Tendances Carbone

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Is the European Union in fighting formation on the Paris 2015 front?

Between the 26 and 27 of June, the upcoming European Council of Heads of State will debate the *Policy framework for climate and energy between 2020 and 2030* Communication published by the European Commission in 2014. In the run-up to an expected decision in October 2014, this debate includes three main challenges: deciding on the EU's CO_2 and renewable energy targets; expressing an opinion on the domestic energy system governance proposal; and positioning the EU in preparation for the Paris Climate Conference (COP 21) which is scheduled for November of 2015. These three challenges are intertwined : the 2030 CO_2 target will be the contribution that the EU will deliver in the first quarter of 2015, as part of international climate negotiations.

The task of drawing up a global climate agreement for the period beyond 2020 is a sizeable one. To meet this challenge, the negotiation route that has been used up until now to achieve a quantitative and binding target appears to have little chance of succeeding. Past and current attempts to reach a global, "burden-sharing type", GHG reduction target, as found in the Kyoto Protocol; or to aggregate the contributions of each State, like the Copenhagen Conference; do not suggest that major progress will be made by the Parties between now and 2015.

Other avenues for negotiation must be investigated. What could States commit to in Paris? Increased dedicated public funding to fight climate change? Unfortunately, this remains unlikely. Rather, the "battle plan" of an agreement in Paris could focus on three other areas, namely transparency, which is capable of increasing mutual trust between the Parties; the relationship between trade and combating climate change; and the design of funding channels for the transition to low-carbon economies.

The key to improving transparency resides in three words, namely Monitoring, Reporting, and Verification (MRV). Depending on the increasing level of ambition, the commitments could involve two levels: a commitment by all States – even developing States – to monitor, report and verify their emissions with common criteria; and a commitment by all States to report in a standardized way on the national policies they implement to meet their targets.

From a trade relations standpoint, a successful conference in Paris could mark the beginning of a process that would enable States to implement climate policies and to assert these policies as part of international trade negotiations. In fact, experience shows that some sectors' concern about losing future competitiveness represents an obstacle to implementing ambitious climate and energy policies.

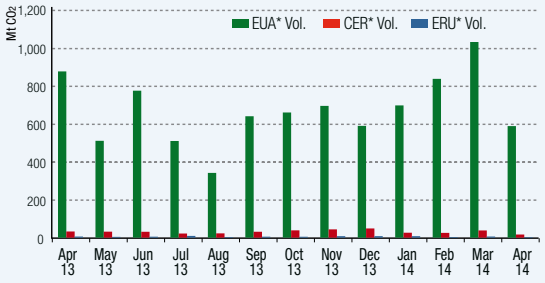
The third cornerstone for a Paris Protocol would be financing the transition to a low-carbon economy. Success in 2015 depends on reinventing an incentive-based financing circuit that is capable of redirecting private capital towards low-carbon investments. Even if the operating details of this type of mechanism could be drawn up between now and 2020 - the date when the Agreement enters into effect - a new approach could already be envisaged. Multiple initiatives that have already been launched, such as the Green Fund, the reform of the Clean Development Mechanism, and sector-based frameworks such as what is in place for forestry. Nevertheless, the involvement of actors in the monetary and banking systems, e.g. through the use of monetary creation or refinancing loans for low-carbon investments, could enable genuine structural changes to be introduced across entire economic sectors. This is clearly what should be promoted, in order to implement a recovery plan for "green growth" on a global scale. The European Union could launch such a line of thought.

Benoît Leguet - **Head of Research, CDC Climat Research**

Key points

- **Verified CO_2 emissions:** in 2013, emissions of EU ETS stationary installations, estimated to 1,895 $MtCO_2$, have decreased by at least 3% in comparison of 2012.
- **State aids for 2020 climate targets:** the EU Commission has adopted new guidelines on public support for projects in the field of environmental protection and energy that notably promote a gradual move to market-based support for renewable energy.
- **Carbon leakage:** the EU Commission has sent its draft proposal for a 2015-2019 carbon leakage list to the EU Climate Change Committee and has launched a public consultation on possible post-2020 carbon leakage provisions.

