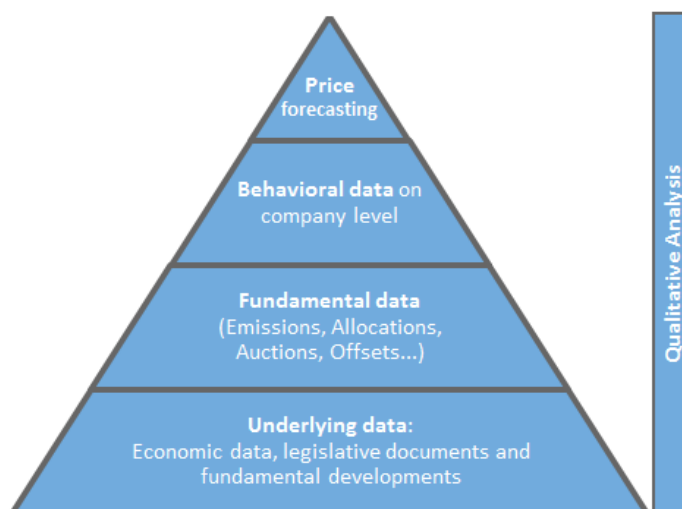
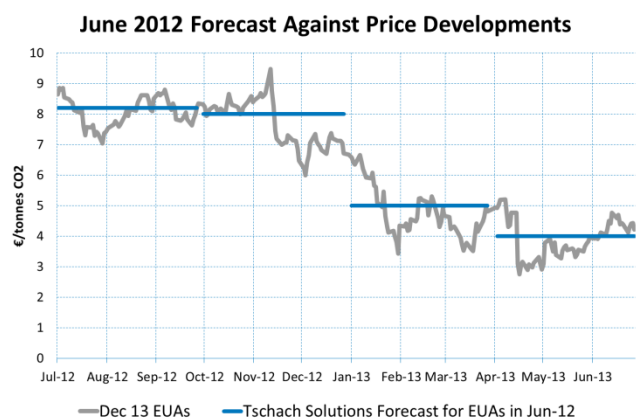


EU ETS Portal is a one-stop shop for Analysts, Traders, Risk Departments and Managers. It provides support to make short- and mid-term decisions more efficient with superior information, model based forecasts and high quality background data.

The EU ETS Portal provides short- and mid-term price forecasts based on our behavior-driven market model, the **Timing Impact Model (TIM)**. The model results are accompanied by ad hoc analysis and regular reporting. All underlying data, documents or other information is fully available in the portal in a structured way, making it easy to understand and reproduce the conclusions.

The EU ETS Portal provides detailed information on the EU ETS and all related markets in different granularities:

- **Traders** can see immediate model results, main drivers and company specific data on behavior, demand and supply positions.
- **Analysts** can dive into the details of model data, extract datasets to calculate own forecasts or get support with a range of provided documents and datasets.
- **Risk Departments** get a good view on expected price developments, key risk factors for investments or political risks.
- **Managers** can use the EU ETS Portal to get a high level view on market drivers or gather needed background data or analysis quickly.

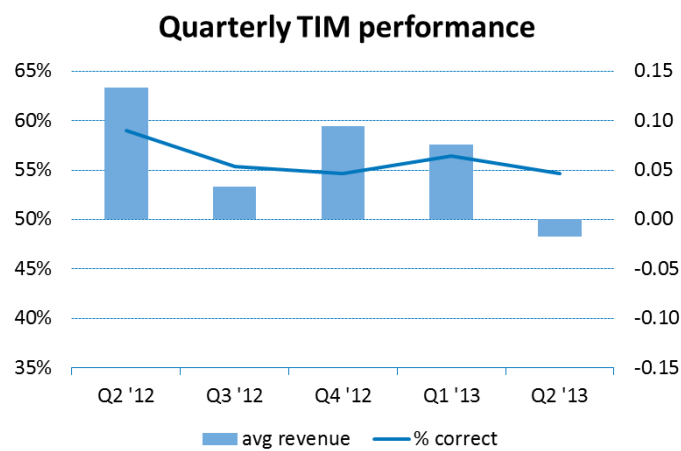


Price Forecast and Traded Positions

Short-Term Price Forecast

The daily updated short-term price forecast is based on estimated trading volumes from players with a natural position (compliance companies or CDM portfolio holders or auctions) in the market. Furthermore, short-term hedging adjustment, hedging speed-ups and other features are included in the modelling.

The forecast shows a one-week market trend (bullish/bearish) for the derivatives EU allowance (EUA) market and a strength indicator for the forecast. Historical correctness of the forecast is around 55%.

