sweden									
AEAs		41.7	41.0	40.4	39.8	37.8	37.2	36.7	36.1
Emissions	43.5	35.3	34.5	33.9	32.6	32.7	31.4	30.5	29.7
gap to target		6.4	6.5	6.5	7.2	5.1	5.9	6.1	6.4
United Kingdom									
AEAs		358.7	354.2	349.7	345.2	360.4	357.2	354.1	350.9
Emissions	417.8	339.5	324.4	326.0	333.9	331.9	316.7	314.4	309.4
gap to target		19.3	29.8	23.7	11.3	28.5	40.6	39.7	41.5

#### 8. Use of revenues from auctioning of ETS allowances

Table 6: Member States' revenues from auctioning of ETS allowances and amounts of the revenues spent on climate and energy purposes, 2017 (EUR 1000).

Member State	Total revenues from the auctioning of allowances from EU ETS (EUR 1000)	Total revenues used (or planned to be used) for climate related purposes (EUR 1000)
Austria <sup>13</sup>	157 380	
Belgium	145 100	133 097
Bulgaria	130 418	138 240
Croatia	27 152	18 920
Cyprus	6 393	788
Czech Republic	199 775	199 775
Denmark	71 723	71 723
Estonia	39 354	15 905
Finland <sup>14</sup>	95 260	9 530
France	313 402	313 402
Germany	1 146 818	1 130 840
Greece	198 028	198 028
Hungary	85 129	0
Ireland	53 560	53 560
Italy	549 806	383 692
Latvia	15 391	3 790
Lithuania	31 513	31 513
Luxembourg	6 875	3 471
Malta	5 952	6 878
Netherlands	190 706	190 706
Poland	505 994	290 378
Portugal	100 350	95 096
Romania	260 752	0
Slovakia	87 064	40 873
Slovenia <sup>15</sup>	25 093	25 093
Spain	493 551	445 466
Sweden	52 572	28 808
United Kingdom	614 758	614 758
EU 28	5 609 868	4 444 330

<sup>&</sup>lt;sup>13</sup> Austria reported the following: Revenues are not ear-marked. Actual climate-related spending exceeds the total amount of revenues.

<sup>&</sup>lt;sup>14</sup> Finland does not ear mark revenues for specific uses, including the auctioning revenues from the operation of EU ETS in Finland. Finland's total spending in 2017 on the purposes specified under Article 10 (3) of the EU Emission Trading Directive 2003/87/EC is higher than the equivalent financial value of auction revenues in 2016 but is not reported here.

<sup>&</sup>lt;sup>15</sup> Slovenia reported billion EUR 25.093. In the table it is assumed that the correct figure is 1000 EUR 25 093.