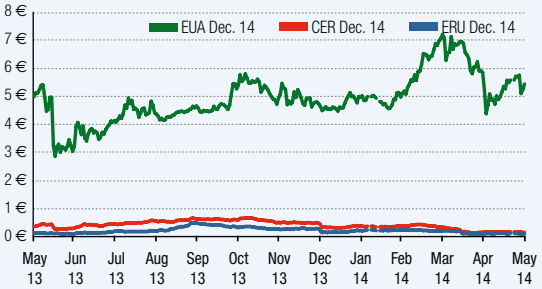
Trading volumes: EUA –43.0%, CER –56.0%, ERU –82.0%



* Spot & futures, exchanges & OTC cleared

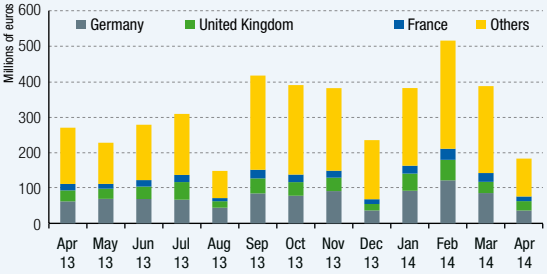
Source: CDC Climat Research calculation, based on data from EEX, ICE Futures Europe, NYMEX, Nasdaq OMX, and LCH Clearnet

Price of the Dec. 14 contract: EUA –15.0%



Source: CDC Climat Research, ICE Futures Europe

Income from Phase 3 auctions: 183 M€ in April (–53.0%)



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

Energy

Primary energy prices and electricity prices

			April 2014	
Coal	API # 2 CIF ARA (First month in USD/t)		75.7	▲
Natural gas	NBP (spot in €/MWh)		20.7	▼
	TTF (spot in €/MWh)		20.4	▼
Crude oil	Brent (First month in USD/b)		108.1	▲
Electricity	Germany (€/MWh)	Spot	33.6	▲
		Calendar	34.5	▼
	United Kingdom (€/MWh)	Spot	50.7	▼
		Next summer	60.8	▼
		Next winter	67.7	▼

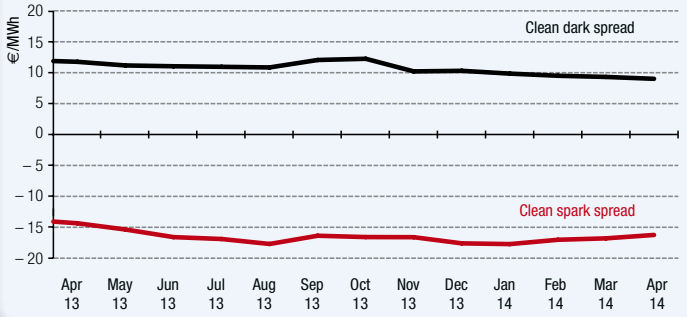
Sources: CDC Climat Research, Thomson Reuters

Clean dark, clean spark spreads and switching price

	Clean spark (€/MWh)		Clean dark (€/MWh)		Switching Price (€/tCO2)	
	spot	futures	spot	futures	spot	futures
Germany*	–9.2	–16.2	9.9	9.0	23.2	28.9
United Kingdom*	10.8	10.7	26.4	34.7	23.3	27.2

