

## The EU ETS, a good example of a “zombie” public policy

Although the EU ETS was meant to be the flagship for Europe’s transition to a competitive and low-carbon economy, it finds itself in a rather sorry state at the beginning of its Third Phase. The carbon price is at a record low, and provides no incentive to reduce emissions. Wits will not fail to observe that, in a naval battle, the flagship is actually the ship that the enemy tries to sink first, and which receives the heaviest fire. The EU ETS has come under quite a lot of fire up until now.

The EU ETS was already devoid of any purpose, as it was caught between a rock – the economic downturn – and a hard place – the overlaying of GHG emission targets, promoting renewable energy, and improving energy efficiency. The European Parliament’s failure to adopt the proposal to delay the CO<sub>2</sub> allowance auctions (backloading) is a further body blow. Obviously, this is not the end of the story, since the proposal has been sent back to the Parliament’s ENVI Commission. However, the damage has been done, and the allowance price is now trading water under the €4.00 mark.

The low carbon price is just the symptom of one obvious truth: if the EU ETS is now a zombie public policy, it is not just because the EU does not have the means to achieve its ambitions; it is simply because its climate policy lacks ambition. If we want the EU ETS to remain the flagship for the transition towards a low-carbon economy, what should we do? Only one thing: restore economic players’ confidence in Europe’s long-term climate goals.

To do so, it seems imperative to agree first and foremost on the targets for 2050, and on interim targets for 2030 and 2040 that are ambitious, but credible. This is easier to say than to do in the short-term, at a time when climate goals may be perceived as an additional burden during the economic downturn, rather than as a way to exit from economic depression. If we cannot agree on the medium and long-term targets, we must at least agree on two structural reforms that would enable us to remedy the lack of any long-term ambition in a credible, but nonetheless temporary way:

1. Increasing the straight-line EU ETS annual emission reduction factor. This factor, which is enshrined in European legislation for an indeterminate period, is currently 1.74% per year. An upwards revision of this factor would enable a message regarding the long-term scarcity of allowances to be sent to the players involved.
2. Introducing a floor for the CO<sub>2</sub> allowance price at the European level, or a floor for the auction reserve price, which is roughly equivalent. This price would enable long-term investors, including financial investors, and specifically power generators and industrial companies, to invest in low-carbon assets with complete peace of mind. Other countries in the world have already looked at implementing a similar price mechanism.

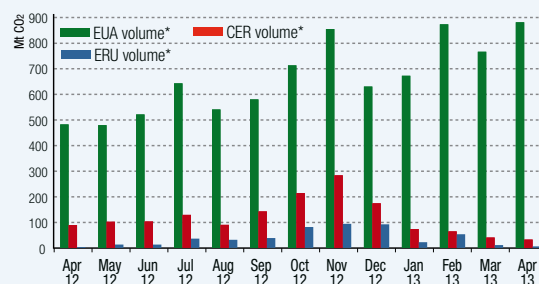
This is all very well, but it is still very complicated... While waiting to agree on these structural reforms, we need to find a short-term palliative. One good idea, perhaps, is that of Bruegel’s Georg Zachmann, who is putting forward an interesting and unexplored solution, namely getting the European Investment Bank to auction future allowance price guarantees, which would enable the risk relating to low-carbon investments to be lowered, while waiting for something better. On the contrary, a bad idea would be to set up a “regulatory authority” without being clear about the climate targets, or to express it differently, worrying about the means before agreeing on the goals. In any event, the long-term goal will need to be implicit in the discussions on the 2030 Climate & Energy Package Green Paper.