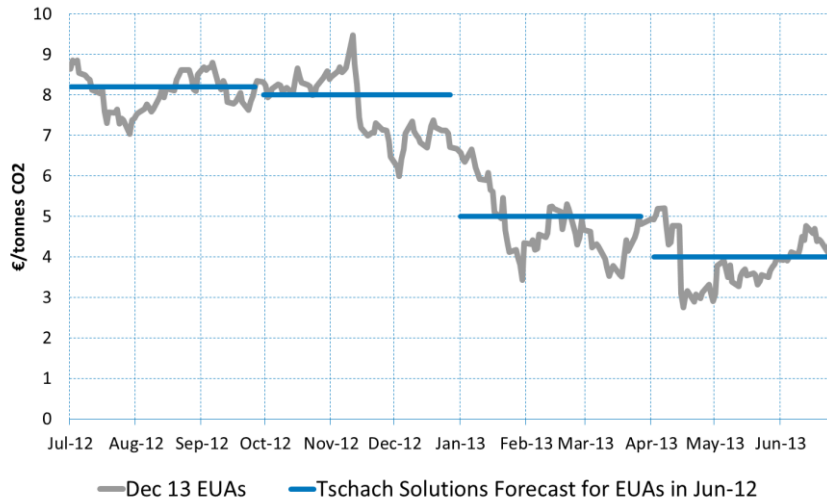


Mid-Term Price Forecast

The monthly updated mid-term price forecast is also based on trading activities of compliance players and provides a price forecast for the next eight quarters. The price forecast also incorporates the latest changes of trading behaviour, the macroeconomic picture and political changes. Furthermore, the model allows for different scenarios because of policy discussion concerning the EU ETS or unclear timelines of other events.

The forecast is published once a month in our Monthly Report accompanied by an in-depth explanation of the changes in the assumptions as well as the biggest risk to the current forecast.

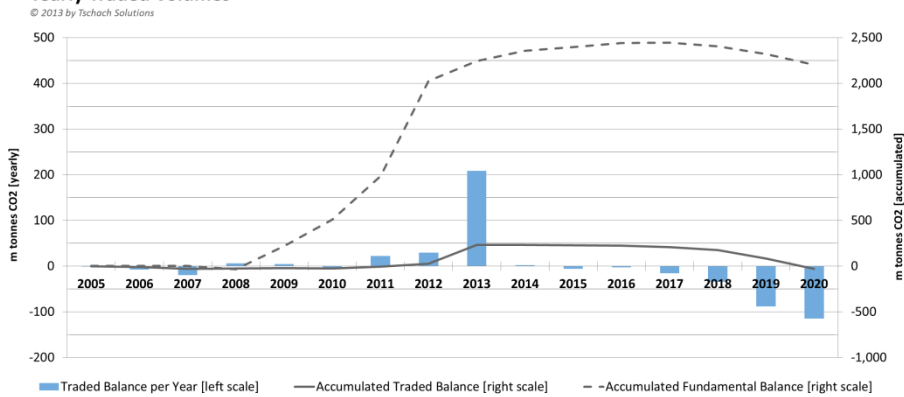
June 2012 Forecast Against Price Developments



Traded Positions

In our view, positions of compliance players are only driving carbon prices once they are traded in the market. Trading usually deviates significantly from when positions actually arise. Out of this reasoning the EU ETS Portal contains a full section where fundamental demand and supply are redistributed according to trading behaviour of compliance players to the point in time when they are actually traded in the market. This core of our analysis provides valuable insights for predicting price developments.

Yearly Traded Volumes



Fundamental Data

Emissions and Caps

The EU ETS Portal contains a complete set of both historic and estimated emissions, caps and cap-to-emissions (long position means positive values). Data are presented both in overview tables as well as broken down by country and sector in a variety of formats. A separate section contains the same set of data also for different reduction, back-loading and aviation scenarios.

Emissions estimates are based on a consistent modelling of the macroeconomic environment, with special focus on the power sector.

