

CURRENT STATE OF CARBON PRICING IN GERMANY AND THE EU

Korean-German Energy Transition Talks

MINDSET OF EU/DE CLIMATE POLICY

The EU thinks its climate policy backwards from its targets.

- Net-zero emissions until 2050.
- 55% reduction until 2030 compared to 1990.

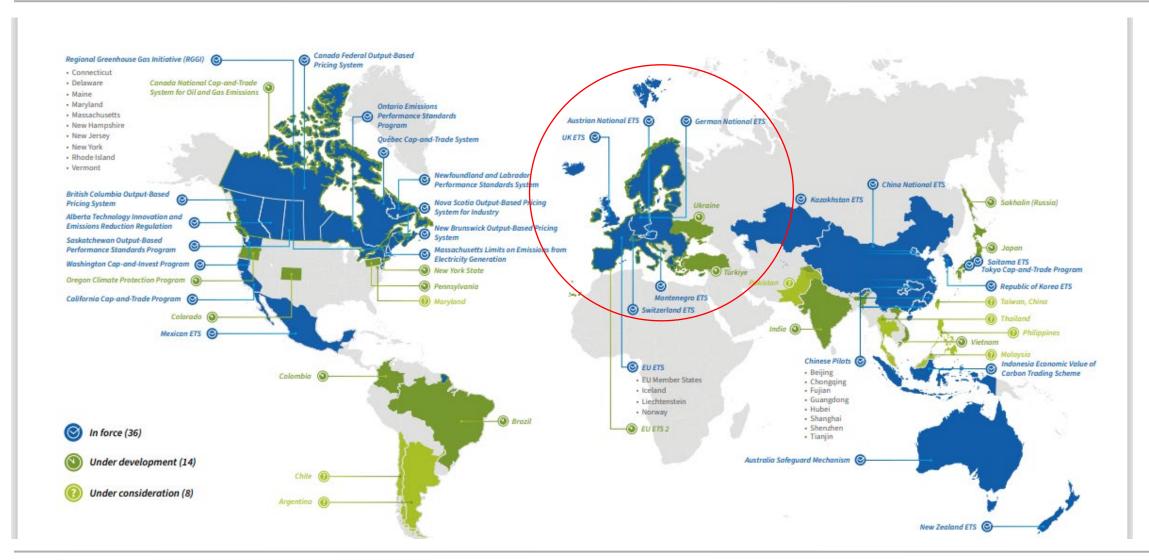
An ETS is the only instrument to target the quantity of emissions.

- The **trajectory of the allowance cap** in an ETS sketches the path towards the climate targets.
- It can be applied to **individual or several** sectors.
- With a carbon tax, it is not clear what emission reduction will be achieved.

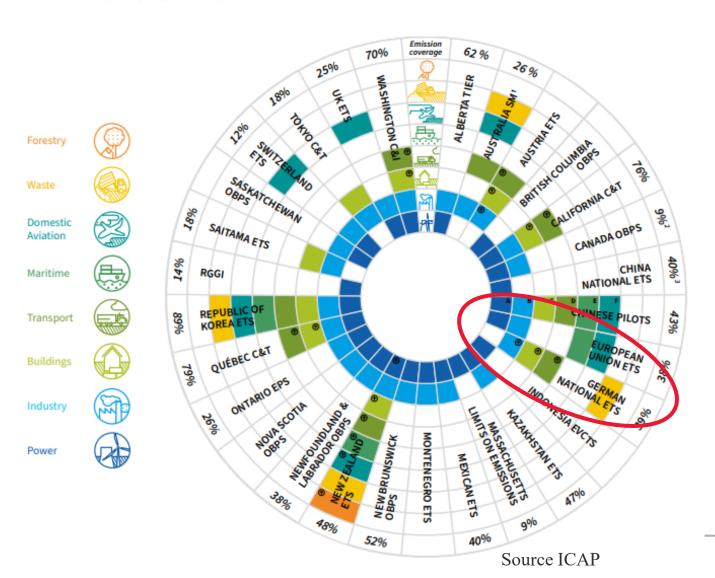
A variety of sectoral policies to support emission reduction.

- The EU ETS and the German national ETS are **umbrella policies** for emission reduction.
- Other policies (renewable energy support, low-carbon infrastructure, energy efficiency regulation, etc.) enable the shift towards a low-carbon economy.

ETS IN THE WORLD



SECTORAL COVERAGE



EU ETS 1 for power and industry

German national ETS

New EU ETS 2 for buildings, road transport and small industry

EU ETS – CENTER OF EU CLIMATE POLICY

The EU ETS is the oldest and, in terms of trading volume, largest ETS worldwide. It is a major driver for decarbonization in the electricity and industrial sectors.



How does the EU ETS work?

- Power plants, industrial installations (> 20 MW) and airlines (intra-EU flights) need to surrender allowances for their CO₂ emissions under the **EU ETS**
- The supply of allowances is limited for every year (= ETS cap).
- Allowances are auctioned and traded on secondary markets, incentivizing a **cost-effective reduction of emissions**.
- The current market price is at \sim 64 Euro (USD 70) per allowance (1 ton CO₂e).

