



The EU Carbon Market

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KPMG Tanácsadó Kft.



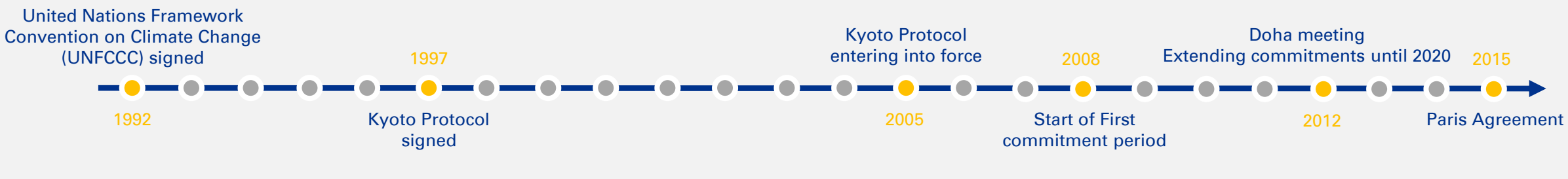


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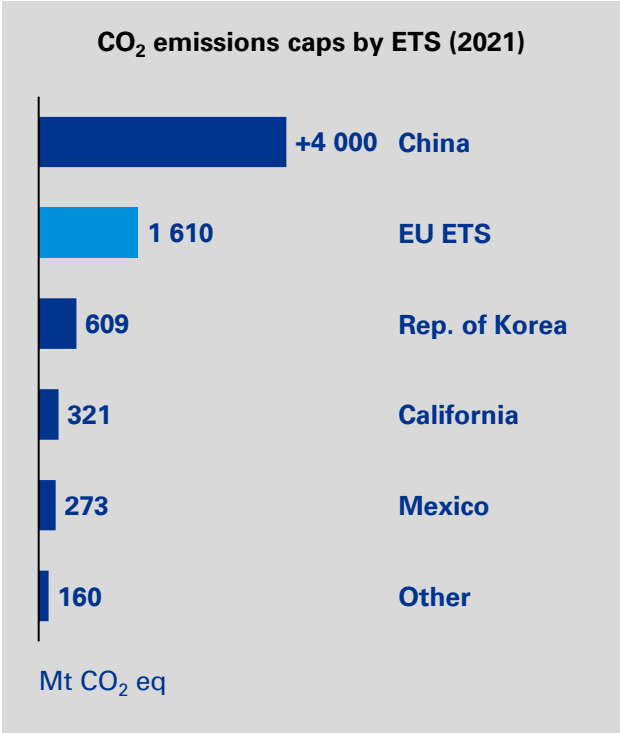
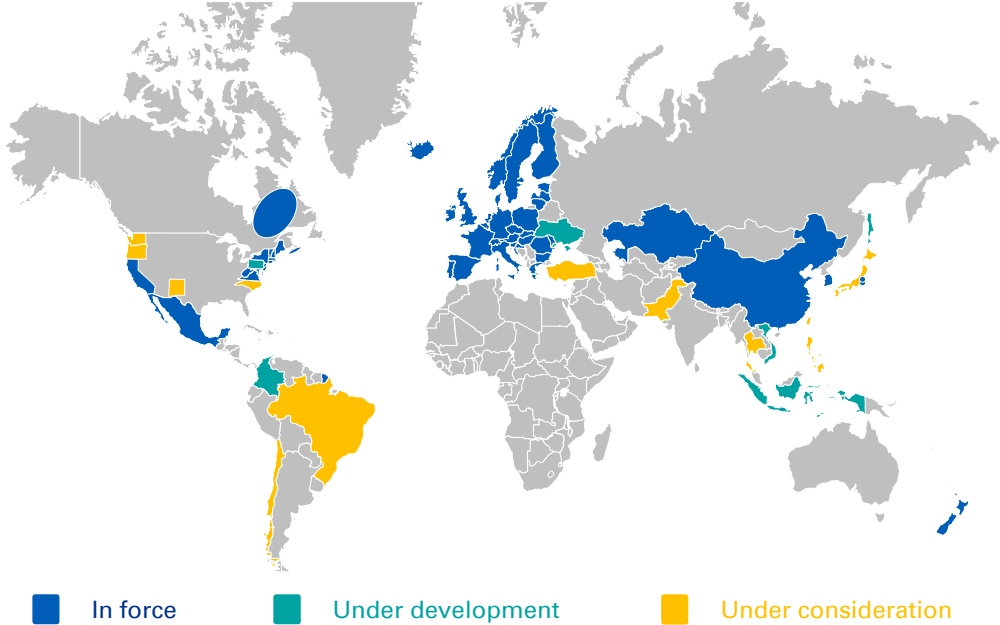
Emission Trading Systems worldwide



