## sandbag

# 2015 EU ETS Emissions analysis

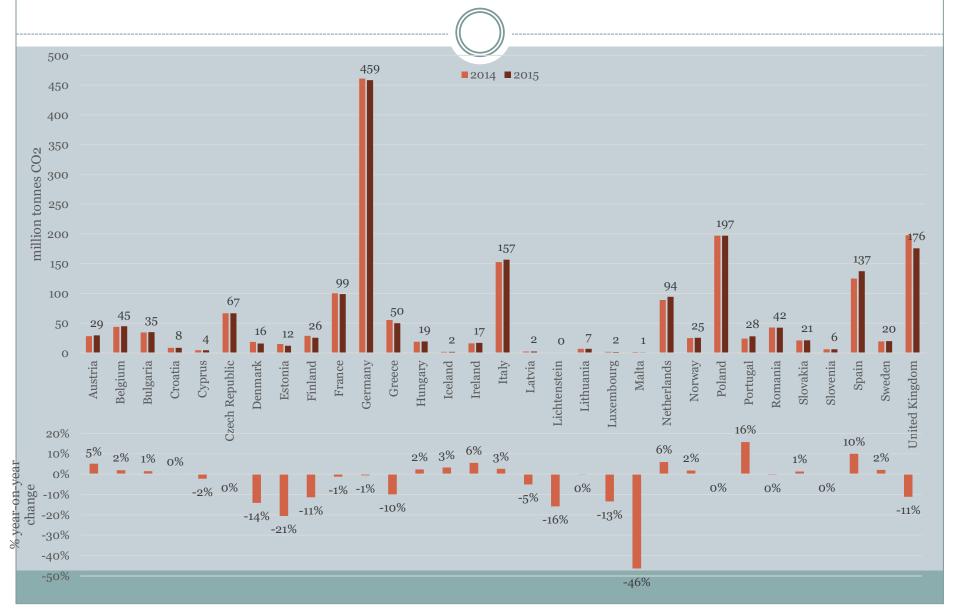
from EC data published 1200CET on 1-April 2016; excludes aviation



### **Key points:**

- Total emissions are 11mt down, or 0.6%, from 1813mt to 1802mt.
  - Exact levels uncertain, as 10% of emissions have not been published (mostly Polish)
- Power and heat emissions fell 0.6%, from 1073mt to 1065mt.
  - This fall follows a massive 8% in 2014 power sector emissions, due to a record mild year. It is incredible that emissions in 2015 still fell as weather moved to be more "normal".
  - This underlines the large long-term trend of falling emissions in the European power sector as renewables electricity displaces fossil.
  - UK coal power emissions saw a huge fall of 23%, whilst UK gas power also fell. See our blog today for more details.
  - German lignite power emissions fell slightly slower than overall EUETS emissions, and are still responsible for 9.0% of all EUETS emissions. See our second blog today for more details.
  - Netherlands power emissions increased by 11% as new coal plants came online. However, emissions should fall again as older coal plants are decommissioned in 2016 and 2017.
  - A dry region in Spain and Portugal significantly increased coal power emissions there; whilst a wet Nordic region led to lower coal generation in Denmark and Finland.
- Industry emissions fell 0.3% from 740mt to 738mt.
  - Emissions have fallen only very marginally.
  - *UK steel emissions fell 18%.*
  - Excluding this fall, total European industrial emissions were the same in 2015 as in 2014.

