

From the rehearsal dinner in Lima to the wedding of interests in Paris: finding the recipe to keep everyone seated at the negotiations table¹

The 14th of December 2014 marked the end of the Conference of Parties (COP) 20 in Lima. 2014 was a relatively productive year marked by Europe's engagement through the Energy Climate Package 2030 in October 2014, the US-China agreement and the capitalization of the Green Climate Fund. Hopes were high that the 20th Conference of the parties (COP) could put the negotiations on track towards an ambitious global agreement in Paris in December 2015. However, in many ways, Lima has been a ponderous and drawn-out rehearsal dinner in anticipation of the Parisian "wedding of interests" for which the right recipe must be found to bring all actors to the table.

While slow going, COP20 has pointed to what ingredients are necessary for all actors to share the table – and an agreement – in Paris. Through the resulting "Lima call for climate action" and its annex, two key objectives have been achieved: defining a framework – even if only indicative – for the submission of the countries' Intended Nationally Determined Contributions (INDCs); and a preview of the components of the draft negotiating text that will be discussed throughout 2015 on the way to Paris. Nevertheless, many unsolved critical issues remain on the negotiators' plates to ensure the strong commitments necessary to reach the ambitious long-term 2°C target.

The decision does not provide a definitive answer on the legal form and the chosen "menu" of the future agreement. It nevertheless gives a "shopping list" for 2015 discussions:

- First, hard-law options such as a protocol or amendments to the climate convention are implicitly considered. Nevertheless, the still-undetermined legal status of INDCs opens the door to a hybrid agreement: this could have the internationally binding force of a protocol focusing on specific topics such as transparency and MRV², while mitigation targets would be determined and managed nationally. This appears to be a necessary condition for countries such as the United States to remain at the table.
- Second, large flexibility is given to countries to customize their own contributions, moving the discussion towards a buffet rather than a set menu. This included some indications pointing to the use of market mechanisms supplementary to domestic action, even though the role of markets in the 2015 Agreement was not clarified. The details of the INDCs' key elements that countries must provide are fairly indicative, which in practice may limit comparison between countries if they are not endorsed.
- Third, concerning ambition, the text specifies that INDCs will represent a progression beyond the 'current undertaking' of every country, such as the Kyoto Protocol commitments and voluntary pledges of the Copenhagen-Cancun process.
- Finally, the most valuable outcome is – probably – the disappearance of the usual distinction between Annex I/non-Annex I countries. This represents a paradigm shift from a bipolar regime to a multipolar system. Following USA-China announcement, the Lima decision builds on the classical "principle of common but differentiated responsibilities and respective capabilities" and introduces the subtly innovative phrase "in light of different national circumstances."

While COP20 can be characterized as a limited success, climate action in 2014 remains positive. Growing public mobilization and a change of paradigm on the distinction between national responsibilities may be two key ingredients for success. Looking forward to Paris at the end of this year, the ingredients for both success and disaster are present.

An experienced "chef" will be needed to keep everyone at the banquet table in Paris. Each country will have to find its interest in the global balance of the dinner: global ambition, adaptation, finance and MRV tools. Countries will also have to ensure that their contributions reflect their national ambition and capacities. The end of the first half of 2015 – the deadline to submit a draft agreement and the expected revelation of INDCs from major countries – will be a telling intermediary point to see if the shopping list written in Lima has produced a meal suited to everyone's tastes.

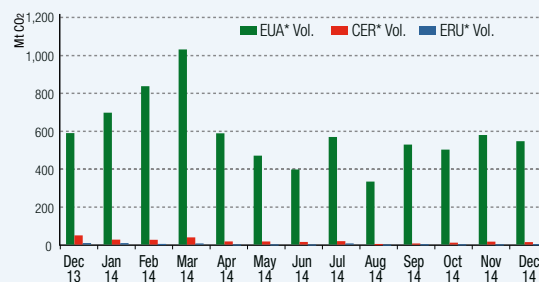
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1. For further details on the Lima Conference, see "COP20 in Lima : a tense rehearsal dinner where everyone ended up eating at the same table": <http://bit.ly/CBriefCOP20>
2. Monitoring, Reporting and Verification

Key points

- **EU ETS – MSR debate:** ENVI Committee met on 3rd December to discuss issues concerning the implementation of the MSR. MPs remain divided.
- **EU ETS – MSR timetable:** the ITRE Committee will hold an opinion vote on 22nd January 2015, while the ENVI Committee will vote on 23rd and 24th February 2015.
- **EU ETS Directive:** On 19th December, the European Commission launched a public consultation on the revision of the EU ETS directive post 2020.

