

Emission Trading System in Europe – a brief overview

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What is the EU ETS? (I/II)

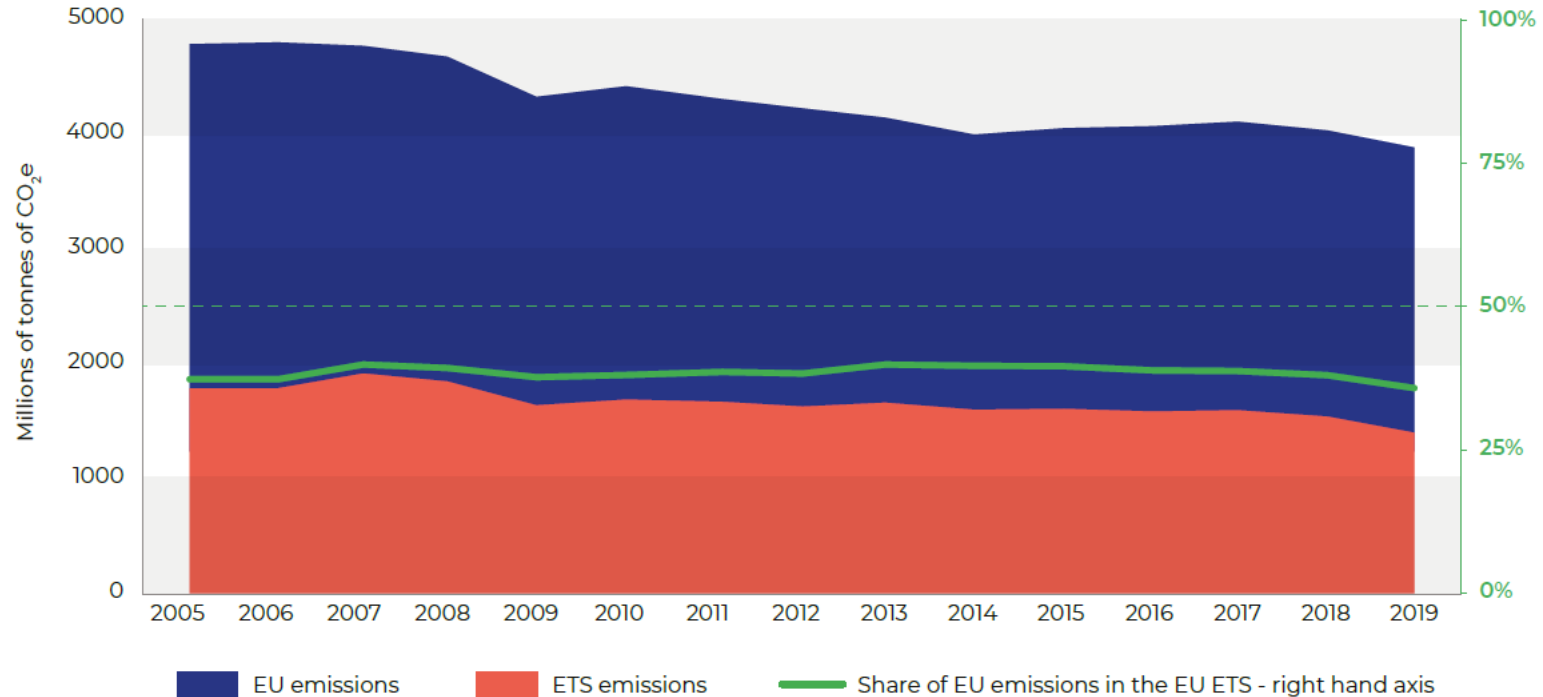
(Main Source of the presentation: EU ETS 101, A beginner's guide to the EU's Emissions Trading System)

- It is a regulatory market instead of just being the result of market forces
- Main legislation: **EU ETS Directive**
- ETS has experienced many revisions over the years with the latest revision as part of the 'Fit for 55' package, finalised in 2023
- The EU ETS is meant to apply the **'polluter pays' principle**, meaning that the costs of pollution should be borne by those who create it