Cap & Trade system

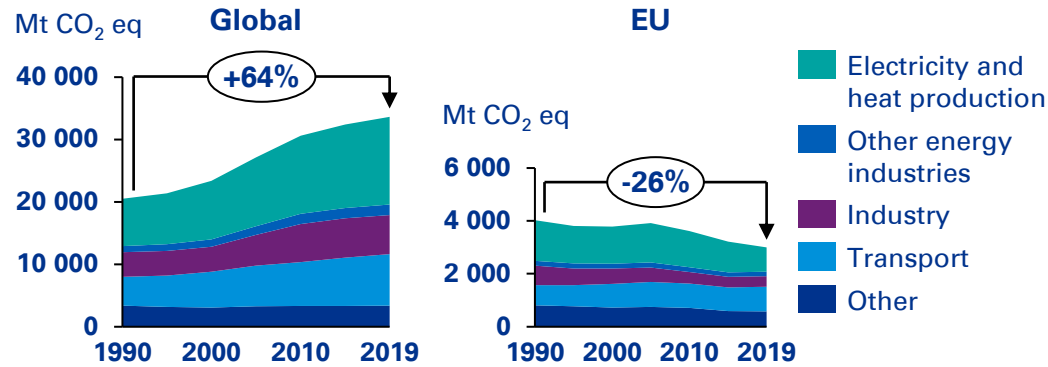


Emission Trading Systems

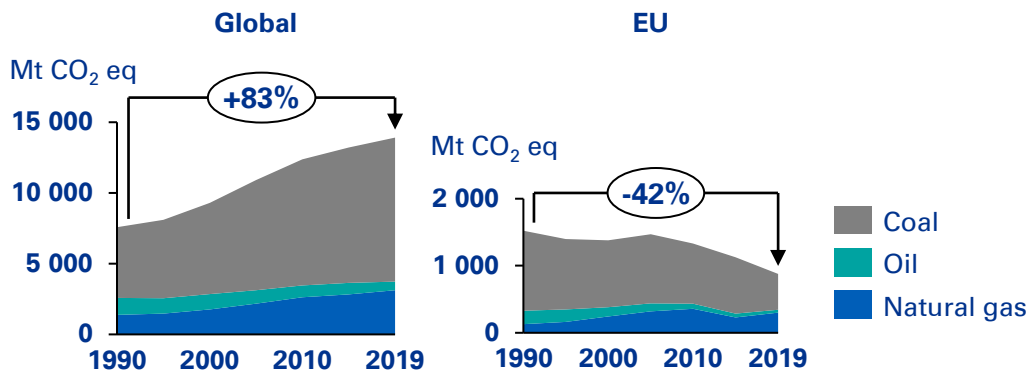


EU ETS has a significant effect on phasing out coal

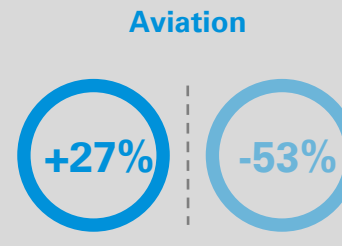
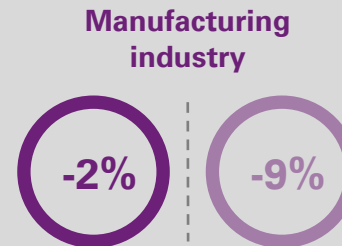
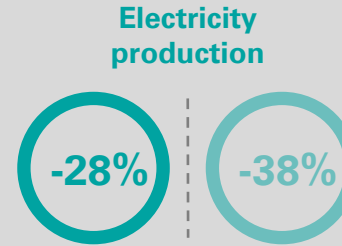
CO₂ emissions by sector