Trading volumes: EUA –5.6%, CER –15.3% ERU +2.3%



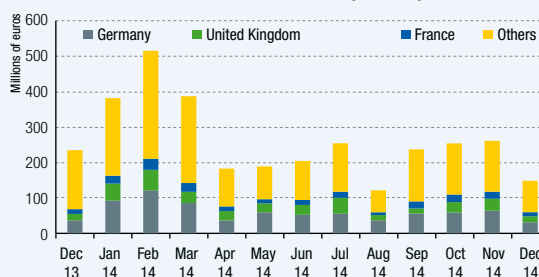
Source: CDC Climat Research calculation, based on data from EEX, ICE Futures Europe, NYMEX, Nasdaq OMX, and LCH Clearnet

Dec 14 contract price: EUA –2.05%



Source: CDC Climat Research, ICE Futures Europe

Monthly proceeds from Phase 3 auctions: 148.61 M€ in december 2014 (-43%)



Source: CDC Climat Research based on data from ICE Futures Europe, EEX

Energy

Primary energy prices and electricity prices

		Dec. 2014	
Coal	API # 2 CIF ARA (First month in USD/t)	71.1 ▼	
Natural gas	NBP (spot in €/MWh)	23.2 ▼	
	TTF (spot in €/MWh)	22.5 ▼	
Crude oil	Brent (First month in USD/b)	63.3 ▼	
Electricity	Germany (€/MWh)	Spot	34.3 ▼
		Calendar	34.5 ▼
	United Kingdom (€/MWh)	Spot	55.9 ▼
		Next summer	59.8 ▼
		Next winter	65.1 ▼

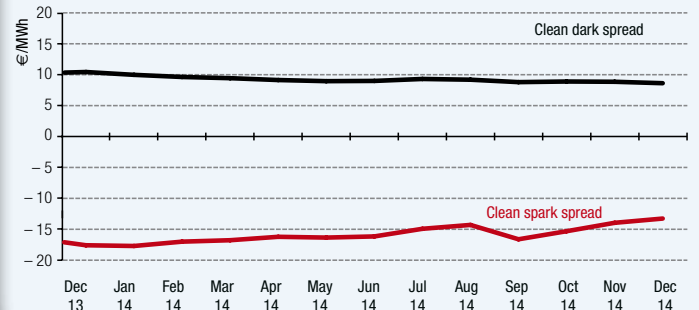
Sources: CDC Climat Research, Thomson Reuters

Clean dark, clean spark spreads and switching price

	Clean spark (€/MWh)		Clean dark (€/MWh)		Switching Price (€/tCO ₂)	
	spot	futures	spot	futures	spot	futures
Germany*	-13.3	-13.3	7.9	8.5	42.9	44.1
United Kingdom*	6.0	12.9	28.8	33.3	45.0	40.8

* Germany, 2015 calendar contract, United Kingdom, summer 2015 contract.

German baseload – monthly average of Cal. 2015 clean dark and clean spark spreads