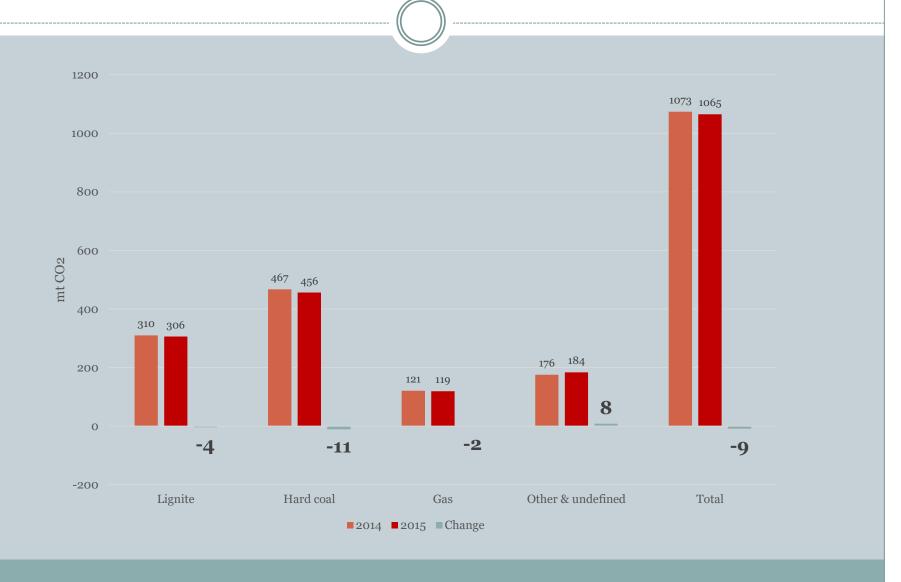
# Emissions by Country sandbag



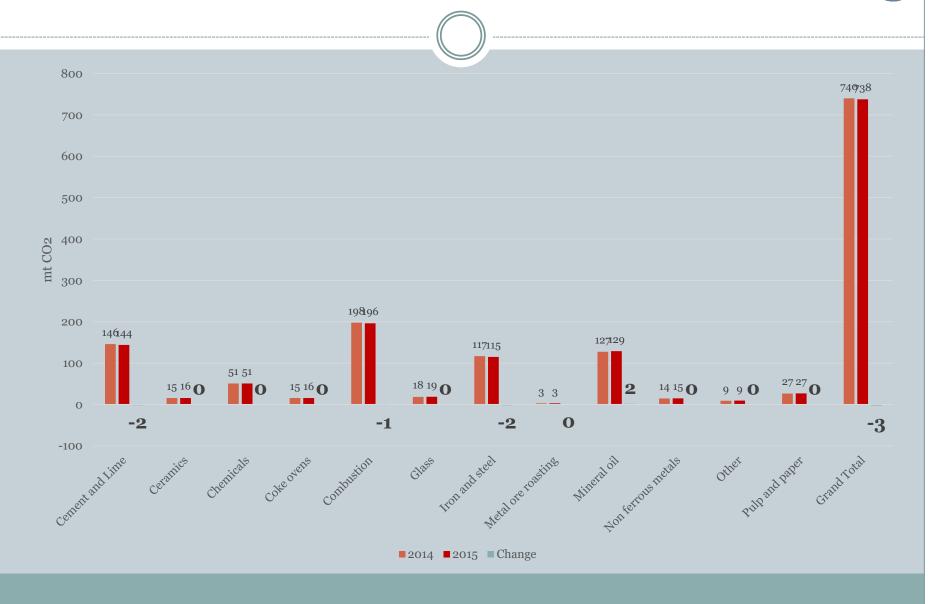
## Emissions changes 2014 to 2015



# Power & Heat Sector sandbag



## Industrial Sector sandbag



## Industrial Sector % sandbag



## **Industrial Sector**

year-on-year tCO2 changes by sector, by country

Sum of FilledVa	Sector	I <b>T</b>											
Country -1	Mineral oil	Ceramics	Glass	Coke ovens	Other	Chemicals	Non ferrous metals	Pulp and paper	Metal ore roasting	Combustion	Cement and Lime	Iron and steel	Grand Total
Spain	290,78	5 129	,951 -31	477 -2,8	97 2,414	114,440	-183,185	-68,342	0	-381,071	719,244	974,394	1,564,256
Austria	90,86	4 -1	.311 -1	181	0 4,680	-27,766	10,137	93,563	0	100,928	14,995	163,960	448,869
Sweden	59,66	5 -5	.231	833	0 4,632	-15,621	-22,170	-32,476	-46,555	-40,811	198,730	308,756	408,086
Ireland	79,18	9 2	,622	0	0	) 0	0	3,697		41,451	213,315	0	340,274
Hungary	56,02		,623 -9	207 -51,8	31 41	7,954	. 0	255		-161,944	194,040	249,497	311,835
Estonia	9,28			150	0	) 0	0	-7,792		305,999		0	303,098
Denmark	47,51			056	0	) 0	0	-1,398		124,077	62,553	0	252,398
Portugal	328,31			975	0	-17,750		26,752	0	7,268	-143,097	34,774	246,711
Bulgaria	-1,29			577	0	, ,	4,658			238		6,303	
Lithuania	124,50			850	0 -3,532		0	-5,356		57,975	34,117	0	204,736
Norway	-2,79			791	0			-20,638	0	137,618		-176,810	
Croatia	109,86			880	0 7,000			0		45,735		-6,561	102,165
Belgium	94,00	0 27	,943 13	417 -65,2			0	72,760	0	414,623		11,757	
Iceland		0	0	0	0 56,54		0	0	0	550		0	
Slovakia	154,24	.6 3	,200 2	565	0 2,55	306,009	32,123	8,807	0	-350,308	-94,106	-36,065	29,021
Lichtenstein		0	0	0	0		0	0	0	-49		0	40
Netherlands	421,90	16 28		421	0 19,20	33,641			0	-908,913		359,395	
Luxembourg		0		228	0		-674		0	-17,012		6,194	
Slovenia		0		527	0 -11,410	) -25	5,072			635		-895	-102,977
Latvia				145	0		•	-2,321		-9,249		22,670	
Finland	-178,17			995	0 14,39	7,250	-1,205	-94,129	-37	-65,965		169,718	
Cyprus			,331	0	0			0	0	0		0	
Poland	102,43			803 -52,8				14,723		-144,998		121,260	
Czech Republic	11,78			534	0 -1,39					-318,479		-183,524	-356,563