** 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

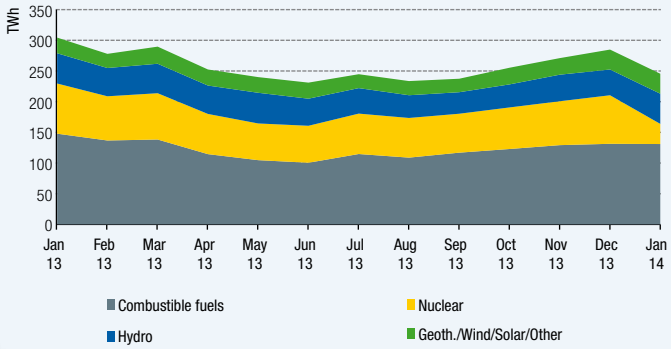
The average monthly price of Brent crude has increased by 1% to $108.1/b, remaining unconcerned by tensions in Crimea. Warmer weather, a well-supplied market and healthy storage stocks ensured that gas prices fell: NBP prices and TTF spot prices fell by 10% respectively to €20.7/MWh while and €20.4/MWh. A relatively mild winter has left Europe with high coal stocks depressing coal prices. The combination of mild weather, the decrease of natural gas prices and also the stabilization of wind power supply continued to drive electricity prices downwards as well: German spot prices fell 4.9%, calendar 2015 prices fell by 0.6%, British spot prices were 2.6% up on the spot market and around 2.7% down on both summer and winter 2015 contracts. As a result, German clean dark and spark prices increase on both spot and future markets. In the UK clean spark prices increased on spot and forward markets, but clean dark prices fell on the spot market while clean dark prices on forward remained stable. The theoretical carbon price that would make switching to natural gas profitable was calculated at around €23-28/tCO2.

Production

Electricity generation (TWh)

EU 20 (in TWh)	Jan. 14	Jan.13	Year-on-Year (% change)
Production	294.8	304.3	–3.1%
of which - Combustible fuels	130.9	147.8	–11.4%
- Nuclear	32.8	81.8	–59.9%
- Hydro	49.1	49.3	–0.4%
- Geoth./Wind/Solar/Other	32.5	25.5	27.5%

** Gas, coal, oil.*

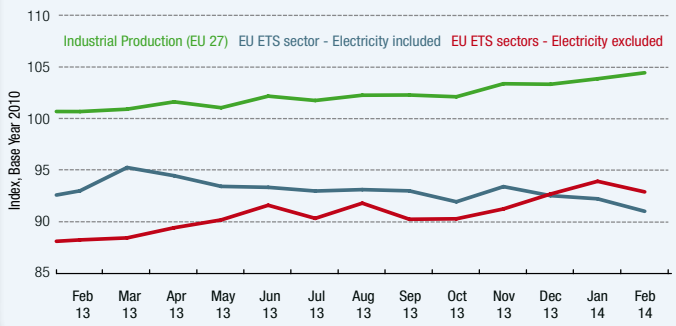


Source: CDC Climat Research, from IEA data

Production indices (Index base year 2010)

EU 27	Feb. 14	Last month (pts)	Year-on-Year (pts)
Indust. Prod (excl. construction)	104.4	0.6	2.3
EU ETS sectors production* (incl. electricity)	91.0	–1.2	–2.2
EU ETS sectors production* (excl. electricity)	92.9	–1.0	2.2
Electricity. gas and heating	90.1	–1.3	–4.5
Cement	81.7	–2.8	4.1
Metallurgy	101.7	–0.5	3.0
Oil refinery	92.3	–0.1	–1.3