Sources: CDC Climat Research, Thomson Reuters

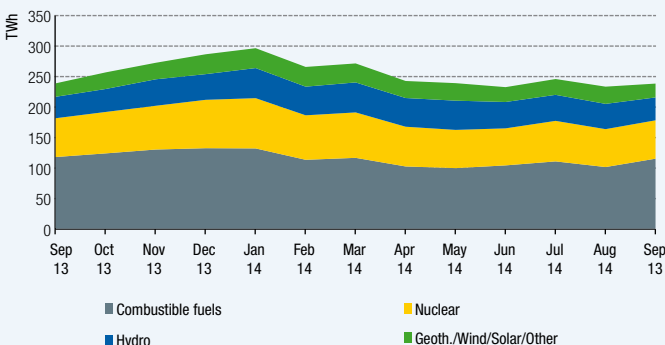
The downward trend in the average monthly price of Brent Crude accelerated in December 2014, when the price fell by over 20.5% to \$63.3 per barrel. The weak demand prospects and a persistent excess supply contributed to this strong downward trend since June, when a barrel was trading at \$110. Gas prices decreased slightly in October: NBP spot prices and TTF spot prices fell by 2.1%, reaching respectively €23.2/MWh and €22.5/MWh. The good supply of gas markets has made it possible to compensate for temperature declines. Long-term prices follow a downward trend, following the oil price fall. With respect to power markets, German spot prices decreased by 13.8%, due to strong winds, mild temperatures at the end of the month, and a strong nuclear supply, while long-term cal. 2015 prices fell by 2.3%. Lastly, the German clean dark price fell sharply on spot markets, while the clean spark price fell on the spot markets and on the futures markets. The theoretical price of the CO₂ switch was estimated at €42.90 per tCO₂eq on the German spot power market, and at €45 per tCO₂eq on the United Kingdom spot power market.

Production

Electricity generation (TWh)

EU 20 (in TWh)	Sep. 14	Cumulative from Jan. 14	Year-on-Year (% change)
Production	236.9	2,251.9	-2.5%
of which - Combustible fuels	114.2	986.9	-8.9%
- Nuclear	62.7	608.0	-0.1%
- Hydro	37.4	403.9	1.7%
- Geoth./Wind/Solar/Other	22.6	253.1	14.0%

* Gas, coal, oil.

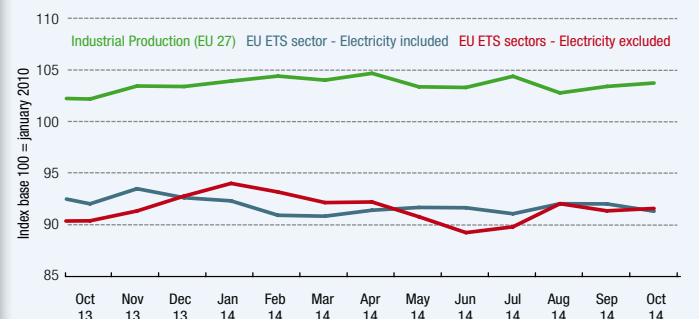


Sources: CDC Climat Research, from IEA data

Production indices (Index base year 2010)

EU 27	Oct. 14	Last month (pts)	Year-on-Year (pts)
Indust. Prod (excl. construction)	103.7	0.3	1.6
EU ETS sectors production* (incl. electricity)	91.2	-0.7	-0.7
EU ETS sectors production* (excl. electricity)	91.5	0.2	1.2
Electricity, gas and heating	91.1	-1.2	-1.7
Cement	78.0	-1.6	0.3
Metallurgy	100.9	0.9	1.1
Oil refinery	93.7	1.5	3.9

* Index weighted by EU ETS sectors's weight in average total allocation over 2008-2012

