Rödl & Partner

Series on the energy transition

EU ETS II

What does the second stage of emission trading mean for companies?!

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European emissions trading II (EU ETS II) will be introduced in 2027 and will establish an EU-wide market for emissions certificates, particularly for the buildings and transportation sectors. As part of the revised EU ETS Directive, it replaces the national CO_2 fixed prices. ETS II is intended to support member states in achieving their national emission reduction targets in accordance with the *Effort Sharing Regulation (ESR)* as part of the *European Green Deal*.[1]

Cap

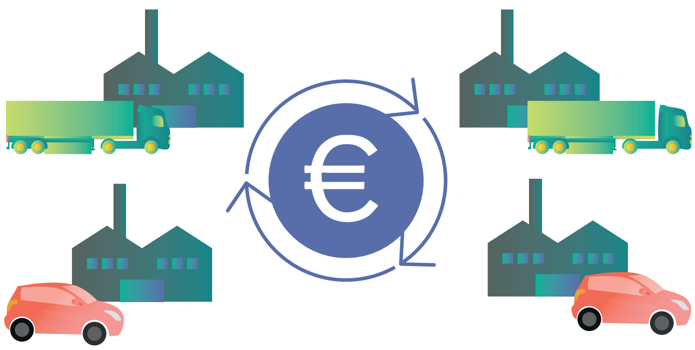
The EU sets an annually decreasing cap for certificates. The number is based on strict reduction targets of the relevant sectors in ETS II.

Trade

The certificates are auctioned primarily to distributors of fossil fuels from the heating and transportation sector. The costs are passed on to the end consumer (upstream system).

Cap-and-Trade-System

A market for emission allowances is created. From an economical point of view, it makes sense to invest in emission reduction measure if the certificate costs exceed the cost of reduction initiatives.



Relevance for companies

ETS II presents companies with major challenges due to the expected rise in CO_2 prices and occurring market uncertainty. Energy-intensive companies are particularly exposed to financial risks – but new opportunities arise at the same time.[2] Addressing the issue at an early stage creates the opportunity of strategic benefits.

Those who invest in decarbonization can benefit from subsidies in an early stage and competitive advantages in the long term.

Introduction of ETS II & rapidly rising CO_2 prices

Chances

- Incentive for investments in decarbonisation
- Potential for CO_2 reduced business models
- New funding opportunities

Risks

- Uncertainty about CO_2 price development
- Higher operational costs
- Planning uncertainties and regulatory risks
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Emission reduction targets for relevant sectors

The limit (cap) for certificates is based on the goal of reducing emissions included in ETS II scope by 42 % compared to 2005 levels.[3] The sectors of buildings and transportation account for most of the emission in ETS II. The emission reduction goals have so far been **missed by a wide margin**, particularly in Germany. ETS II is intended to close this gap and accelerate the further reduction of emissions in these sectors. In order to achieve the overarching goal of climate neutrality by 2050 emission must decrease significantly across all sectors. Germany's reduction targets are even more ambitious leading to a need of even faster reduction.

The greater the shortfall, the higher the certificate prices in ETS II.
High emissions and strict reduction targets create strong demand and a shortage in supply of certificates.

Development and target achievement of CO_2 emissions in Germany in buildings and transportation sectors

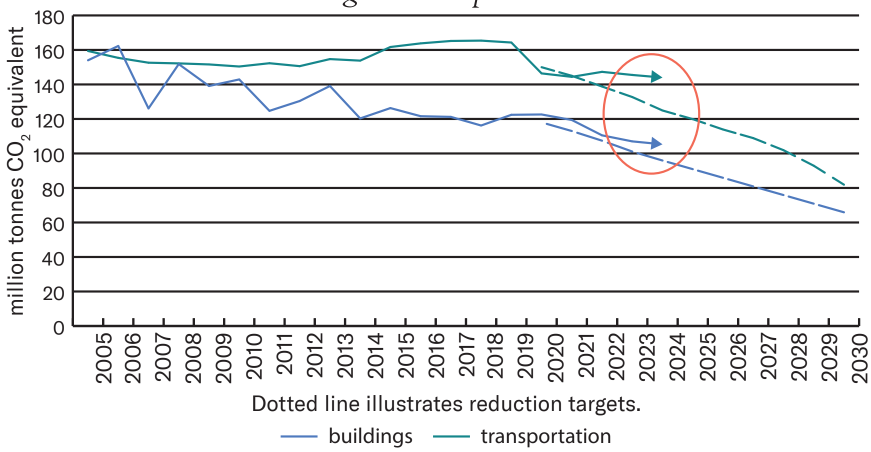


Figure 1: Values for 2005-2023 – Umweltbundesamt[4]
Values for 2024 – Agora Energiewende[5]