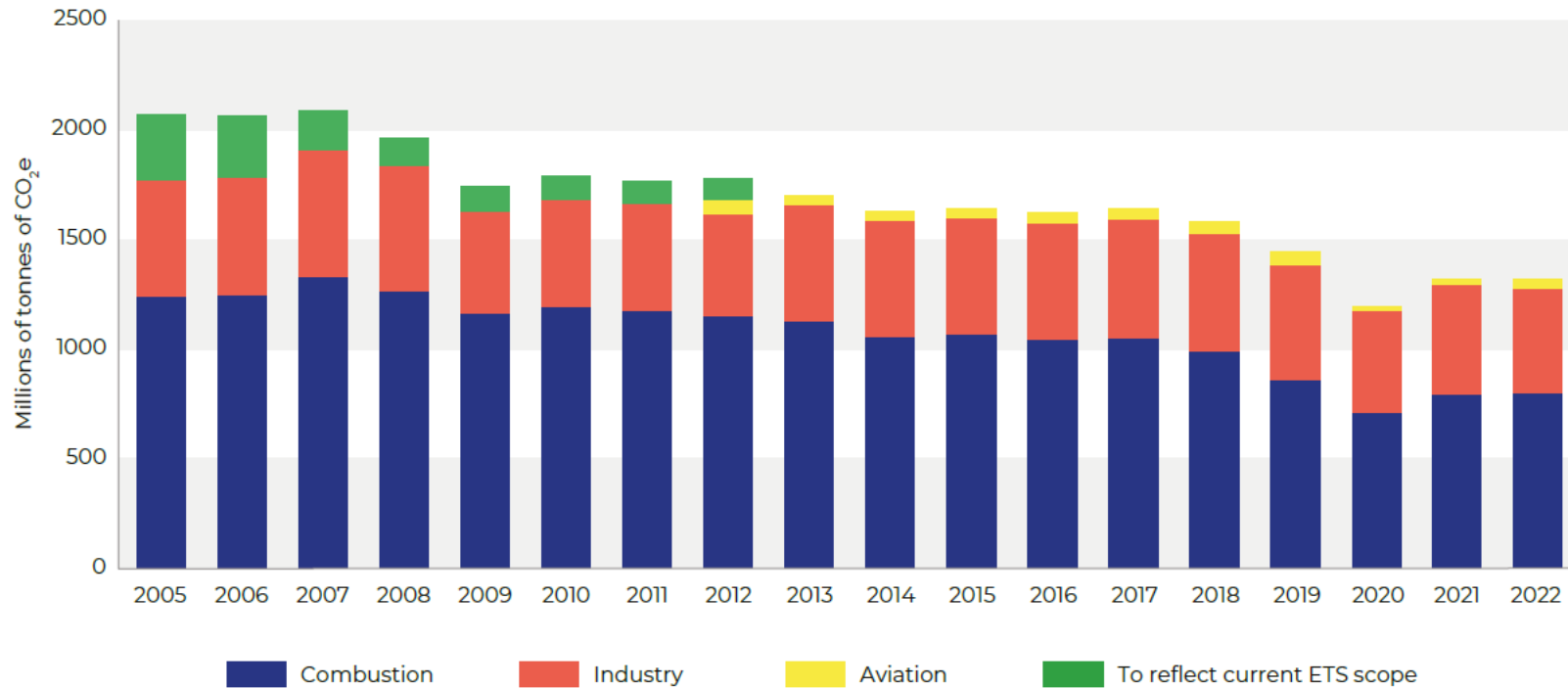
What is the EU ETS? (II/II)

- Launched in 2005, the EU ETS is the oldest emission trading scheme in the world
- The EU ETS covers roughly **10.000 industrial plants and power stations**, as well as approximately 390 aircraft operators across the 27 EU members, Iceland, Norway and Liechtenstein
- In **2013** the EU ETS covered approximately **half** of all EU's GHG emissions. This share **dropped to 36% in 2022** because EU ETS sectors are reducing their emissions faster than the rest of the economy