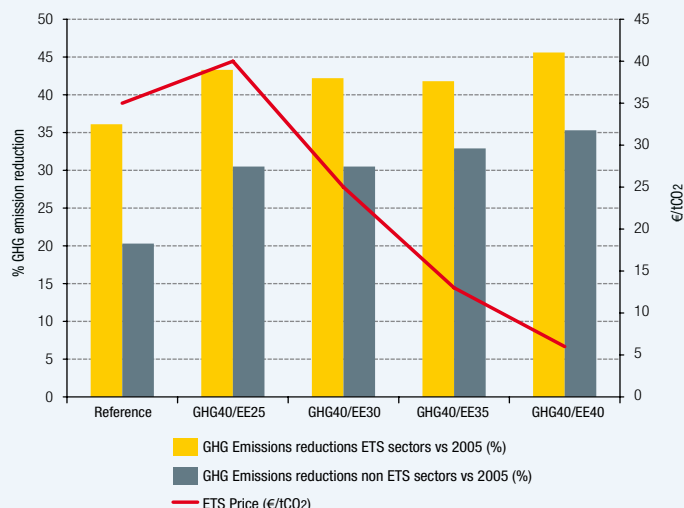
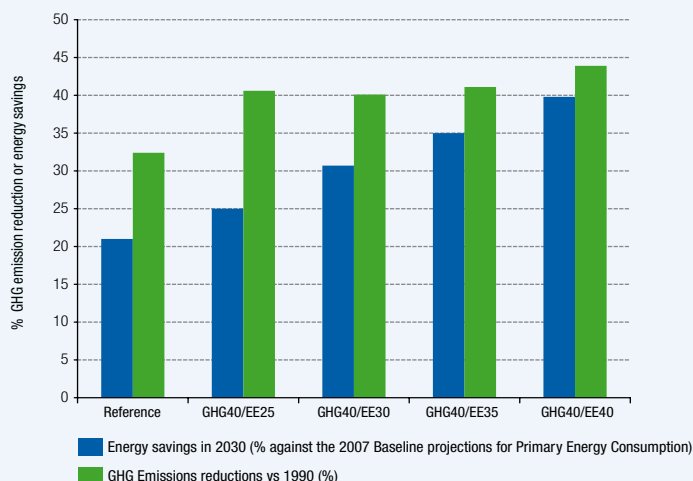


Sources: CDC Climat Research from Eurostat data

Industrial production in the EU-27 countries rose by 0.3% in September 2014 compared to the previous month and by 1.6% compared to October 2013. The 0.3% increase in monthly industrial production is due to a 1.5% increase in production for non-durable consumer goods, and 0.6% for durable consumer goods. The largest increases in industrial production were recorded in Ireland (+9.0%), Lithuania (+5.0%), Greece (+2.5%) and Slovenia (+2.4%), and the steepest falls in Hungary (-2.7%), France and the Netherlands (-0.9% each). Our production index for EU ETS sectors (including electricity) decreased slightly to 91.2 pt, while the index excluding electricity increased by 0.2% to 91.5 pt. Power generation in the 20 EU countries amounted to 231.1 TWh in September 2014, an increase of 2.5% compared to August 2014 and down 2.5% compared to 2013. We recorded an increase in hydro production (1.7%) and renewable energy (14.0%) compared to August 2014.

Coordination of CO₂, EE and RES policies

Impact of energy efficiency target on the GHG emissions and the price of CO₂



Note: Reference refers to the scenario with no additional climate and energy policies on the trajectory of the 2020 objectives; EE 25, 30, 35, 40 refer to the scenario with a 40% GHG target, a 27% EU level renewable energy target, and energy savings of respectively 25%, 30%, 35%, 40% in 2030 compared to the 2007 Baseline projections for Primary Energy Consumption. Source: European Commission, Impact Assessment, Energy efficiency and its contribution to energy security and the 2030 Framework for Climate and energy policy, 2014

On 9th December 2014, the EU Council met to discuss energy and climate issues. Ministers agreed on the importance of the EU's 2020 objectives which are on track to be achieved. They emphasized the positive aspects of this strategy, such as the increase of sustainability in the power sector. Regarding the implementation of the internal energy market, delays are arising concerning market integration and the development of common codes of network operations. The EU Council has adopted measures to promote the integration of wholesale and retail markets and enable faster ramp-up of interconnections. The Council also adopted the draft Directive concerning Indirect Land Use Change (ILUC) to promote the emergence of biofuels that have an overall positive impact in terms of greenhouse gas (GHG) emissions reduction. On 16th December, the European Commission unveiled its working program for the year 2015. The Air Quality framework initiated in December 2013 to set more rigorous emissions reduction trajectories to reduce air pollution is removed from the program, as it was considered redundant following the implementation of the 2030 climate and energy package.

