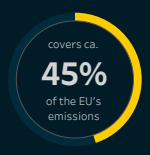
The European Union Emissions Trading System (EU ETS) Combatting Climate Change?

The European Union launched the EU Emissions Trading System (EU ETS) in 2005 as the cornerstone of its strategy for **cutting emissions** of manmade carbon dioxide (CO2) and other greenhouse gases which are largely responsible for causing climate change. The system works by setting a **limit on overall emissions** from various industries. Within this limit, companies can buy and sell emission allowances as needed. With this **'cap-and-trade' approach** the EU ETS is the world's first major carbon market. While EU ETS covers **emission cuts in power and industry** its companion policy, the Effort Sharing Decision (ESD) covers areas such as buildings and agriculture.

It operates in the 28 EU countries plus Iceland, Liechtenstein and Norway (EU31). Through the European Union Transaction Log (EUTL) data such as the **verified emission or allowances** for more than 12.000 stationary installations as well as 1.400 aircraft operators are checked and recorded.

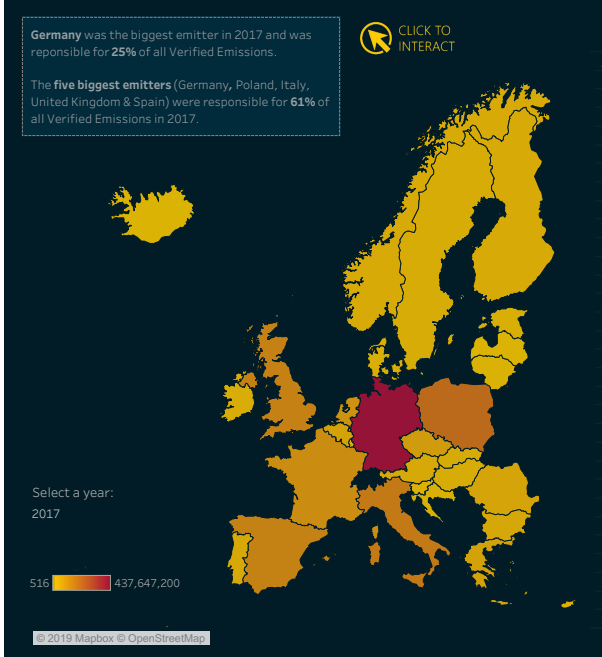


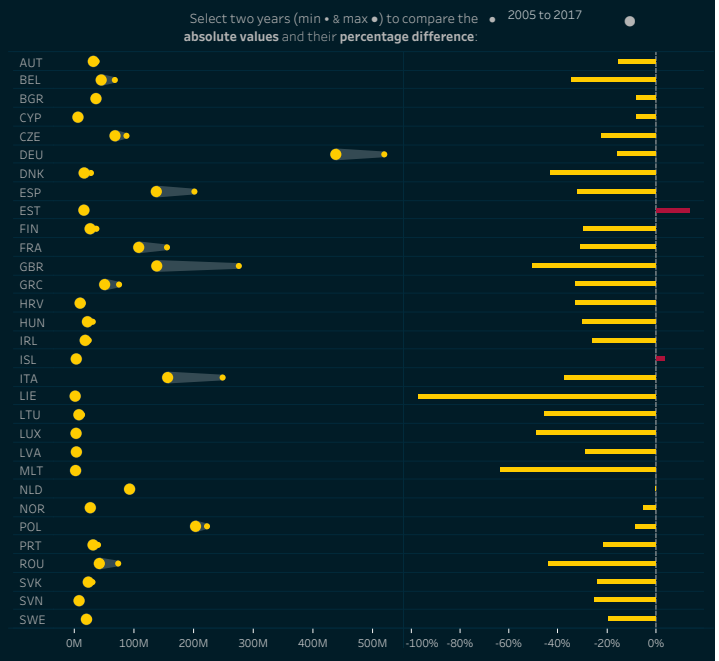
The EU ETS consists of several **phases of development**. The 1st trading period from 2005-2007 constituted a process of ,,learning by doing." In the 2nd period (2008-2012) the number of allowances was reduced by 6.5%. The 3rd period (2013-2020) introduced an EU-wide cap on emissions which is set to be lowered by 1.74% each year. This should support the EU's target to reduce greenhouse gas emissions by **20% in 2020 compared to 1990**.
In July 2015 the European Comission presented a legislative proposal for the revision of the 4th period (2021-2030) which aims to achieve a **43 % reduction in EU ETS emissions in 2030** compared to 1990 levels

Let's have a look at the Ve.. **Verified Emissions**

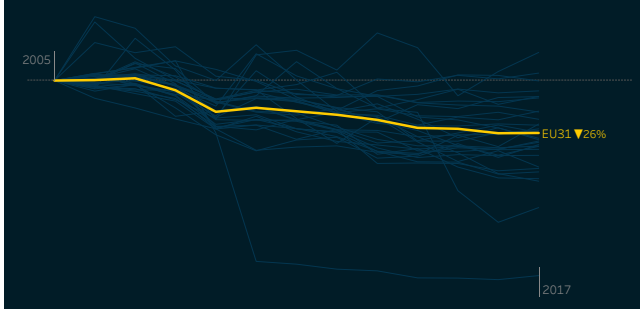
Germany was the biggest emitter in 2017 and was reponsible for **25%** of all Verified Emissions.

