EU ETS Company Database
Market analysis and carbon disclosure solution
Climate change, the most serious environmental issue, represents a significant threat to the financial community. Facing a changing world and a new regulatory regime, investors must be able to identify and assess the risks and opportunities created by the new carbon-constraining policies.

To help financial investors and carbon traders in this task, Carbon Market Data designed the EU ETS Company Database, a unique and innovative carbon disclosure solution.

The EU ETS Company Database currently provides, for more than 1,000 companies, the following strategic information:

- CO₂ verified emissions
- Distributed allowances
- Emissions-to-cap figures
- CERs surrendered for compliance
- ERUs surrendered for compliance
- Type and country of origin of CDM and JI projects (generating the CERs/ERUs used for compliance)
- List of installations
- CO₂ emissions by country
- List of parent companies (with % of shareholdings)
- List of subsidiaries (with % of shareholdings)
- Sector of activity
- Contact details
- ISIN company code
- BVD company code (Amadeus database)

The EU ETS Company Database currently includes:

- More than 1,000 companies from 31 European countries (EU + Norway + Iceland + Liechtenstein)
- More than 90% of CO₂ emissions from all EU ETS companies

A key feature of our carbon information solution is that it displays corporate carbon data at three levels:

- Group level (equity-based)
- Company level
- Installation level
Market Analysis Solution

The EU ETS Company Database provides to our clients a clear competitive edge. It enables:

- Carbon traders and brokers to identify the carbon asset distribution in the market (EUA portfolios, buy or sell yearly positions, company ranking, sectorisation, …) and design winning trading strategies
- Power traders and analysts to better evaluate cross-commodity interactions
- Equity research analysts to assess the impact of carbon trading schemes on company valuations
- Investors to assess and manage their carbon risk exposure
- CSR professionals to report on their company and investment portfolio’s carbon risk profile
- SRI managers to calculate carbon emissions benchmarks, identify best corporate performers and design climate performance indexes
- Asset managers to quantify their carbon risk exposure, manage carbon assets and design innovative carbon trading products (options, futures, repos)
- Credit rating agencies to integrate carbon risk component into their corporate ratings
- Business and strategy consultants to assess the value of corporate carbon assets and liabilities
- Mergers & acquisitions (M&A) specialists to evaluate the carbon risk profiles of companies

<table>
<thead>
<tr>
<th>Company</th>
<th>Sector</th>
<th>Installation count</th>
<th>Allocated allowances 2012</th>
<th>Verified emissions 2012</th>
<th>Emissions-to-cap (#C-C) 2012</th>
</tr>
</thead>
<tbody>
<tr>
<td>RWE</td>
<td>Power &amp; Heat</td>
<td>131</td>
<td>109,140,268</td>
<td>153,750,096</td>
<td>44,615,808</td>
</tr>
<tr>
<td>Vattenfall</td>
<td>Power &amp; Heat</td>
<td>155</td>
<td>63,852,758</td>
<td>92,075,886</td>
<td>28,223,128</td>
</tr>
<tr>
<td>Enel</td>
<td>Power &amp; Heat</td>
<td>78</td>
<td>63,529,573</td>
<td>76,743,545</td>
<td>15,213,771</td>
</tr>
<tr>
<td>Drax Power</td>
<td>Power &amp; Heat</td>
<td>1</td>
<td>9,501,265</td>
<td>22,694,684</td>
<td>13,193,410</td>
</tr>
<tr>
<td>Endesa</td>
<td>Power &amp; Heat</td>
<td>59</td>
<td>25,959,033</td>
<td>37,280,130</td>
<td>11,337,097</td>
</tr>
<tr>
<td>Statoll</td>
<td>Oil &amp; Gas</td>
<td>28</td>
<td>2,863,832</td>
<td>12,297,090</td>
<td>9,434,167</td>
</tr>
<tr>
<td>Eggborough Power</td>
<td>Power &amp; Heat</td>
<td>1</td>
<td>4,744,518</td>
<td>10,222,778</td>
<td>5,478,260</td>
</tr>
<tr>
<td>Scottish and Southern Energy</td>
<td>Power &amp; Heat</td>
<td>34</td>
<td>15,227,189</td>
<td>20,698,119</td>
<td>5,470,931</td>
</tr>
<tr>
<td>Gas Natural Fenosa</td>
<td>Power &amp; Heat</td>
<td>20</td>
<td>11,158,338</td>
<td>15,969,502</td>
<td>4,811,164</td>
</tr>
<tr>
<td>Nuon</td>
<td>Power &amp; Heat</td>
<td>24</td>
<td>7,661,350</td>
<td>12,390,394</td>
<td>4,720,044</td>
</tr>
</tbody>
</table>
Direct emissions - Scope 1