ETS II prices and costs of fossil energy

The exact transition towards ETS II is still unclear. However, there is a considerable risk that CO_2 prices will increase rapidly in 2027 and gain further momentum in the following years.

Planning security for companies will be weakened. Several studies forecast the development of ETS II based on various scenarios. A current evaluation of these studies shows a **price range of around 60 to 380(!) EUR/tonne CO_2** in 2030. This range can be explained through different model assumptions and the varying degrees of detail in the implementation of ETS II.[6] Price levels at the extremes of the illustrated range seem unlikely. The mean value of all studies is around 210 euros/tonne in 2030 and offers a more realistic orientation.

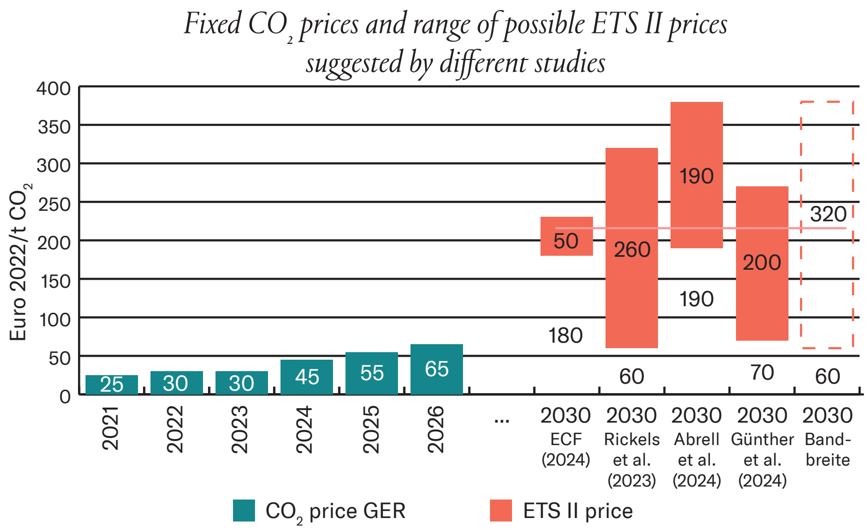
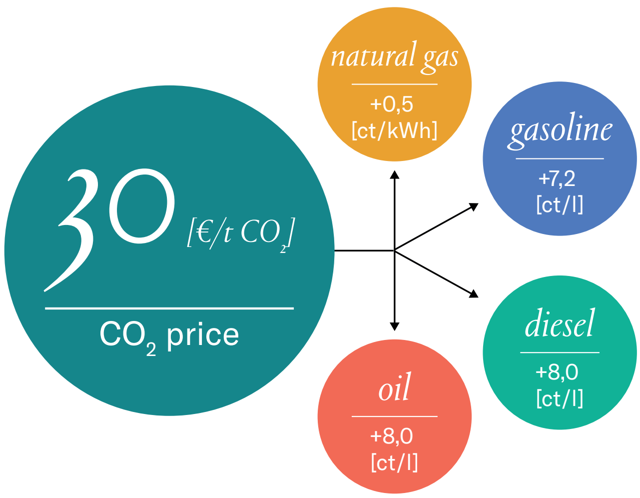