The **five biggest emitters** (Germany, Poland, Italy, United Kingdom & Spain) were responsible for **61%** of all Verified Emissions in 2017.

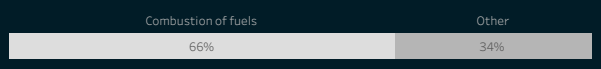




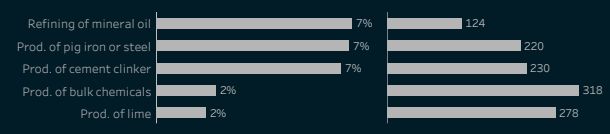
Are we doing better compared to 2005 (in %)?



Which activity caused most emissions (in 2017)?

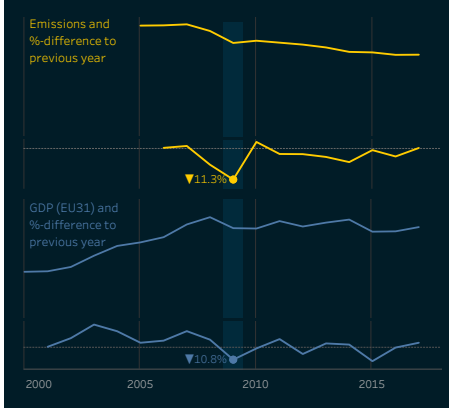


Combustion of fuels are responsible for a large part of overall emissions which are emitted by a total of **6,665 different companies**.
These are the **five activities** with the highest emissions outside of combustion of fuels and their corresponding number of companies:



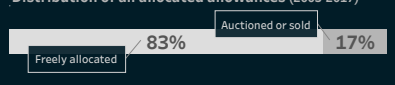
The overall emissions are decreasing – is the EU ETS a success?

While the emissions decreased compared to 2005, this might have also other reasons than the EU ETS.
A structural break in emissions seem to happen around the time of the **global financial crisis in 2009**.

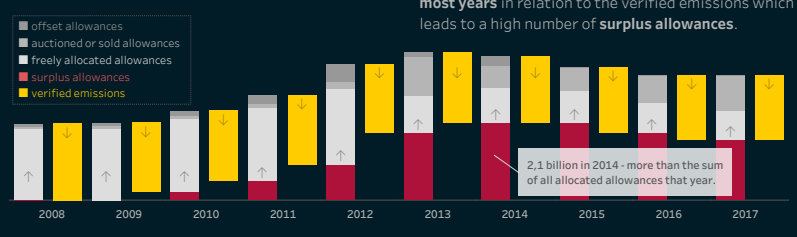


A major point of critique regarding the EU ETS is its allocation of emissions allowances. While the EU argues emissions will fall by putting a **price on carbon** through the ETS, a great amount of allowances is **granted for free**. Furthermore there is an **oversupply of allowances** which leads to a rather low price per ton CO2-eq.

Distribution of all allocated allowances (2005-2017)

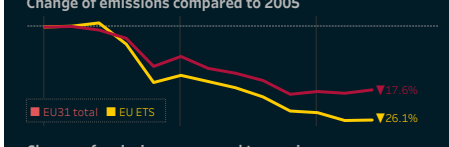


Besides the allocated allowances, companies can also receive credits generated by supporting certain types of emission- saving projects around the world (**offset allowances**). The sum of all allocated (free & auctioned) and offset allowances was **much higher in most years** in relation to the verified emissions which leads to a high number of **surplus allowances**.

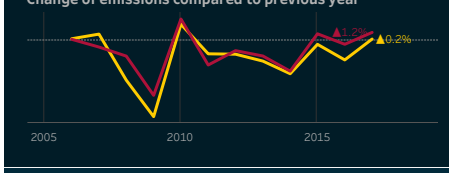


The EU ETS covers only around 45% of the EU's emissions, does this share have a **higher decrease compared to the total EU's emissions**?
Please note: total emissions include only CO2 emissions

Change of emissions compared to 2005

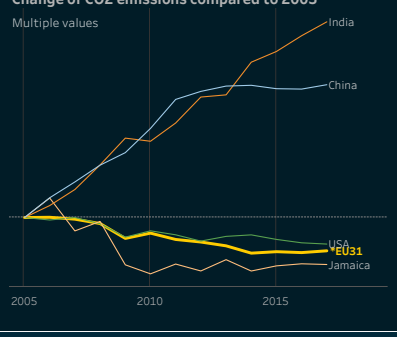


Change of emissions compared to previous year

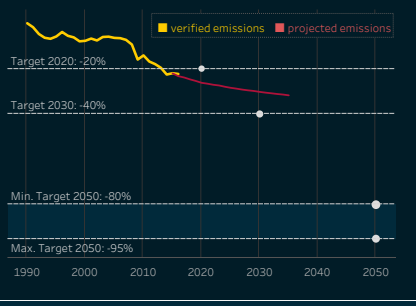


The EU ETS covers only around 10% of worldwide emissions, how good are the **achievements compared to other countries**?

Change of CO2 emissions compared to 2005



While the general trend looks promising and the EU will probably meet its target for 2020, the Member States' projections generate less optimism: The projected reductions of **32% in 2030 fall short of the 40% target for 2030** and it furthermore seems quite **unrealistic to meet the targets set for 2050**.



Data Sources ⓘ

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