The EU ETS Company Database provides you with greenhouse gas emissions data on 1,000 companies operating in the EU and EEA countries. EU ETS emissions data are audited and verified every year by accredited third-parties, as according to the EU legal framework.

The EU ETS Company Database is therefore a trusted and powerful tool for helping professionals conducting a carbon footprint analysis. Our solution provides you with direct emissions company data (scope 1), both at installation level as well as company level.

Greenhouse gases covered:
- For years 2005-2012: CO2 (carbon dioxide)
- From 2013: CO2 (carbon dioxide), N2O (nitrous oxide), PFC (perfluorocarbons)

Countries covered:
- 28 EU countries
- EEA countries: Norway, Iceland, Liechtenstein

Carbon Market Data publishes every year the EU ETS Company Rankings. This unique analysis report on the European cap-and-trade scheme is based on the data extracted from the EU ETS Company Database.

It provides the following rankings:
- List of the biggest GHG emitters
- List of companies with largest shortage of free carbon allowances (EUAs)
- List of companies with highest surplus of free carbon allowances (EUAs)
- List of companies having surrendered the largest amounts of CERs
- List of companies having surrendered the largest amounts of ERUs
Carbon Risk & Company Valuation

The carbon factor

The Kyoto Protocol was signed in 1997 and entered into force in 2005, while the European Union’s emissions trading scheme (EU ETS) was established by the directive 2003/87/CE of 13 October 2003 and officially started on 1 January 2005. These two programmes represent key milestones in international climate change policy. Such carbon-regulating policies modify the financial landscape by adding a new risk factor: the carbon factor.

Company Carbon Risk Assessment

Facing this new element of risk, financial institutions need to conduct a systematic company carbon risk assessment of their investment portfolios. The EU ETS Company Database enables the rapid implementation of a systematic corporate carbon risk analysis. It includes data on CO2 and other greenhouse gas emissions, EU carbon allowances (EUAs) freely received, emissions-to-caps, CERs and ERUs surrendered for compliance, covering 1,000 companies (biggest emitters as well as largest companies in terms of market capitalisation and company valuation).

Company Valuation Models

The EU ETS Company Database can help you in conducting benchmarking and company valuation analysis. It provides you with unique and strategic data on the company carbon profiles. It also allows you to identify over time the strategy adopted by company boards towards climate change risk. For instance, the mergers and acquisitions occurred in the European power industry in the last years greatly modified the carbon risk profile of some major power producers.

Self-reported data vs third-party verified data

Nowadays, self-reported data produced on a voluntary basis are commonly found when dealing with a company’s greenhouse gas emissions. As these data are supplied on a voluntary basis and are not subject to any clear legal framework, data accuracy and reliability remains an issue. Also, transparency on the data scope used (whether geographical or sectoral scope) represents too often a hurdle for implementing a solid CSR analysis.

These reliability and accuracy issues can be avoided by using data verified by accredited third-parties. In the EU emissions trading scheme (EU ETS), emissions data are verified and audited every year by accredited carbon verifiers such as DNV, SGS, Bureau Veritas, or TÜV. The EU ETS Company Database displays only carbon emissions data audited by EU-accredited carbon verifiers. Our carbon disclosure solution is therefore a trusted data source for professionals conducting a CSR (Corporate and Social Responsibility) and equity analysis.
Company search functionality

You can search companies by name, sector, country, number of EU allowances, emissions-to-cap figures.
Company’s Carbon Data Summary

In this interface, you can view company’s carbon data (distributed allowances, emissions, emissions-to-cap figures) for each year.