Institutional environment

Phase 3 supply balance table

	2013	2014
Auctions (MtCO₂)	804	551
Free allocation (MtCO₂)	843	767

Free allocation status table

EU Member State	2013	2014
France	82	81
Germany	169	163
United Kingdom	66	64
Others	526	459
TOTAL	843	767

Sources: CDC Climat Research, European Commission, ICE Futures Europe, EEX

CER and ERU supply

	Dec. 14	Last month change
Number of CDM projects	12,265	+5.0
<i>of which - registered</i>	7,589	+10.0
<i>with - CER issued</i>	2,715	+20.0
Cumulative volume of CER issued (Mt)	1,521	+8.6
Number of JI projects	788	0.0
<i>of which - registered</i>	604	0.0
Cumulative volume of ERU issued (Mt)	849.9	0.0
<i>via - Track 1</i>	824.5	0.0
<i>via - Track 2</i>	25.4	0.0

Sources: CDC Climat, UNEP-DTU

On 19th December, the European Commission launched a public consultation on the revision of the EU ETS Directive for the period after 2020. This consultation focuses on several issues including the effective implementation of the GHG emission reduction path of at least 40% in 2030 compared to 1990, free allocation mechanisms to industrial sectors, the implementation of a fund to promote innovation in low-carbon technologies, and the free allocation to power sectors of certain Member States to foster their modernization. The debate on the Market Stability Reserve (MSR) was pursued: an opinion exchange meeting in the Parliament ENVI Committee was held on 3rd December and a draft report was informally published on 16th December. The draft report will be completed with the draft amendments and compromises that have received consensus. Key points include the use of backloaded allowances, the start date, carbon leakage and using allowances for creating a special fund to help stimulate low-carbon technologies. According to IETA, 44 members of the ENVI Committee would welcome early implementation and backloading allowances being moved into the reserve, six were opposed, and 19 members' decision was unknown.

Carbon markets dashboard

Primary market - EUA auctions in Phase 3

		Dec-13	Jan-14	Feb-14	Mar-14	Apr-14	May-14	Jun-14	Jul-14	Aug-14	Sep-14	Oct-14	Nov-14	Dec-14
Common Auction Platform + United Kingdom & Germany	Price (€/t)	4.62	5.00	6.45	6.35	7.35	5.03	5.54	5.91	6.23	5.96	5.99	6.78	6.74
	Volume (Mt)	50.90	76.31	80.33	60.98	35.22	37.72	37.02	43.28	19.52	39.79	42.05	38.56	22.04
Auction Revenues (M€)	Germany	36.66	92.28	121.62	85.73	36.53	59.46	52.45	55.37	36.75	56.07	58.71	63.97	31.17
	United Kingdom	18.27	48.43	57.88	31.69	26.48	25.35	27.82	44.97	14.93	14.13	29.65	33.78	17.15
	France	13.43	22.21	31.21	24.78	13.13	11.65	14.01	17.35	7.90	20.14	21.35	20.03	11.51
	Others	166.63	218.98	304.96	245.15	106.82	92.56	110.32	136.70	62.03	146.78	144.45	143.52	88.78
	Total	235.00	381.89	515.66	387.35	182.96	189.02	204.60	254.39	121.61	237.13	254.15	261.30	148.61

Sources: EEX, ICE Futures Europe

Primary market - CER and ERU issued (MtCO₂)

		Dec-13	Jan-14	Feb-14	Mar-14	Apr-14	May-14	Jun-14	Jul-14	Aug-14	Sep-14	Oct-14	Nov-14	Dec-14
Cumulative volume of CER issued UNEP-DTU (Mt)		1,419	1,428	1,433	1,440	1,451	1,457	1,466	1,472	1,480	1,491	1,504	1,512	1,512
Cumulative volume of ERU issued (Mt)	Track 1 (Mt)	803.7	803.8	809.6	816.1	824	824.1	824	824.1	824.4	824.4	824.4	824.5	824.5
	Track 2 (Mt)	25.4	25.4	25.4	25.4	25	25.4	25.4	25.4	25.4	25.4	25.4	25.4	25.4

Sources: UNEP-DTU, CDC Climat Research

Secondary market - Prices (€/t) and volumes: EUA, CER (ktCO₂)