**Benoît Leguet** - Managing Director, Head of Research - CDC Climat  
[benoit.leguet@cdcclimat.com](mailto:benoit.leguet@cdcclimat.com)

## Key points

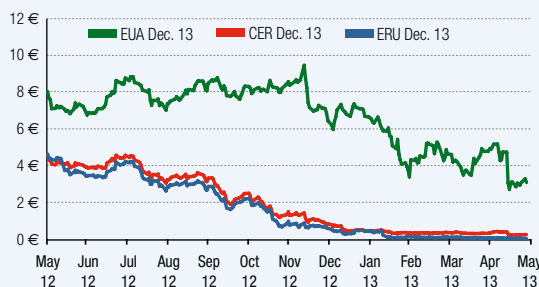
- Backloading was rejected by the European Parliament on 16 April and referred to the Parliament’s ENVI Commission. A new plenary session vote has been scheduled for early July.
- On ICE Futures Europe, 52% of the whole monthly volume of the daily spot contract has been traded on April the 16<sup>th</sup>.
- Structural reforms: discussion at the Parliament ENVI Commission at the end of June:

### Trading volumes: EUA +15% CER -19.6% ERU -46.8%



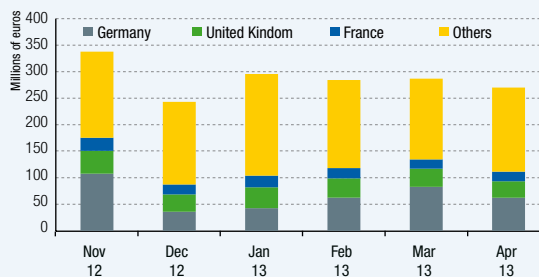
\* Spot & futures, exchanges & OTC cleared  
 Source: CDC Climat Research calculation, based on data from BlueNext, EEX, ICE Futures Europe, NYMEX, Nasdaq OMX, and LCH Clearnet

### Contract price Dec. 2013: EUA -35%



Source: CDC Climat Research, ICE Futures Europe

### Phase 3 auction revenues: €270.1 million (-5.8%)



Source: CDC Climat Research, ICE Futures Europe

# Energy

## Primary energy prices and electricity prices

		April 2013	
Coal	API # 2 CIF ARA (First month in USD/t)	81.7 ▼	
Natural gas	NBP (spot in €/MWh)	28.0 ▼	
	TTF (spot in €/MWh)	28.1 ▼	
Crude oil	Brent (First month in USD/b)	103.4 ▼	
Electricity	Germany (€/MWh)	Spot	38.4 ▼
		Calendar	40.2 ▼
	United Kingdom (€/MWh)	Spot	60.6 ▼
		Next summer	59.1 ▼
		Next winter	65.3 ▼

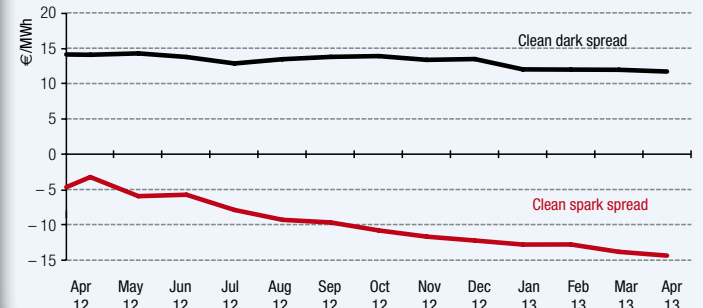
Sources: CDC Climat Research, Thomson Reuters

## Clean dark, clean spark spreads and switching price

	Clean spark (€/MWh)		Clean dark (€/MWh)		Switching Price (€/tCO <sub>2</sub> )	
	spot	futures	spot	futures	spot	futures
Germany*	-19.3	-14.5	13.3	11.8	34.6	30.0
United Kingdom*	10.1	5.2	34.8	30.3	33.9	28.4

\* Germany, 2014 calendar contract, United Kingdom, summer 2014 contract.