EU ETS – PAST AND FUTURE

History

- The system was introduced in 2005.
- ETS prices were below 10
 Euro for 2011-2017 and only increased after a reform in 2018. Prices increased again with the 2021 reform proposal.

Recent reform

April 2023 saw the **conclusion of a reform** with the following outcomes:

- Increase of the cap reduction factor to achieve the 2030 EU climate target.
- Inclusion of the maritime sector from 2024, potential inclusion of waste incineration.
- Decrease of free allocation of allowances for industry and aviation.

EU CBAM

- The EU introduced a Carbon Border Adjustment Mechanism (CBAM) from October 2023.
- Importers will pay a carbon price on embedded emissions from 2026.
- **Pilot sectors:** Iron & steel, aluminum, cement, electricity, hydrogen, ammonia & fertilizers.
- Carbon prices paid in third countries are recognized.

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GERMAN NATIONAL ETS

The German national ETS started in 2021 with a fixed price on emissions of buildings, transport and small industry. It is a hybrid instrument of an ETS and a carbon tax.

How does the German national ETS work?

- The German Climate Law required Germany to go beyond the European climate ambition. The country **introduced the national ETS in 2021**.
- It is an **upstream system: Fuel distributors** pay the carbon price for fossil fuels delivered to buildings, the transport sector and small industries.
- The national ETS covers only emissions not already regulated by the EU ETS.
- It kicked off with **fixed-price phase starting at 25 Euro** in 2021 **increasing to 45 Euro in 2025.** There will be a price corridor from 55 to 65 Euro in 2026 and market-based price determination from 2027.
- In 2022, Austria launched a similar ETS.

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UNDER DEVELOPMENT: EU ETS 2

To reach its new climate target of 55% reduction by 2030, the EU decided to introduce a second ETS for buildings, road transport, and small industry.

How will the EU ETS 2 work?

- The EU plans to introduce a complementary ETS for buildings, road transport, and small industry in 2027.
- There is the possibility to opt in other sectors (e.g., Germany can include fuels for agriculture already covered by the German ETS).
- There is **no overlap** between the new system and the existing **EU ETS 1.**
- The EU ETS 2 will operate as **upstream system: Fuel distributors** pay the carbon price for fossil fuels delivered to firms and consumers.
- This requires a **different set of rules** for monitoring, reporting and verification (**MRV**).

EU ETS 2 – MITIGATE SOCIAL IMPACT

How will the impact of the EU ETS 2 on households and microenterprises be mitigated?

Price stabilization

The EU put several **price stabilization mechanisms** in place:

- **Postponement** by one year in case of extraordinarily high oil and gas prices.
- Release of 2 x 20 million allowances from a market stability reserve if the price is above 45 Euro/t.

Revenue recycling: Social Climate Funds

- A part of the revenues from the EU ETS 2 auctions will be transferred to a **funds to support vulnerable households and micro-enterprises**.
- EU Member States will co-finance the Funds.

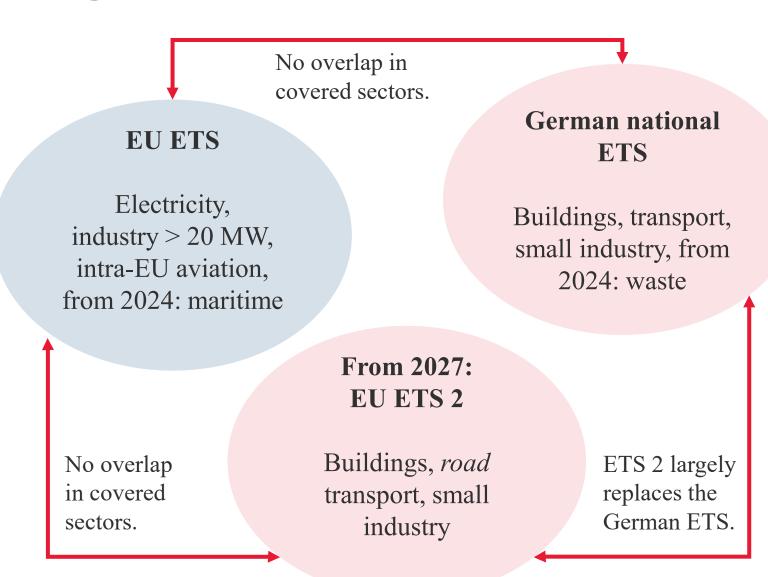
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ETS LANDSCAPE - OVERVIEW

The different instrument are designed to be perfect complements. Any overlap and double regulation should be avoided. In the long run, EU ETS and EU ETS 2 could potentially merge into one system.



adelphi

Sitz der Gesellschaft Berlin

Standorte

Alt-Moabit 91 10559 Berlin T +49 (30) 8900068-0 F +49 (30) 8900068-10

E office@adelphi.de
I www.adelphi.de

Landwehrstrasse 37 80336 München T +49 (30) 8900068-140 F +49 (30) 8900068-1