			Dec-13	Jan-14	Feb-14	Mar-14	Apr-14	May-14	Jun-14	Jul-14	Aug-14	Sep-14	Oct-14	Nov-14	Dec-14
ICE Futures Europe	Daily spot	Price EUA phase 3	4.79	4.98	6.51	6.11	5.22	5.11	5.52	5.96	6.26	6.01	6.09	6.91	6.97
		Volume EUA phase 3	14,965	14,405	21,075	35,324	49,429	19,271	20,937	11,897	5,173	17,953	5,530	7,793	10,180
		Price CER	0.36	0.39	0.36	0.19	0.17	0.12	0.14	0.16	0.17	0.15	0.13	0.08	0.04
		Volume CER	1,204	80	375	1,028	2,998	745	167	1,530	1	242	255	319	8,622
	Dec. 14	Price EUA	4.92	5.07	6.61	6.19	5.28	5.50	5.62	6.00	6.29	6.04	6.10	6.92	6.78
		Volume EUA	240,590	450,338	527,394	640,679	360,681	469,397	254,497	336,379	210,539	315,678	291,844	328,676	262,834
		Price CER	0.35	0.37	0.36	0.18	0.16	0.23	0.12	0.16	0.17	0.14	0.11	0.08	0.04
		Volume CER	20,287	15,305	13,092	20,681	8,006	15,527	6,058	10,426	1,353	3,818	4,614	7,276	7,871
	Dec. 15	Price EUA	5.10	5.26	6.91	6.41	5.46	5.50	5.80	6.16	6.44	6.16	6.21	7.03	7.15
		Volume EUA	57,784	102,312	116,329	120,993	60,524	467,135	56,911	114,684	64,504	94,922	119,746	140,392	180,590
		Price CER	0.45	0.48	0.52	0.48	0.41	0.23	0.29	0.40	0.40	0.39	0.38	0.52	0.54
		Volume CER	10,987	8,766	7,711	11,991	2,012	15,510	3,454	3,951	1,636	1,535	3,644	3,724	2,654
	Dec. 16	Price EUA	5.32	5.49	7.26	6.76	5.7	5.50	6.02	6.35	6.62	6.30	6.34	7.17	7.35
		Volume EUA	17,398	36,721	62,380	101,196	45,597	466,631	33,286	61,189	28,171	47,533	40,921	40,926	39,009
		Price CER	0.46	0.50	0.55	0.49	0.42	0.33	0.29	0.40	0.41	0.39	0.38	0.52	0.54
		Volume CER	0	689	245	982	164	800	0	0	10	50	850	500	550

Sources: ICE Futures Europe

Emission-to-cap by EU ETS sector and country: difference between distributed allocations of allowances and verified emissions

	2008	2009	2010	2011	2012
Combustion	-253.1	-113.5	-125.8	-76.9	-42.4
Oil refining	-1.4	7.6	14.3	16.0	20.2
Coking plants	1.5	6.8	2.9	3.1	5.7
Metal ores	4.3	11.0	8.8	8.9	9.7
Steel production	51.6	89.3	71.4	72.8	73.9
Cement	20.9	61.4	61.0	62.8	70.3
Glass	2.5	6.1	5.5	5.4	5.0
Ceramic products	5.3	10.0	10.2	9.6	9.2
Paper	6.9	11.3	10.0	11.1	11.6
Other activities	0.2	4.3	1.3	-0.7	1.4
Total (Mt)	-161.3	94.2	59.8	112.1	164.5

Source: CTL

	2008	2009	2010	2011	2012
Germany	-84.0	-36.6	-54.4	-49.5	-28.6
United Kingdom	-50.8	-15.0	-16.8	2.5	-2.5
Italy	-8.5	24.1	8.5	5.3	12.2
Poland	-3.1	10.8	5.9	4.2	15.6
Spain	-9.6	13.7	29.5	18.4	17.0
France	5.5	17.5	23.4	33.9	25.2
Czech Republic	5.2	12.2	10.6	12.2	17.1
The Netherlands	-6.8	2.8	0.1	8.9	10.5
Romania	7.7	24.9	27.7	23.6	25.8
Others	-17.0	39.8	25.3	52.7	72.3
Total (Mt)	-161.3	94.2	59.8	112.1	164.5

Source: CTL