## German baseload – monthly average of Cal. 2014 clean dark and clean spark spreads



Sources: CDC Climat Research, Thomson Reuters

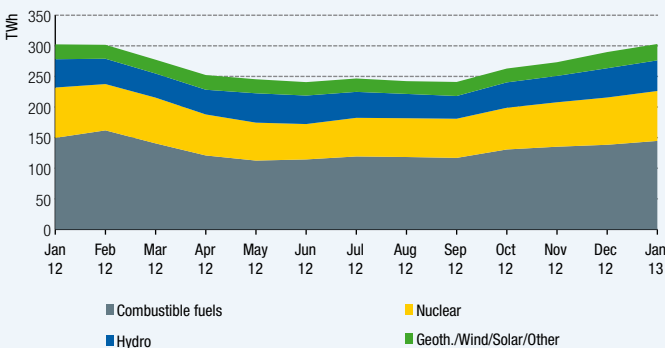
The price of Brent Crude fell by 5.6% in April, after declining sharply mid-month. The price of gas corrected following the steep increase observed during March as a result of the particularly cold weather; the spot gas price fell sharply in April (-18.8% for NBP and -12.8% for TTF), after increasing by 26.7% and 22.7% respectively in March. Meanwhile, the price of CIF ARA month-ahead coal fell by 6.2% over the month. The European Parliament's rejection of the backloading solution on 16 April resulted in the forward electricity price in Germany falling to €39.60 per MWh, its lowest level since May 2005. Although the spot price in the United Kingdom obviously declined (by 15.6%) following the sharp increase recorded in March, the price for summer 2014 delivery fell only slightly, by 1.6%. At a time when the coal price is falling sharply and the EUA price is collapsing, the base spot electricity price fell by almost 9% over the month. Meanwhile, the spot clean dark price continued to rise in the United Kingdom, although it fell in Germany.

# Production

## Electricity production (TWh)

EU 20 (in TWh)	Jan. 13	Jan. 12	Year-on-Year (% change)
Production	303.0	302.4	0.2%
of which - Combustible fuels	144.6	149.6	-3.3%
- Nuclear	81.6	82.2	-0.8%
- Hydro	50.0	46.2	8.1%
- Geoth./Wind/Solar/Other	26.8	24.3	10.0%

\* Gas, coal, oil.

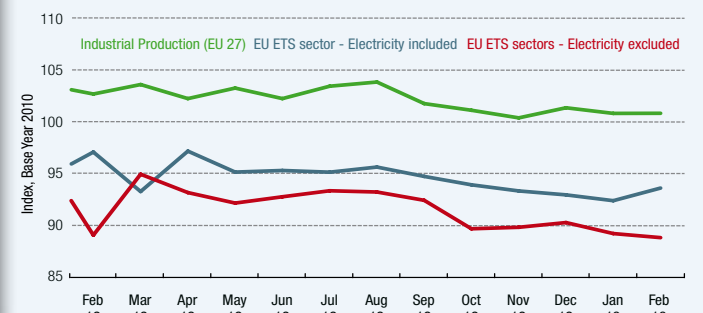


Source: CDC Climat Research, from IEA data

## Production indices (Index base year 2010)

EU 27	Feb. 13	Last month (pts)	Year-on-Year (pts)
Indust. Prod. (excl. construction)	100.8	0.0	-1.5
EU ETS sectors production* (incl. electricity)	93.6	1.2	-1.1
EU ETS sectors production* (excl. electricity)	88.8	-0.4	-3.2
Electricity, gas and heating	96.1	2.1	0.1
Cement	74.4	-3.5	-6.4
Metallurgy	95.4	0.9	-2.7
Oil refinery	94.2	1.6	-1.2