Cement & Lime

[in MT]	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	08-12	13-20	08-20
Austria	3.7	3.1	2.8	2.9	2.9	2.9	3.0	3.0	3.1	3.1	3.1	3.2	3.2	15.5	24.6	40.1
Belgium	8.1	6.5	6.7	7.0	6.7	7.0	7.2	7.3	7.4	7.5	7.5	7.6	7.7	35.0	59.2	94.2
Bulgaria	3.6	1.9	1.5	1.5	1.8	1.7	1.7	1.8	1.8	1.9	1.9	2.0	2.0	10.2	14.8	25.0
Cyprus	1.5	1.3	1.1	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.9	0.9	5.6	6.7	12.2
Czech Rep.	4.1	3.2	3.2	3.5	3.2	3.0	3.0	3.1	3.2	3.3	3.4	3.5	3.6	17.2	26.1	43.3
Germany	28.8	25.3	26.2	27.9	27.4	26.4	27.2	27.5	27.7	28.0	28.3	28.6	28.9	135.6	222.5	358.2
Denmark	2.4	1.6	1.5	1.7	1.7	1.7	1.8	1.8	1.8	1.8	1.9	1.9	1.9	8.9	14.7	23.6
Estonia	1.2	0.5	0.6	0.8	0.8	0.9	0.9	0.9	0.9	0.9	1.0	1.0	1.0	4.1	7.5	11.5
Spain	25.0	19.7	19.5	16.8	15.2	13.6	13.7	13.9	14.0	14.2	14.3	14.4	14.6	96.2	112.7	208.9
Finland	1.7	1.2	1.4	1.5	1.3	1.3	1.3	1.3	1.3	1.4	1.4	1.4	1.4	7.1	10.9	18.0
France	16.8	14.2	14.9	15.3	14.4	14.0	14.4	14.6	14.7	14.9	15.0	15.2	15.3	75.6	118.1	193.7
UK	10.8	7.4	7.7	8.2	7.6	7.2	7.4	7.4	7.5	7.6	7.7	7.7	7.8	41.7	60.3	102.0
Greece	10.3	7.8	7.1	4.1	5.2	4.5	4.6	4.6	4.7	4.7	4.7	4.8	4.8	34.5	37.4	71.9
Hungary	2.5	1.9	1.5	1.2	1.3	1.3	1.3	1.4	1.4	1.4	1.5	1.5	1.6	8.3	11.5	19.7
Ireland	3.7	2.4	2.1	1.9	2.2	2.1	2.1	2.2	2.2	2.2	2.2	2.3	2.3	12.3	17.6	29.9
Italy	28.8	23.3	23.6	22.7	18.5	15.7	15.9	16.0	16.2	16.3	16.5	16.7	16.8	116.8	130.1	246.9
Liechtenstein	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lithuania	0.9	0.6	0.6	0.7	0.9	0.9	0.9	0.9	1.0	1.0	1.0	1.1	1.1	3.7	7.9	11.6
Luxembourg	0.6	0.6	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	3.1	5.7	8.9
Latvia	0.4	0.3	0.7	0.8	0.8	0.9	0.9	0.9	1.0	1.0	1.0	1.0	1.1	3.0	7.8	10.8
Malta	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Netherlands	0.7	0.7	0.6	0.6	0.5	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	3.2	5.4	8.6
Norway	1.4	1.5	1.5	1.4	1.4	1.5	1.5	1.5	1.6	1.6	1.6	1.6	1.7	7.2	12.6	19.9
Poland	12.6	10.9	11.6	13.8	11.8	10.1	10.4	10.6	10.9	11.2	11.5	11.9	12.2	60.6	88.8	149.4
Portugal	6.8	5.5	5.7	4.9	4.4	4.1	4.2	4.2	4.2	4.3	4.3	4.4	4.4	27.2	34.2	61.4
Romania	7.2	5.2	4.7	5.1	5.2	5.2	5.3	5.4	5.5	5.7	5.9	6.0	6.2	27.4	45.1	72.5
Sweden	3.0	2.5	2.8	3.0	3.0	3.1	3.2	3.2	3.3	3.3	3.4	3.4	3.5	14.3	26.4	40.7
Slovenia	1.1	0.8	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.7	0.7	3.8	5.1	8.8
Slovakia	3.4	2.8	2.6	2.9	2.7	2.7	2.7	2.8	2.9	2.9	3.0	3.1	3.2	14.4	23.4	37.8
Sum TP2 installations	191.1	152.8	153.6	152.2	142.8	134.5	137.4	139.1	141.1	143.1	145.2	147.3	149.4	792.5	1,137.0	1,929.5

© Tschach Solutions
Last update: 25 Jun 13

[Get data as Excel file \[csv\]](#)

Power emissions estimates are updated daily to include the latest effects due to fuel switch changes and weather related emissions changes. All other estimates are updated on a monthly basis.