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

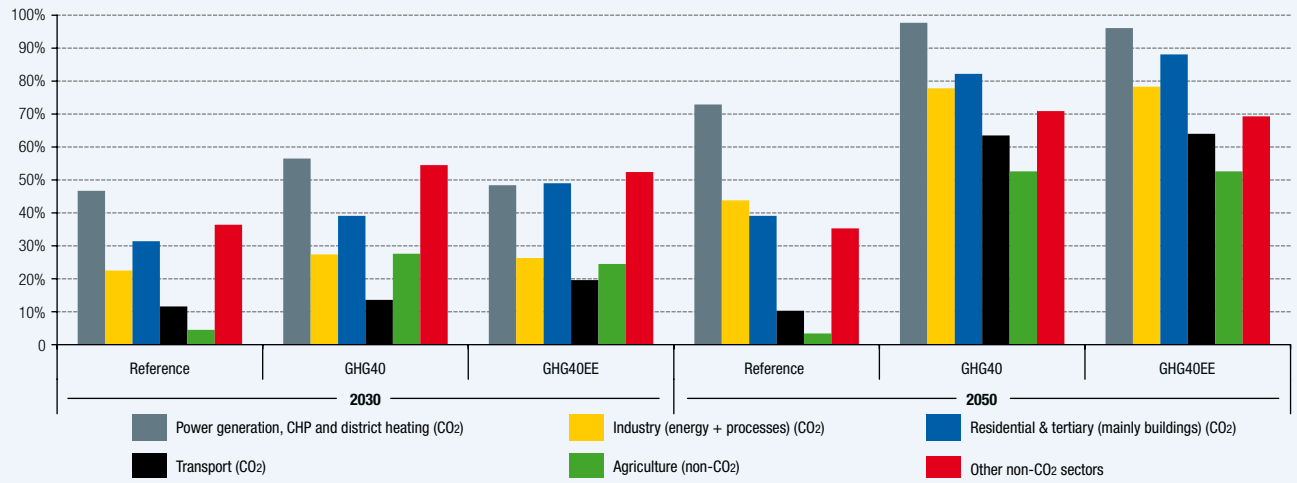


Source: CDC Climat Research from Eurostat data

According to Eurostat estimates released in April, the industrial production increased in February 2014 to 0.4% in the UE28 from January 2014 and 2.1% compared to February 2013. Since a year, industrial production increased by 4% in particular in Germany and 5.3% in Poland. In April, the EU-27 industrial confidence index remained broadly unchanged (–0.3), reflecting a marked decrease of managers' production expectations which was mitigated by a brighter appraisal of the level of overall order books and a broadly stable assessment of stocks of finished products. Our EU ETS sector production index increased slowly by 1.2 point in February due to a decrease of 1.2 point in electricity production and of 2.8 pts in cement. The electricity generation for EU-27 in January 2014 was 294.8 TWh, which represents a 3.1% decrease over the same month last year. This decrease in cumulative electricity generation was accompanied by an increase of renewable energy (+27.5%) and hydroelectric energy (–0.4%) and a decline in the use of fossil fuels (–11.4%) and a huge decrease nuclear energy (–59.9%).

Coordination with the 20-20-20 policies

Sectoral GHG emission reductions compared to 2005



Note: The resulting projections of the Scenario Reference show a decline in total GHG emissions of 24% in 2020, 32% in 2030 and 44% in 2050 relative to 1990. GHG40 refers to the scenario with only a 40% GHG target, GHG40/EE refers to the one with additional ambitious energy efficiency (EE) policies.
Source: European Commission, Impact Assessment, A policy framework for climate and energy in the period from 2020 up to 2030, PRIMES model, 2014

On April 9th, the EU Commission has adopted new rules on public support for projects in the field of environmental protection and energy. The guidelines will support Member States in reaching their 2020 climate targets, while addressing the market distortions that may result from subsidies granted to renewable energy sources. To this end, the guidelines promote a gradual move to market-based support for renewable energy. They also provide criteria on how Member States can relieve energy intensive companies that are particularly exposed to international competition from charges levied for the support of renewables. Furthermore, the guidelines include new provisions on aid to energy infrastructure and generation capacity to strengthen the internal energy market and ensure security of supply. On energy efficiency, the public consultation ended on April 28th. In July 2014, the EU Commission is expected to release an assessment report on the progress made to achieve the 2020 energy efficiency target.