CO₂ emissions from electricity and heat by energy source



EU ETS Phase 3 emission reduction



2013-2019 | 2013-2020

Covered sectors



Biggest emitter sectors



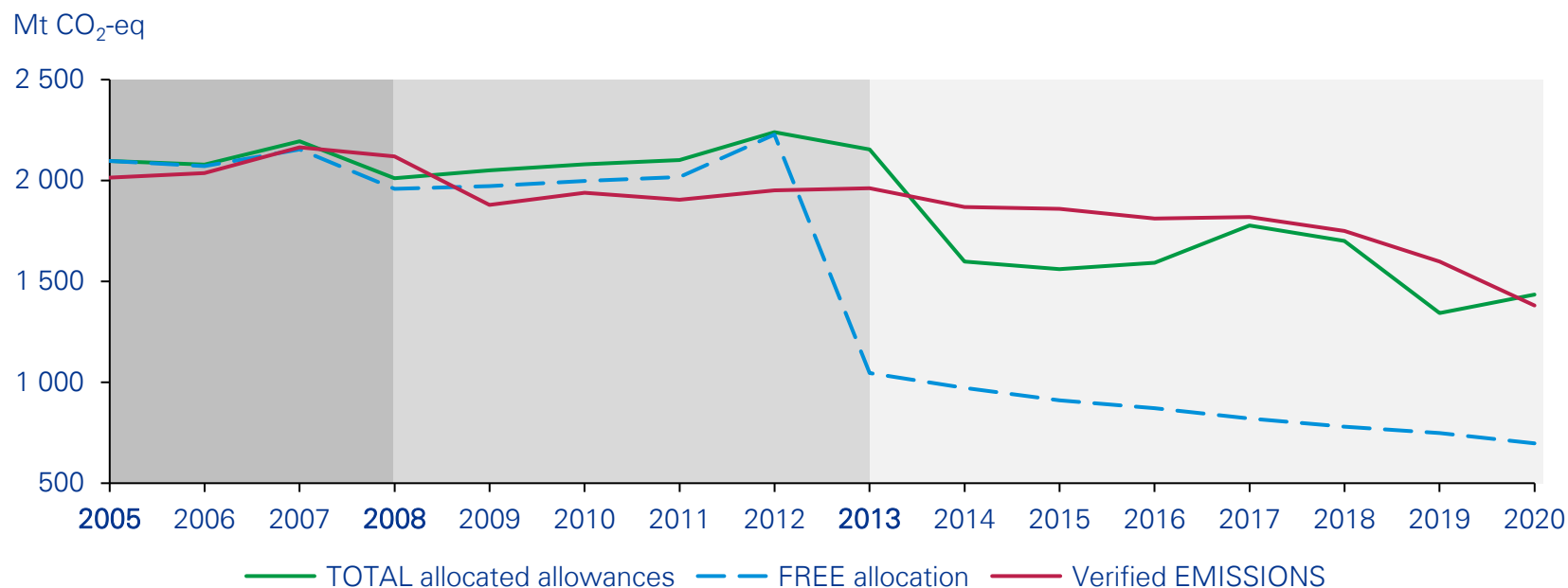
Covered GHGs



Sectors not covered by the EU ETS:

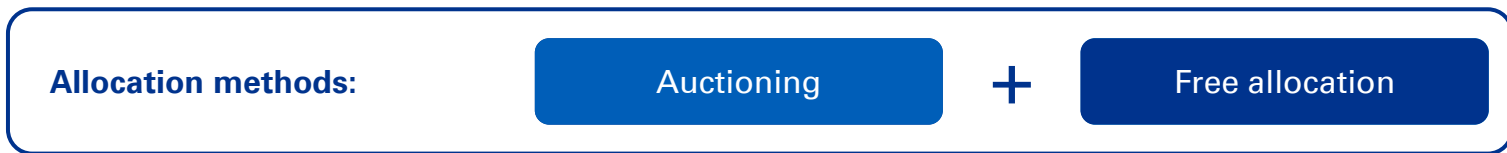
- Transport
- Agriculture
- Buildings

Electricity producers have to purchase most of their allowances



Allowance allocation:

- EU level allocation
- National auction shares are based on 2005-2007 emissions



- Electricity production
 - Obligated to purchase all required allowances
 - EXCEPT free allocation for energy sector modernisation
- Energy intensive industries
 - Free allocations are based on 54 product benchmark values
 - Decreasing number of freely allocated allowances
- Aviation
 - 82% of allowances are granted for free to aircraft operators
- Carbon leakage
 - 100% free allocation to installations with risk of carbon leakage

Allowance allocation is shifting from free allocations towards auctioning

Allowance procurement

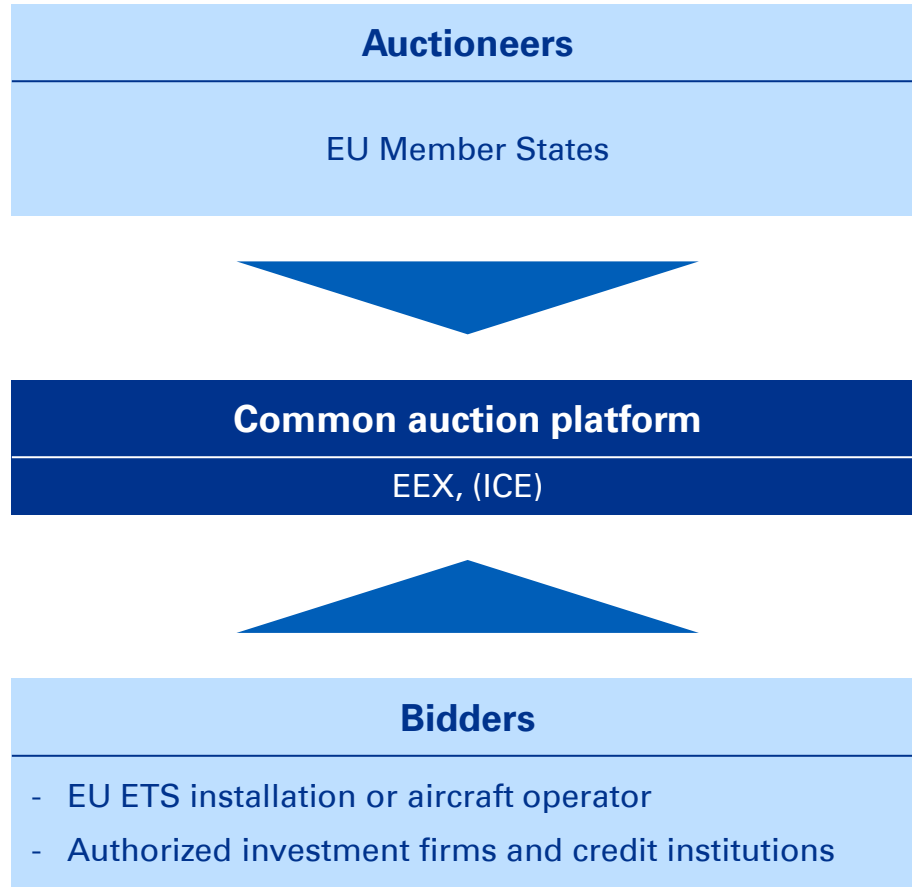
I. Primary market

- from Member States through auctions

II. Secondary market

- from other operators
- from intermediaries: banks, brokers, etc.