Portion of EU ETS emissions vs total EU emissions over time



Sectoral emissions under the EU ETS



The phases of the EU ETS

- **Phase I (2005 – 2007):**
 - Pilot phase – testing and understanding the system
 - Nearly all allowances were handed out free
 - Individual national plans and targets
- **Phase II (2008 – 2012):**
 - Around 90% of the allowances were still handed out for free
 - First auctions were held
 - Individual national plans and targets
- **Phase III (2013 – 2020):**
 - Overall European national plans and targets
 - No more free allowances for the electricity sectors (except poor countries)
- **Phase IV (since 2021):**
 - Free allocation still for 90% of industrial emissions
 - Still ongoing and fast revisions to meet the 2040 targets (emission reduction 90% - 95%)
 - Integration of maritime transport
 - Starting in 2026 also long-haul flights should be integrated (aviation sector was integrated in 2012, but only European domestic flights)

ETS2 starting in 2027
- Integrating Buildings and Road transport emissions

Cap and trade

- The EU ETS is a 'cap and trade' system
- It sets an overall limit (= cap) on the volume of GHG emissions that the covered sectors can collectively emit
- The reduction targets are achieved through the gradual lowering of this cap
- The cap is divided into pollution permits known as EU Allowances (EUAs)
- One EUA = 1 metric tone of CO₂
- In 2022 the cap was approx. 1,52 billion EUAs
- **installations covered by the EU ETS are obliged to hand over EUAs equal to their emissions of the previous year**

3 ways to acquire EUAs

- Auctions – organised by the European Energy Exchange
- Receive them for free – sectors deemed to be at risk of carbon leakage, the aviation sector and electricity producers in some lower-income member states receive free allocations
- Buy them on the open market – several trading platforms