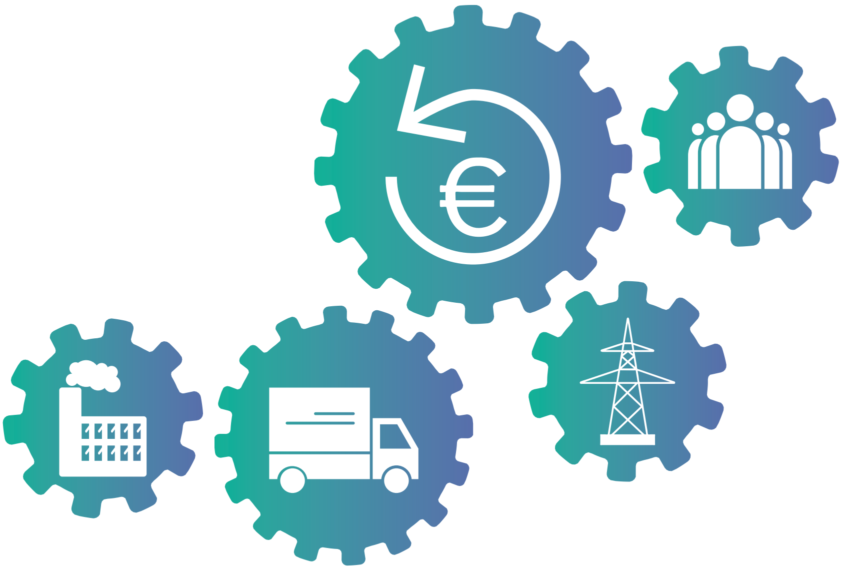
Figure 2: Values for CO_2 fixed prices – BMWK[7]
Range of likely ETS II prices – Paper of the Friedrich Ebert Stiftung[6]

High ETS II prices lead to higher costs of fossil energy such as natural gas, gasoline, diesel and heating oil. Therefore, expenses for heat generation, road transportation and other energy-intensive processes are rising. According to a calculation by Agora Energiewende, an increase of **30 EUR/tonne CO_2**[8] could lead to a direct impact on consumer prices and therefore companies. As these costs have an impact on the sales prices, an inflationary effect can be assumed. Furthermore, the market position may worsen compared to imported goods.



The extent to which the modelled prices actually form on the market depends on several factors that can only be partially taken into account in the models. These include specifically defined measures in the ETS guidelines which are intended to prevent drastic price increases in the early years as far as possible. However, the implementation of these measures remains unclear for the time being.[6] Moreover, a climate and social fund is to be introduced with the revenue from the auctioning of certificates. This fund is earmarked to drive the transformation towards low-emission technologies and to support measures of social equalisation.

In Germany, the ETS II could generate ***revenue of around EUR 180 billion from 2027 to 2032 at an average price 150 EUR/tonne*** which would be fully fed back into the market – both to promote decarbonisation and to ensure social compensation measures.[2]



Conclusion for companies

Germany has achieved substantial success in recent years through the massive expansion of renewable energies. By 2024, emissions from the energy industry had fallen by 61 % reducing its overall emissions by 48 % compared to 1990.[9] Green electricity must now be used to decarbonise the transport and heating sectors (sector coupling). Coupled with digitalisation (e.g. smart meter, digital trading systems) and a growing battery storage capacity an innovative, sustainable energy system is created which has enormous upside potential. Electrification has already won and allows the utilisation of volatile electricity prices through battery storage (self-consumption optimisation, grid fee reductions). Heat storage (salt) may also have the potential to exploit this opportunity.

Companies should already take ETS II into account when making management decisions. The high level of uncertainty regarding the level of CO_2 prices and the possible negative effects on the market position should be analysed at an early stage. CO_2 emissions in the entire value chain (including upstream suppliers) will be focused more due to ETS II. Climate targets can only be achieved through dedicated action.

Companies should prepare well for the upcoming start of ETS II and implement decarbonisation measures to benefit from increased planning security and competitive advantages. Because one thing is certain: ETS II will be introduced in the coming years and will heavily influence markets. Strict emission targets and forecasted CO_2 prices dictate the expected market environment. Preparation an early stage will allow companies to benefit from financial advantages compared to those that do not. The latter is not an option.

Sources

[1] ETS2: buildings, road transport and additional sectors – European Commission

[2] A-EW_311_BEH_ETS_II_WEB.pdf

[3] ETS2: buildings, road transport and additional sectors – European Commission

[4] Treibhausgasminderungsziele Deutschlands | Umweltbundesamt

[5] Die Energiewende in Deutschland: Stand der Dinge 2024

[6] Die CO_2-Bepreisung im Umbruch

[7] BMWK – Der CO_2-Preis: Wichtiger Beitrag zum Klimaschutz

[8] Der CO_2-Preis für Gebäude und Verkehr | Agora Energiewende

[9] Die Energiewende in Deutschland: Stand der Dinge 2024

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