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



Source: CDC Climat Research, from Eurostat data

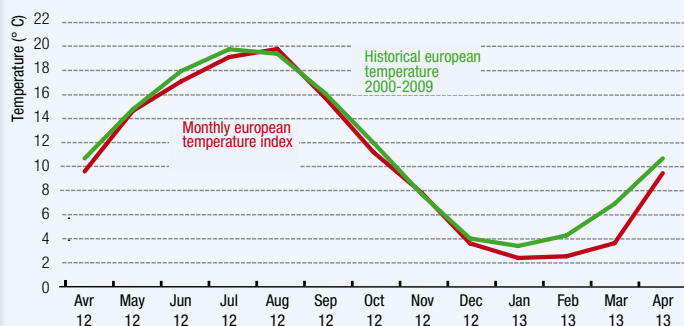
The economic environment remained very depressed in April, when the Commission's business climate indicator declined 0.2 pt to 0.9, at a time when the EU-27 growth rate could contract by 0.1% in 2013. The ECB reduced its main base rate, which reached a historically low level of 0.5%. The March PMI Index in the manufacturing sector declined in the euro zone. Our EU ETS sector output index posted a month-on-month increase of 1.2 pts in February 2013, while the manufacturing sector output index fell by 0.4 pt. Electricity generation increased by 2.1 points, driven by heating requirements resulting from the low temperatures. Refining (+1.6), iron ore extraction (+5.6) and steel (+0.9) saw an increase in output, while the ceramics (-0.2), glass (-0.1 pt), paper (-1.1), and especially the cement (-3.5) industries all experienced a decline. European electricity generation amounted to 303 TWh in January; nuclear power accounted for 27% of the total, hydropower for 16.5% and other renewable energies for 8.8%. It is worth noting that Germany beat new solar power generation records at the end of April.

# Temperature impact

## European temperature index (°C)

- Average of the Climpact Metnext indices for 18 European countries, weighted according to the emission allowances allocated to each country.

	March 13	April 13
Monthly average (°C)	3.5	9.4
Monthly average (°C) 2000-2009	6.8	10.6
Monthly minimum (°C)	0.3	3.5
Monthly maximum (°C)	8.2	14.5

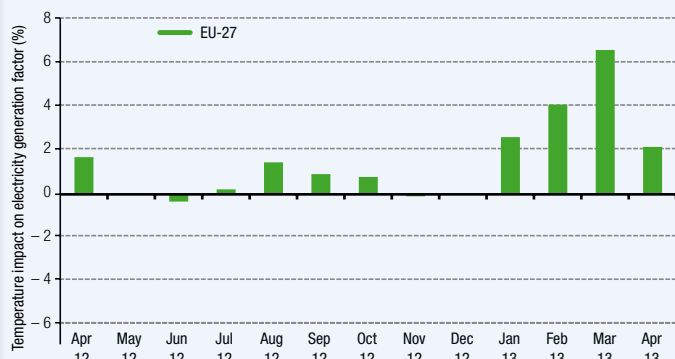


Source: Climpact Metnext

## Temperature impact on electricity generation factor (%)

- The impact factor, which is calculated on the basis of a statistical electricity generation model, expresses the temperature impact in relation to average weather patterns for the 10 years between 2000 and 2009.

	March 13	April 13
EU 27	6.3	2.2



Source: Climpact Metnext

The average for the weather and economy indices within the EU-27 was 1.2°C below the ten-year trend in April 2013. This situation is in keeping with the particularly cold weather conditions seen in March (reminder: the index was 3.3°C below trend). Northern European countries experienced temperatures that were still 1 to 2 degrees below the seasonal average, including shortfalls of -2°C in Poland, -1.8°C in the United Kingdom, -1.2°C in Germany, as well as -1°C in France. Conversely, temperatures in Southern European countries were close to the seasonal average. Overall, the winter of 2013 was characterised by temperatures that were markedly colder than the ten-year trend. According to the Climpact MetNext weather and economy model, the impact of the temperatures recorded was to increase gross European electricity generation by 2.2% compared with normal weather conditions, which was, however, a marked decrease compared with the situation in March (6.6% increase, as a reminder). Spanish dam fill levels, which were boosted by heavy rainfall, are now well above the ten-year average (14 points), while the Nordic dam fill level remains relatively low.