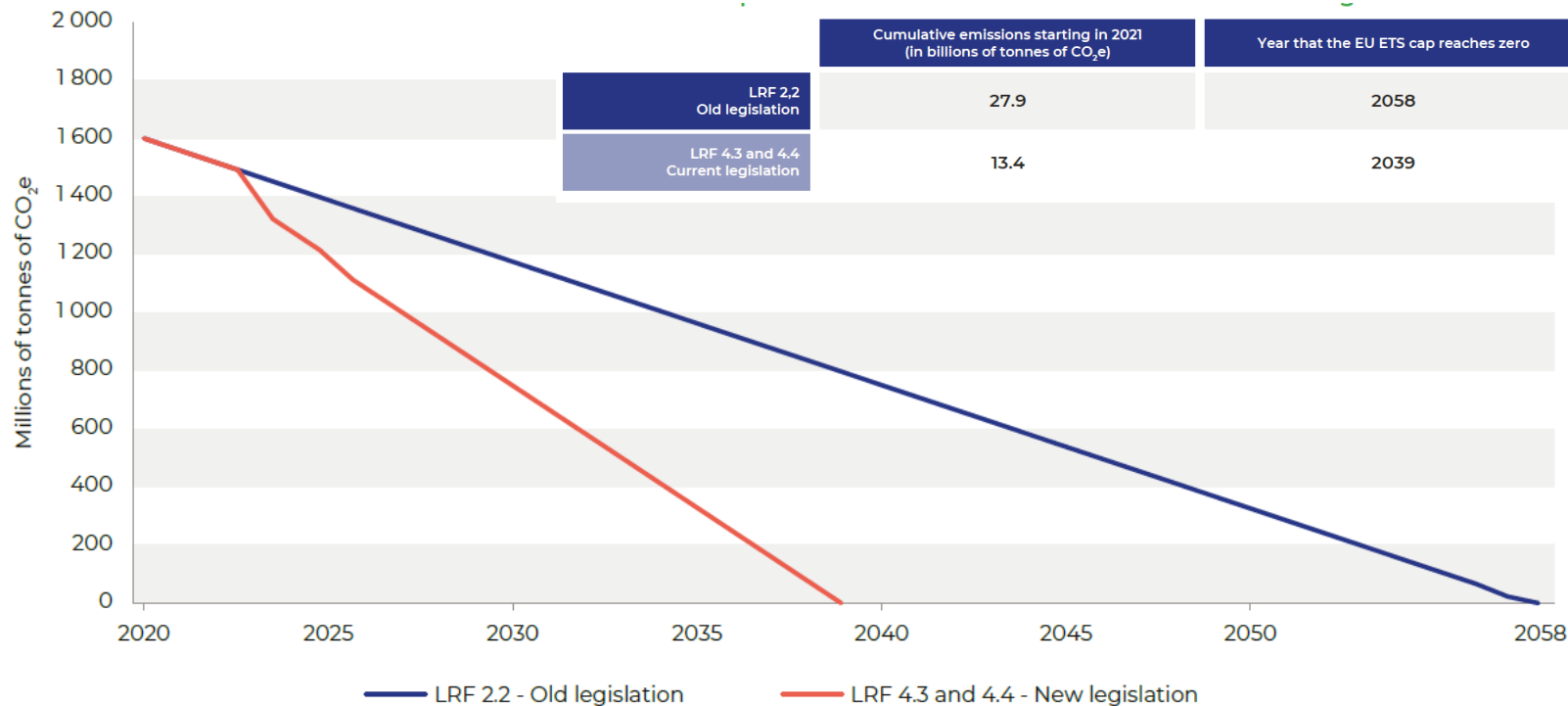
Trading allowances

- Companies can buy and sell allowances on the open market
- If a company has succeeded in lowering its emissions particularly fast, it can sell its spare allowances to another company or save them for future needs
- **Aim of the trading element: enable cost-efficient decarbonisation, meaning that the cheapest emission reductions take place first**