<table>
<thead>
<tr>
<th>year</th>
<th>allocated allowances</th>
<th>verified emissions</th>
<th>emissions-to-cap (t CO₂)</th>
<th>emissions-to-cap ratio (as % of cap)</th>
<th>verified emissions evolution</th>
<th>allowances evolution</th>
<th>total surrendered units</th>
<th>CERs surrendered</th>
<th>ERUs surrendered</th>
<th>% CERs-ERUs surrendered</th>
</tr>
</thead>
<tbody>
<tr>
<td>2005</td>
<td>82,990.079</td>
<td>60,071.636</td>
<td>-22,918.443</td>
<td>-27.62 %</td>
<td></td>
<td></td>
<td>28,305.581</td>
<td>0</td>
<td>0</td>
<td>0.00 %</td>
</tr>
<tr>
<td>2006</td>
<td>82,112.200</td>
<td>63,781.737</td>
<td>-18,330.463</td>
<td>-22.32 %</td>
<td>+6.18 %</td>
<td>-1.06 %</td>
<td>95,492.793</td>
<td>0</td>
<td>0</td>
<td>0.00 %</td>
</tr>
<tr>
<td>2007</td>
<td>93,429.395</td>
<td>73,557.556</td>
<td>-19,871.849</td>
<td>-21.27 %</td>
<td>+15.33 %</td>
<td>+13.78 %</td>
<td>73,557.557</td>
<td>0</td>
<td>0</td>
<td>0.00 %</td>
</tr>
<tr>
<td>2008</td>
<td>88,148.924</td>
<td>67,616.589</td>
<td>-20,532.325</td>
<td>-23.29 %</td>
<td>-8.08 %</td>
<td>-5.85 %</td>
<td>67,616.589</td>
<td>0</td>
<td>0</td>
<td>0.00 %</td>
</tr>
<tr>
<td>2009</td>
<td>88,154.492</td>
<td>65,085.512</td>
<td>-43,077.980</td>
<td>-48.86 %</td>
<td>-33.32 %</td>
<td>+0.02 %</td>
<td>45,332.127</td>
<td>0</td>
<td>0</td>
<td>0.00 %</td>
</tr>
<tr>
<td>2010</td>
<td>86,288.542</td>
<td>54,829.289</td>
<td>-31,459.174</td>
<td>-36.46 %</td>
<td>+21.61 %</td>
<td>-2.13 %</td>
<td>54,829.289</td>
<td>0</td>
<td>0</td>
<td>0.61 %</td>
</tr>
<tr>
<td>2011</td>
<td>86,125.835</td>
<td>53,156.937</td>
<td>-32,968.449</td>
<td>-38.28 %</td>
<td>-3.05 %</td>
<td>-0.19 %</td>
<td>53,156.937</td>
<td>0</td>
<td>0</td>
<td>56.10 %</td>
</tr>
<tr>
<td>2012</td>
<td>86,039.394</td>
<td>49,992.193</td>
<td>-36,047.201</td>
<td>-41.10 %</td>
<td>-5.95 %</td>
<td>-0.10 %</td>
<td>15,031.247</td>
<td>7,418.444</td>
<td>7,612.803</td>
<td>100.00 %</td>
</tr>
<tr>
<td>2013</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0.00 %</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0.00 %</td>
</tr>
</tbody>
</table>

Subsidiary companies

<table>
<thead>
<tr>
<th></th>
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<th></th>
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<th></th>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Twing</td>
<td>Power</td>
<td>17.50 %</td>
<td>1</td>
<td>150.177</td>
<td>135.068</td>
<td>-10.109</td>
<td>-10.05 %</td>
<td>+3.89 %</td>
<td>0.00 %</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>ElektricitetsPower</td>
<td>Power</td>
<td>0.00 %</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>
### Company Ranking

You can list companies and sort them according to their number of distributed EUAs, carbon emissions, emissions-to-cap figures (initial carbon trading positions).