# Institutional environment

## EUA supply

	2008	2009	2010	2011	2012
<b>Total free allocations (Mt)</b>	<b>1,958.5</b>	<b>1,973.7</b>	<b>1,998.3</b>	<b>2,015.9</b>	<b>2,049.5</b>
Combustion	1,259.5	1,269.3	1,289.6	1,303.8	1,331.8
Oil refining	152.7	152.9	156.7	156.7	159.0
Coking plants	22.5	22.5	22.8	22.6	22.5
Metal ores	21.9	22.0	22.0	22.1	22.1
Steel production	185.0	184.8	185.2	186.2	186.2
Cement	211.4	214.2	214.6	214.8	215.5
Glass	25.2	25.5	25.7	26.2	26.3
Ceramic products	18.8	19.1	19.2	18.6	18.3
Paper	38.5	39.2	40.1	39.8	40.6
Other activities	22.9	24.2	22.3	25.2	27.3
<b>Total allocations auctioned (Mt)</b>	<b>44.4</b>	<b>78.4</b>	<b>92.1</b>	<b>93.1</b>	<b>87.5</b>

Sources: CCTL, UK Debt Management Office, EEX

## CER and ERU supply

	April 13	Last month change
<b>Number of CDM projects</b>	<b>11,001</b>	<b>+13</b>
<i>of which - registered</i>	6,755	+95
<i>with - CER issued</i>	2,294	+94
<b>Cumulative volume of CER issued (Mt)</b>	<b>1,308</b>	<b>+37</b>
CERs available until 2015, EU ETS eligible – CDC Climat Research estimate (Mt)*	2,120	+10
<b>Number of JI projects</b>	<b>782</b>	<b>0</b>
<i>of which - registered</i>	597	0
<b>Cumulative volume of ERU issued (Mt)</b>	<b>674.2</b>	<b>0</b>
<i>via - Track 1</i>	651.3	0
<i>via - Track 2</i>	22.9	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, Riseo

On 16 April, the European Parliament rejected the Commission's proposal to defer the auction timetable by backloading 900 million allowances. The proposal was sent back to the Environment Commission by a very low majority (334 for, 315 against, and 63 abstentions). This was therefore not a straightforward rejection. Euro MPs, who acknowledged the very negative message sent by the rejection (the EUA carbon price registered a steep 40% fall, to less than €3.00 per tonne) have two months to put forward a new report. The Environment Commission could vote on the new proposal on 19 June, and a plenary session vote could take place in early July. On 7 May, the French, German, British, Dutch, Swedish, Danish, Portuguese, Finnish, and Slovenian Environment and Energy Ministers confirmed that they supported backloading in a joint statement. Against this backdrop, the EU-27 countries are beginning to negotiate the joint EU position ahead of the Warsaw Climate Conference. In the case of the aviation sector, the Council adopted a decision that temporarily delays the obligations imposed on international flights from the EU, and exempts the latter from declaring their emissions.

# Carbon markets dashboard

## Primary market - EUA auctions in Phase 3

		Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12	Jan-13	Feb-13	Mar-13	Apr-13
Common Auction Platform + United Kingdom & Germany	Price (€/t)	-	-	-	-	-	-	7.54	7.01	6.31	5.05	4.37	4.06	3.85
	Volume (Mt)	-	-	-	-	-	-	3.00	48.19	38.51	59.63	65.03	70.61	70.19
Auction Revenues (M€)	Germany	-	-	-	-	-	-	22.62	107.67	35.89	42.61	62.46	82.86	62.31
	United Kingdom	-	-	-	-	-	-	-	43.03	32.71	39.40	36.38	34.23	31.05
	France	-	-	-	-	-	-	-	24.73	18.73	21.97	19.37	17.50	18.14
	Others	-	-	-	-	-	-	-	162.35	155.78	191.70	166.09	152.26	158.58
	Total	-	-	-	-	-	-	-	22.62	337.79	243.11	295.68	284.30	286.86