Institutional environment

Phase 3 supply balance table

	2013	2014*
Auctions ($MtCO_2$)	**804**	**252***
Free allocation ($MtCO_2$)	**843**	**767**

**till April 2014*

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

	April 14	Last month change
Number of CDM projects	**11,133**	**+10**
of which - registered	7,496	+24
with - CER issued	2,579	+7
Cumulative volume of CER issued (Mt)	**1,451**	**+11**
CERs available until 2015, EU ETS eligible – CDC Climat Research estimate (Mt)*	0	–2,060
Number of JI projects	**788**	**0**
of which - registered	604	0
Cumulative volume of ERU issued (Mt)	**849.0**	**+8**
via - Track 1	824.0	+8
via - Track 2	25.0	0

** CDC Climat Research's model: http://www.cdcclimat.com/The-risks-of-CDM-projects-how-did-only-30-of-expected-credits-come-through,900.html?lang=fr*

Sources: CDC Climat Research, UNEP Risoe

For the first compliance of its phase 3, according to the information recorded in the Union registry, verified emissions of GHG from stationary installations of the EU ETS amounted to 1,895 $MtCO_2$ in 2013, i.e a decreased by at least 3% last year. On May 5th, the EU Commission has sent to the EU Climate Change Committee its draft proposal for a 2015-2019 carbon leakage list that includes sectors and sub-sectors which are deemed to be exposed to a significant risk of carbon leakage and which will receive a higher share of greenhouse gas emission allowances free of charge in 2015 to 2019 than other sectors. After approval by the Committee, the draft Decision will undergo three months scrutiny by the EU Parliament and the Council with a view to its adoption by the Commission before the end of this year. On May 8th, the EU Commission has launched a public consultation that will run until 31 July 2014 on possible post-2020 carbon leakage provisions under the EU ETS. The EU Commission plans to organise three stakeholder meetings on 13 June, 10 July and 25 September 2014.

Carbon markets dashboard

Primary market - EUA auctions in Phase 3

		Apr-13	May-13	Jun-13	Jul-13	Aug-13	Sep-13	Oct-13	Nov-13	Dec-13	Jan-14	Feb-14	Mar-14	Apr-14
Common Auction Platform + United Kingdom & Germany	Price (€/t)	3.85	3.40	4.23	4.16	4.40	5.19	4.83	4.51	4.62	5.00	6.45	6.35	7.35
	Volume (Mt)	70.19	66.45	65.89	76.65	33.65	80.33	80.62	84.53	50.90	76.31	80.33	60.98	35.22
Auction Revenues (M€)	Germany	62.31	69.46	68.98	67.09	44.50	84.82	78.19	91.29	36.66	92.28	121.62	85.73	36.53
	United Kingdom	31.05	28.69	35.06	49.65	18.30	42.33	38.40	37.87	18.27	48.43	57.88	31.69	26.48
	France	18.14	13.58	18.29	20.16	8.76	24.28	21.28	19.65	13.43	22.21	31.21	24.78	13.13
	Others	158.58	116.04	156.10	172.06	76.64	265.65	252.38	232.84	166.63	218.98	304.96	245.15	106.82
	Total	270.07	227.66	278.43	308.96	148.20	417.08	390.25	381.64	235.00	381.89	515.66	387.35	182.96

Sources: EEX, ICE Futures Europe

Primary market - CER and ERU issued ($MtCO_2$)

		Apr-13	May-13	Jun-13	Jul-13	Aug-13	Sep-13	Oct-13	Nov-13	Dec-13	Jan-14	Feb-14	Mar-14	Apr-14
Cumulative volume of CER issued UNEP-Risoe (Mt)		1,308	1,335	1,353	1,362	1,369	1,388	1,400	1,409	1,419	1,428	1,433	1,440	1,451
Cumulative volume of ERU issued (Mt)	Track 1 (Mt)	651.3	714.5	757.0	757.0	785.1	801.5	802.4	803.5	803.7	803.8	809.6	816.1	824
	Track 2 (Mt)	22.9	23.9	24.4	24.6	24.7	25.1	26.7	25.4	25.4	25.4	25.4	25.4	25

Sources: UNEP-Risoe, CDC Climat Research

Secondary market - Prices (€/t) and volumes: EUA, CER ($ktCO_2$)