### List of subsidiaries and parent companies

You can view the parent companies and subsidiaries of each company, together with their corresponding shareholdings.
List of company’s installations

With this functionality, you can access the list of the company’s installations.

Company’s emissions by country

You can view the carbon data of multinational companies displayed by country.
Company EUAs vs Emissions Chart

This chart displays for each company the CO2 emissions compared with the number of carbon allowances received.

Emissions by country chart

This pie chart displays the company's CO2 emissions by country.
Underlying CDM and JI Projects

This interface provides information on the CERs and ERUs used for compliance by EU ETS companies.

### Country of Origin

<table>
<thead>
<tr>
<th>Country</th>
<th>CERs-ERUs surrendered per Country - 2010 compliance</th>
</tr>
</thead>
<tbody>
<tr>
<td>China</td>
<td>392,914</td>
</tr>
<tr>
<td>India</td>
<td>312,200</td>
</tr>
<tr>
<td>Mexico</td>
<td>183,919</td>
</tr>
<tr>
<td>Ukraine</td>
<td>165,419</td>
</tr>
<tr>
<td>Others</td>
<td>128,419</td>
</tr>
</tbody>
</table>

### Type of CDM/JI project

<table>
<thead>
<tr>
<th>Project Type</th>
<th>CERs-ERUs surrendered per Project Type - 2010 compliance</th>
</tr>
</thead>
<tbody>
<tr>
<td>HC</td>
<td>413,730</td>
</tr>
<tr>
<td>N2</td>
<td>213,600</td>
</tr>
<tr>
<td>Others</td>
<td>33,512</td>
</tr>
</tbody>
</table>

### List of underlying CDM/JI projects

<table>
<thead>
<tr>
<th>CERs surrendered</th>
<th>project title</th>
<th>ref.</th>
<th>host country</th>
<th>type</th>
<th>setup date</th>
<th>CERs issued</th>
<th>year issued</th>
<th>biodiversity</th>
<th>investment (USD)</th>
<th>climateayer</th>
</tr>
</thead>
<tbody>
<tr>
<td>3,938,892</td>
<td></td>
<td>284</td>
<td>China</td>
<td>HFCs</td>
<td>2007-06-20</td>
<td>3,938,892</td>
<td>2007-12-31</td>
<td>108.19%</td>
<td>3,938,892</td>
<td>Bat (EMIL), Switzerland, Netherlands, United K.</td>
</tr>
<tr>
<td>5,178,584</td>
<td></td>
<td>233</td>
<td>China</td>
<td>HFCs</td>
<td>2007-06-20</td>
<td>5,178,584</td>
<td>2007-12-31</td>
<td>108.19%</td>
<td>5,178,584</td>
<td>Bat (EMIL), Switzerland, Netherlands, United K.</td>
</tr>
<tr>
<td>10,178,117</td>
<td></td>
<td>232</td>
<td>China</td>
<td>HFCs</td>
<td>2007-06-20</td>
<td>10,178,117</td>
<td>2007-12-31</td>
<td>108.19%</td>
<td>10,178,117</td>
<td>Bat (EMIL), Switzerland, Netherlands, United K.</td>
</tr>
<tr>
<td>2,305,532</td>
<td></td>
<td>767</td>
<td>China</td>
<td>HFCs</td>
<td>2007-06-20</td>
<td>2,305,532</td>
<td>2007-12-31</td>
<td>108.19%</td>
<td>2,305,532</td>
<td>Bat (EMIL), Switzerland, Netherlands, United K.</td>
</tr>
<tr>
<td>3,339,000</td>
<td></td>
<td>1</td>
<td>India</td>
<td>HFCs</td>
<td>2005-04-18</td>
<td>3,339,000</td>
<td>2005-04-18</td>
<td>254.29%</td>
<td>3,339,000</td>
<td>Bat (EMIL), Switzerland, Netherlands, United K.</td>
</tr>
</tbody>
</table>

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