ETS balance

20% Reduction Scenario

Update table

[in MT]	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	08-12	13-20	08-20
Emissions	2,119.6	1,879.5	1,939.0	1,904.0	1,931.7											
- Power&Heat	1,287.8	1,177.1	1,193.8	1,165.7	1,164.4											
- Industry	831.8	702.4	745.2	738.3	703.9											
- Aviation	0.0	0.0	0.0	0.0	63.4											
Allocation	1,958.5	1,974.8	1,999.1	2,017.7	2,088.2											
- Power&Heat	1,035.6	1,038.4	1,055.4	1,067.7	1,090.2											
- Derogation	0.0	0.0	0.0	0.0	0.0											
- Industry	922.9	936.4	943.7	950.0	957.8											
- Aviation	0.0	0.0	0.0	0.0	40.2											
Other Supply	44.0	78.3	90.8	106.3	383.5											
- NER	0.0	0.0	0.0	0.0	0.0											
- Auctions & NER leftover	44.0	78.3	90.8	94.3	195.5											
- NER 300	0.0	0.0	0.0	12.0	188.0											
Balance	-117.1	173.6	151.0	220.0	540.0											
Cum. Balance	-117.1	56.4	207.4	427.5	967.5											

© Tschach Solutions
Last update: 15 Jul 13

Get data as Excel file [.csv]

Cap estimates for the third trading period are calculated per sector, country and year. Furthermore, the allocation to new entrants from the *New Entrants Reserve* is included regularly in the allocation volumes. Data is also available for different reduction scenarios (eg, a 25% target).

Auctions

Tschach Solutions provides all relevant data regarding the auctioning supply for the current regulation (eg, a 20% reduction target), but also for different reduction and back-loading scenarios. For this reason an auction tool helps to keep track of the scheduled auctions (separates the scheduled auctions in different types) and includes projections for the auctions per week/month/year up to 2020. An auctioning calendar includes all details of upcoming auctions. All auction data is available for download through our FTP site.

Auctions

Time Interval	Auction Type	Exchange	Country	Resolution	Auction Volumes
From <input type="text" value="29/07/2013"/> to <input type="text" value="15/09/2013"/>	All EUA TP3 EUAA EUA TP2	All Climex DECC EEX	Belgium Czech Republic EIB EU Flanders	<input checked="" type="radio"/> Week <input type="radio"/> Month <input type="radio"/> Year	<input type="radio"/> Officially scheduled <input type="radio"/> TS Projection <input checked="" type="radio"/> Both
<input type="button" value="Clear form"/>		<input type="button" value="Get CSV"/> <input type="button" value="Update Table!"/>			

[Volumes by Auction Type](#)
[by Exchange](#)
[by Country](#)
[Auction Calendar](#)

Auction Type [kt]	29 Jul 13 (W31)	05 Aug 13 (W32)	12 Aug 13 (W33)	19 Aug 13 (W34)	26 Aug 13 (W35)	02 Sep 13 (W36)	09 Sep 13 (W37)
Regular 3rd TP Auction							
Scheduled	14,836	7,316	7,622	7,316	7,622	14,405	18,539
Additional	0	0	0	485	323	971	971
Projection	0	0	0	0	0	0	0
Subtotal	14,836	7,316	7,622	7,801	7,945	15,375	19,510
Sale of NER 300 EUAs							
Projection	0	0	0	0	0	0	0
Subtotal	0	0	0	0	0	0	0
Totals							
Scheduled	14,836	7,316	7,622	7,316	7,622	14,405	18,539
Additional	0	0	0	485	323	971	971
Projection	0	0	0	0	0	0	0
Total	14,836	7,316	7,622	7,801	7,945	15,375	19,510

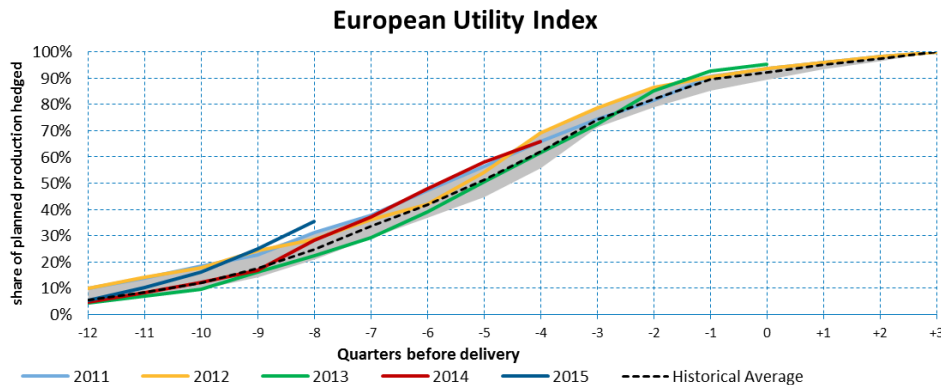
Scenarios

The Scenario section provides the possibility to assemble the fundamental EU ETS data in respect to different legislative developments. It provides data for different reduction scenarios (20%, 25% and 30%), different aviation scenarios (current regulation and intra-EU only) and different back-loading volumes and implementation timelines. The user can select for each option an independent scenario.