			Apr-13	May-13	Jun-13	Jul-13	Aug-13	Sep-13	Oct-13	Nov-13	Dec-13	Jan-14	Feb-14	Mar-14	Apr-14
ICE Futures Europe	Daily spot	Price EUA phase 3	3.88	3.51	4.25	4.22	4.41	5.22	4.91	4.53	4.79	4.98	6.51	6.11	5.22
		Volume EUA phase 3	85,674	14,731	38,427	24,076	5,564	14,672	10,483	7,136	14,965	14,405	21,075	35,324	24,385
		Price CER	0.09	0.39	0.44	0.53	0.62	0.65	0.56	0.42	0.36	0.39	0.36	0.19	0.17
		Volume CER	1,901	0	112	0	57	170	0	47	1,204	80	375	1,028	2,998
	Dec.14	Price EUA	4.11	3.72	4.46	4.39	4.58	5.38	5.07	4.69	4.92	5.07	6.61	6.19	5.28
		Volume EUA	112,934	59,334	95,104	48,690	74,289	93,620	135,862	163,545	240,590	450,338	527,394	640,679	360,681
		Price CER	0.35	0.39	0.48	0.56	0.62	0.62	0.52	0.41	0.35	0.37	0.36	0.18	0.16
		Volume CER	3,885	1,949	8,891	7,134	6,505	12,753	7,949	16,224	20,287	15,305	13,092	20,681	8,006
	Dec.15	Price EUA	4.28	3.88	4.67	4.55	4.75	5.59	5.28	4.89	5.10	5.26	6.91	6.41	5.46
		Volume EUA	61,556	34,689	91,861	41,204	20,176	46,207	57,629	55,672	57,784	102,312	116,329	120,993	60,524
		Price CER	0.38	0.46	0.55	0.64	0.70	0.71	0.60	0.48	0.45	0.48	0.52	0.48	0.41
		Volume CER	1,706	4,087	6,792	2,617	620	3,184	5,586	4,158	10,987	8,766	7,711	11,991	2,012
	Dec.16	Price EUA	4.47	4.04	4.89	4.75	4.96	5.85	5.54	5.12	5.32	5.49	7.26	6.76	5.7
		Volume EUA	31,151	18,256	27,115	11,902	7,216	26,918	21,449	16,416	17,398	36,721	62,380	101,196	45,597
		Price CER	0.47	0.51	0.60	0.66	0.72	0.74	0.62	0.50	0.46	0.50	0.55	0.49	0.42
		Volume CER	0	0	134	1,134	0	0	0	10	0	689	245	982	164

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	–40.6
Oil refining	–1.4	7.6	14.3	16.0	24.2
Coking plants	1.5	6.8	2.9	3.1	5.7
Metal ores	4.3	11.0	8.8	8.9	9.8
Steel production	51.6	89.3	71.4	72.8	74.0
Cement	20.9	61.4	61.0	62.8	74.1
Glass	2.5	6.1	5.5	5.4	6.4
Ceramic products	5.3	10.0	10.2	9.6	10.4
Paper	6.9	11.3	10.0	11.1	12.9
Other activities	0.2	4.3	1.3	–0.7	6.2
Total (Mt)	**–161.3**	**94.2**	**59.8**	**112.1**	**183.2**

Source: CITL

	2008	2009	2010	2011	2012
Germany	–84.0	–36.6	–54.4	–49.5	–27.8
United Kingdom	–50.8	–15.0	–16.8	2.5	–2.2
Italy	–8.5	24.1	8.5	5.3	12.8
Poland	–3.1	10.8	5.9	4.2	16.1
Spain	–9.6	13.7	29.5	18.4	17.4
France	5.5	17.5	23.4	33.9	35.8
Czech Republic	5.2	12.2	10.6	12.2	17.1
The Netherlands	–6.8	2.8	0.1	8.9	10.6
Romania	7.7	24.9	27.7	23.6	26.9
Others	–17.0	39.8	25.3	52.7	76.6
Total (Mt)	**–161.3**	**94.2**	**59.8**	**112.1**	**183.2**

Source: CITL

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