Sources: EEX, ICE Futures Europe

## Primary market - CER and ERU issued (MtCO<sub>2</sub>)

		Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12	Jan-13	Feb-13	Mar-13	Apr-13
Cumulative volume of CER issued UNEP-Risoe (Mt)		919	943	959	974	995	1,009	1,036	1,094	1,155	1,198	1,208	1,271	1,308
Cumulative volume of ERU issued (Mt)	Track 1 (Mt)	126.8	151.3	152.8	157.1	206.2	214.0	232.7	233.2	385.7	564.6	600.0	651.3	651.3
	Track 2 (Mt)	16.6	16.6	16.8	17.3	18.8	19.1	19.4	20.0	363.8	22.6	22.7	22.9	22.9

Sources: UNEP-Risoe, CDC Climat Research

## Secondary market - Prices (€/t) and volumes: EUA, CER, ERU (ktCO<sub>2</sub>)

		Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12	Jan-13	Feb-13	Mar-13	Apr-13	
ICE Futures Europe	Daily spot	Price EUA phase 2	6.93	6.67	7.15	7.45	7.55	7.75	7.86	7.46	6.64	5.18	4.59	4.07	3.88
		Volume EUA phase 2	-	-	-	-	-	-	-	-	265	635	17,518	3,429	7,368
		Price EUA phase 3	-	-	-	-	-	-	-	-	6.79	5.19	4.59	4.09	3.88
		Volume EUA phase 3	-	-	-	-	-	-	-	-	59	322	1,579	6,023	78,306
		Price CER	3.88	3.58	3.65	3.34	2.90	2.10	1.49	0.89	0.40	0.17	0.15	0.17	0.09
		Volume CER	-	-	-	-	-	-	-	-	-	327	1,099	1,541	1,901
	Dec.13	Price EUA	7.54	7.21	7.69	7.98	8.05	8.18	8.24	7.78	6.88	5.35	4.71	4.18	3.94
		Volume EUA	117,472	115,382	86,167	100,827	99,723	125,361	172,430	200,276	189,911	418,524	577,206	443,144	494,819
		Price CER	4.39	3.90	3.96	3.66	3.24	2.35	1.68	1.07	0.52	0.38	0.34	0.33	0.32
		Volume CER	10,353	17,842	14,262	13,537	16,445	26,805	38,256	34,684	52,279	41,549	26,190	21,420	20,693
		Price ERU	4.60	3.97	3.73	3.44	3.01	2.17	1.46	0.76	0.44	0.25	0.14	0.13	0.09
	Dec.14	Volume ERU	-	-	100	500	665	5,343	12,815	18,506	24,314	9,407	7,344	1,425	4,804
		Price EUA	8.11	7.69	8.22	8.48	8.56	8.71	8.69	8.20	7.22	5.61	4.94	4.37	4.11
		Volume EUA	36,978	38,724	36,878	58,473	50,089	37,884	59,562	69,731	42,296	70,721	78,927	79,675	112,934
		Price CER	4.63	4.14	4.18	3.79	3.43	2.51	1.78	1.15	0.59	0.43	0.38	0.37	0.35
	Dec.15	Volume CER	5,105	2,552	4,081	12,152	8,270	5,157	11,757	7,128	3,505	5,883	4,361	2,089	3,885
		Price EUA	8.68	8.10	8.68	8.98	9.04	9.20	9.08	8.61	7.57	5.87	5.15	4.55	4.28
		Volume EUA	14,654	28,946	9,110	20,847	22,887	16,553	21,338	24,491	28,890	41,647	57,190	49,718	61,556
Price CER		0.49	4.40	4.40	3.91	3.50	2.62	1.89	1.23	0.68	0.51	0.43	0.41	0.38	
	Volume CER	1,330	1,542	2,980	2,776	2,493	2,520	5,030	4,094	2,738	2,281	2,767	710	1,706	

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
<b>Total (Mt)</b>	<b>-161.3</b>	<b>94.2</b>	<b>59.8</b>	<b>112.1</b>	<b>164.5</b>

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
<b>Total (Mt)</b>	<b>-161.3</b>	<b>94.2</b>	<b>59.8</b>	<b>112.1</b>	<b>164.5</b>

Source: CTL