Policy, Other Databases and Carbon Calendar

Behaviour Database

Tschach Solutions behavioural database covers extensively not only the historic hedging patterns of most big utilities but also the past selling behavior of big industrial companies. Data and qualitative information are displayed per company and in overview sections.



CITL/EUTL Database

Our CITL Database provides the possibility to retrieve fast and easy CITL data in a user friendly form. Users can filter for (a couple of) countries, sectors and/or companies. The search function is based on Tschach Solutions' proprietary company list that assigns each installation to a company and sector. In addition to the CITL/EUTL data the offset quota for the searched segment is provided. Thus, still open offset limits of the companies/sectors/countries can be evaluated.

Country Code: Austria, Belgium, Bulgaria, Cyprus

Company: ArcelorMittal, BP, Bulgartransgaz, Buzzi Unicem Group

Sector: All, Power, Metals, Cement&Lime, Oil&Gas, Paper&Pulp, Glass, Ceramics, Other

Show only data from Installations for which TP2 and TP3 allocation is known

[in Mt]	2008	2009	2010	2011	2012	2013	2014	2015	2016-20	Sum TP2	Sum TP3
Emissions	55.5	46.2	50.1	46.2	43.0	N/A	N/A	N/A	N/A	241.0	N/A
Allocation	55.4	56.8	56.0	56.6	56.4	44.1	43.1	42.2	41.3	281.2	327.2
Cap to Emissions	-0.1	10.6	5.9	10.4	13.4	N/A	N/A	N/A	N/A	26.8*	N/A
Surrendered EUAs	54.0	45.5	49.5	39.9	33.0	N/A	N/A	N/A	N/A	221.9	N/A
Surrendered CERs	1.5	0.6	0.6	5.7	5.2	N/A	N/A	N/A	N/A	13.7	N/A
Surrendered ERUs	0.0	0.0	0.1	0.6	4.8	N/A	N/A	N/A	N/A	5.4	N/A
Offset Quota 08-12	23.4	23.4	23.4	23.4	23.4	0.0	0.0	0.0	0.0	23.4	N/A
Offset Quota 08-20	39.2	39.2	39.2	39.2	39.2	39.2	39.2	39.2	39.2		39.2
Quota used	1.5	0.6	0.6	6.2	10.0	N/A	N/A	N/A	N/A	19.1	N/A

*: CTE-Sum only 2008-2012

Infoboxes on Topics of Special Interest

To gather all relevant information on topics of special interest, Infoboxes provide the user with in-depth information about the topic in question, eg back-loading. The Infobox contains all information from different interim updates, research reports and other information sources of Tschach Solutions. Furthermore, background information about potential legislative procedures and implementation probabilities are provided.

Policy Database

For the convenience of the Data Portal user, an additional section contains a collection of important carbon policy documents such as legislation, official explanatory documents and official forecasts or scenario analyses.

Carbon Calendar

A calendar lists important dates for the carbon market, such as auctions, EB meetings, meetings of EU Parliament Committees or European Council, important publication dates, regulatory milestones and so on.

Reports Section

Interim Updates

We regularly update our clients, assessing the latest market-relevant developments. These updates are short, to the point and represent analytical reactions on upcoming news or discoveries by the Tschach Solutions team (eg, covering of voting events in the EU Parliament). The Interim Updates give you either new insights or an assessment of existing news.

Monthly Report

Our Monthly Reports are based on the findings of our behavioural driven market model, the Timing Impact Model. The report focuses on topics of special interest, the latest changes in assumptions, the macroeconomic picture or political changes and condenses their market impact in a short report with a price projection for the next two years on a quarterly basis.

Research Reports

For areas of special interest, eg an upcoming carbon scheme, a heavy shift in behaviour or a political situation, Tschach Solutions develops longer in-depth reports. The reports focus on important issues to give the reader deep insights into a specific field (eg, Australia moving earlier to a floating price period, leading to significant EUA demand).

Tschach Solutions  now part of **ICIS**

Carbon Leakage – Is It Art Or Can We Get Rid Of It?

What's the current state, the way forward and the potential impact of the revision

Published: 29/07/2013
Analysts: Philipp Ruf
Benjamin Schmitt
Yann Andreassen



CER Reports

Tschach Solutions produces, on a weekly basis, the latest statistics on the CDM process for both registration and issuance. The report also shows the latest estimates on short- mid- and long-term issuance. Be up to date with the CDM with a weekly three-page report.