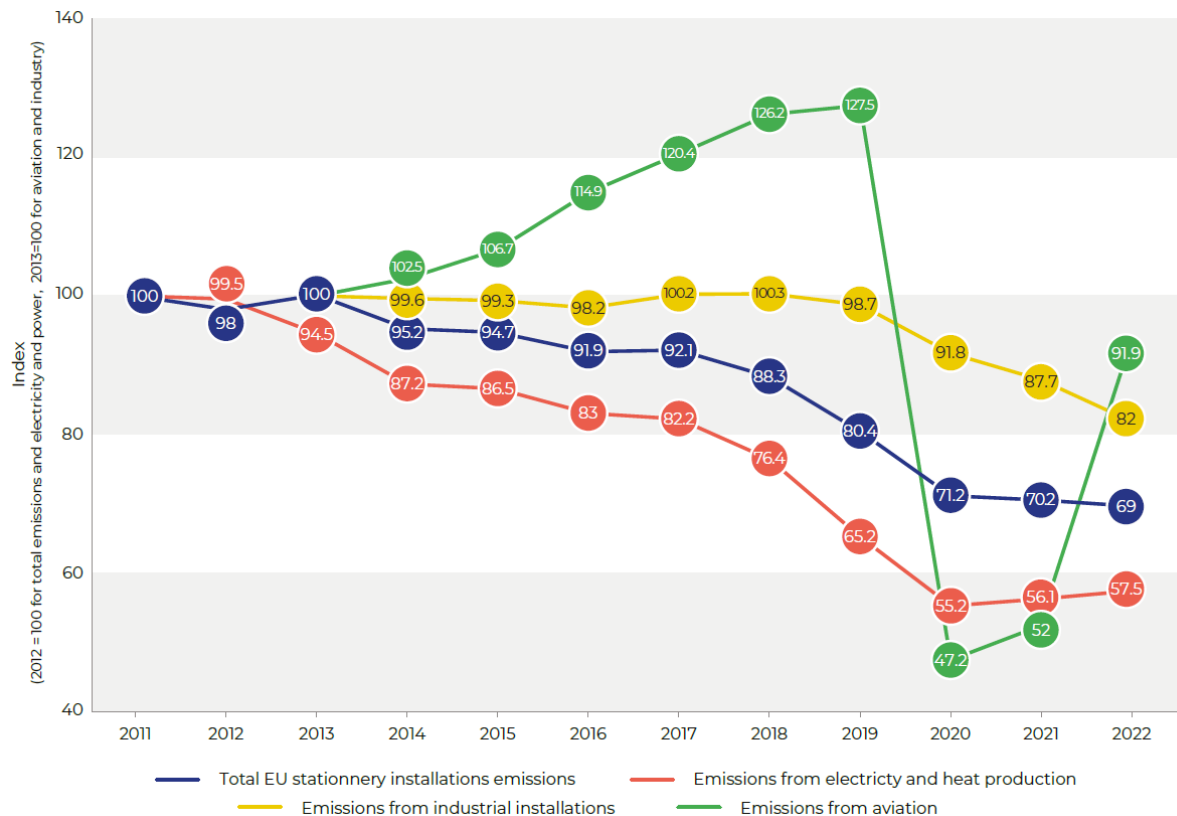
Lower Ceiling

- The cap decreases by a fixed amount each year, which is calculated using the so-called linear reduction factor (LRF)
- The LRF is expressed as a percentage of the 2013 total cap
- For 2013 to 2020, the LRF was set at 1,74% (about 34 million EUAs a year)
- Starting in 2021: 2,2% (about 43 million EUAs a year)

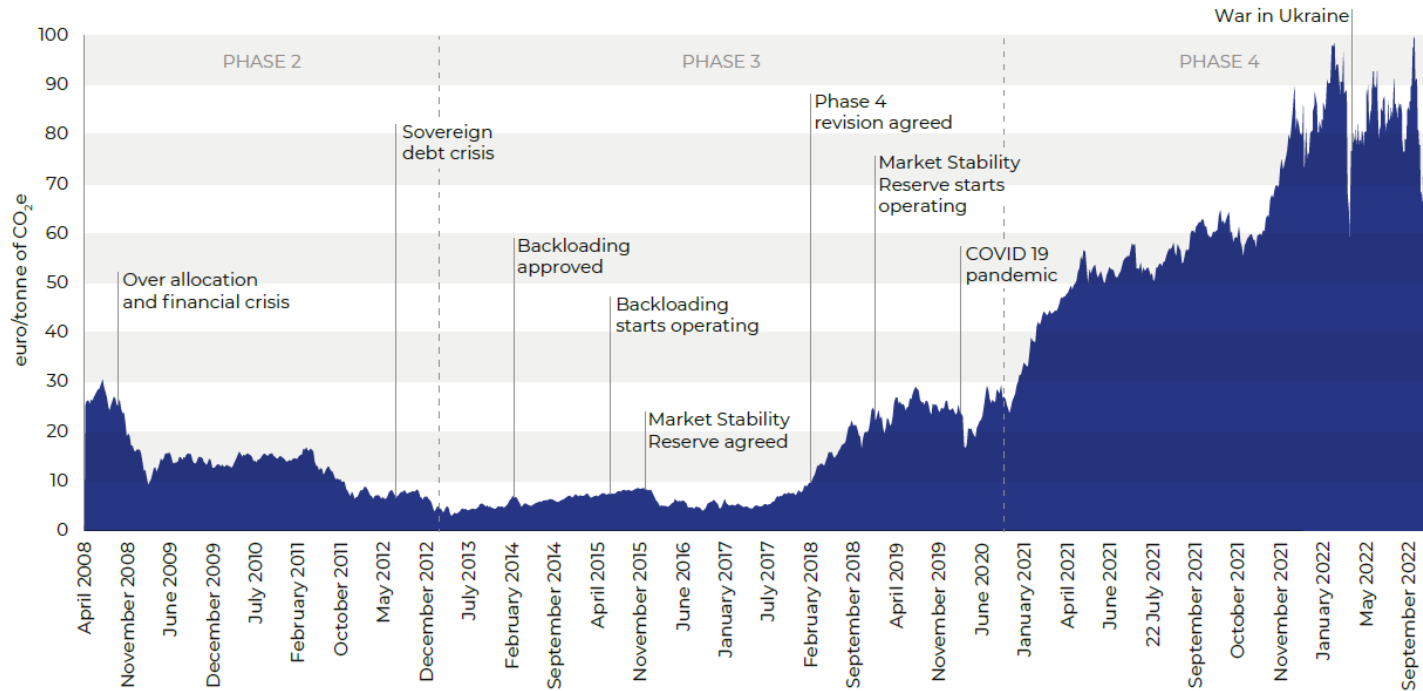
The impact of the LRF on the EU ETS cap trajectory



Sectoral Emission Trends



EU carbon prices since the start of Phase 2



The role of the regulators



Thank You

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