Italy	890,29		,899 105		0 45,45			110,274			-390,326	-1,132,997	-467,612
Romania	-95,61			228	0 5,97			17,524		-727,543			-500,414
Germany	153,02			865 -106,7						-148,567	-658,451	412,169	
Greece	-135,73			775	0 2,082			-11,789		4,345			
United Kingdom	-399,56			024 448,6				33,718		1,186,465			-1,302,511
France	-572,02			970	0 4,110	-87,311	-15,112	-130,640		-353,892	-824,819	-409,826	-2,374,671
Grand Total	1,638,50	3 292	,090 269	492 169,0	91 141,28	100,483	60,090	27,473	-32,606	-1,484,131	-1,849,462	-1,856,994	-2,524,682

# Top 10 Emitters sandbag

	TC	P 10 EURC	OPEAN POLLUTERS		
RANK	PLANT	OWNER	2015 CO <sub>2</sub> EMISSIONS (Mt)	YEAR ON YEAR CHANGE	
1	Belchatow	PGE	36.9 (2014 data)	N/A	
2 - =	Neurath	RWE	32.1	-1%	
3 -	Niederaussem	RWE	27.3	0%	
4 -	Jaenschwalde	Vattenfall	23.3	-4%	
5 - =	Weisweiler	RWE	18.1	8%	
6 -	Drax	Drax	13.2	-21%	
7 -	Brindisi Sud	ENEL	13.1	10%	
8 4	Schwarze Pumpe	Vattenfall	11.6	0%	
9 📥	Kozienice	ENEA	11.4	4%	
10 🛔 💳	Maritsa East 2	TPP	11.3	<b>6</b> %	
<b>1</b> 3 🛊 🔚	Agios Dimitrios	PPC	10.6	-11%	
14 🕴 🔚	Lippendorf	Vattenfall	10.3	-14%	

## **Definitions**

# sandbag

### Power and Heat sector

- Sandbag uses NACE codes, which we believe provide a better representation of what are power and heat installation, than does the "combustion" sector, which most analysts use. We also include additional installations which have no allocations.
- o Specifically, Installations assigned to NACErev2 codes 35.00, 35.10, 35.11, 35.12, 35.13, 35.14 & 35.30 have been flagged as Power installations; additional CITL combustion sector installations have also been flagged as Power installations if have no free alloc PhaseIII but do have emissions 2013 (any NACErev2 code)

## Industry

- Industry is everything that is not power.
- The sub-sector categorisations are as per defined in the EUETS

## Fuel type

 Sandbag has mapped Power and Heat installations by fuel, with 80% coverage.

## Missing data

• Where data is missing for 2015 so far, we assume installations have the same emissions as 2014.