Primary market



Use of auctioning revenues

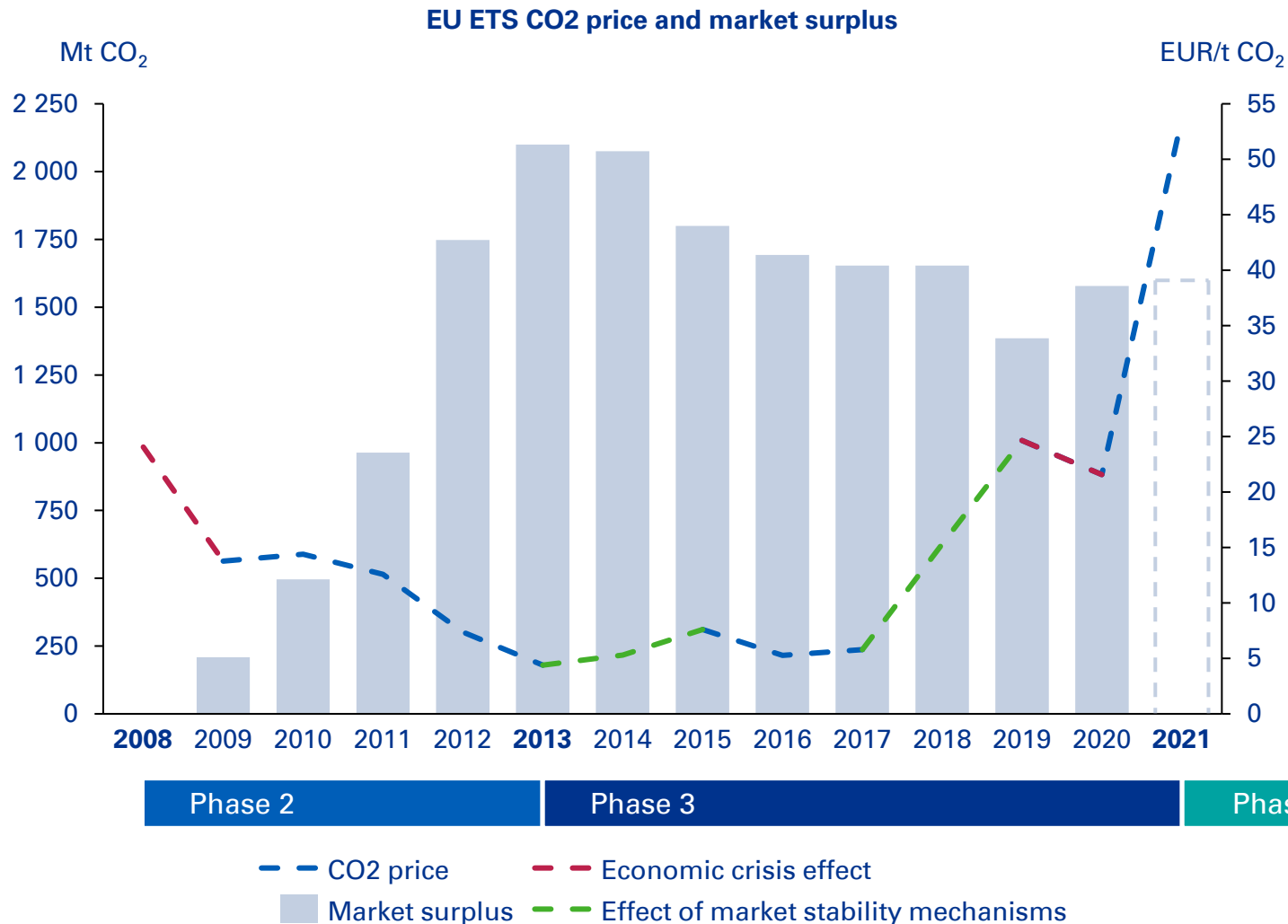
- At least 50 % of the revenues generated from the auctioning should be used for:
 - Developing renewable energies
 - Environmentally safe capture and geological storage of CO₂ (especially from solid fossil fuel power stations)
 - Encourage a shift to low-emission and public forms of transport
 - Finance R&D in energy efficiency and clean technologies
 - Improve energy efficiency, district heating systems and insulation
 - etc.



The EU ETS went through several developments and extensions

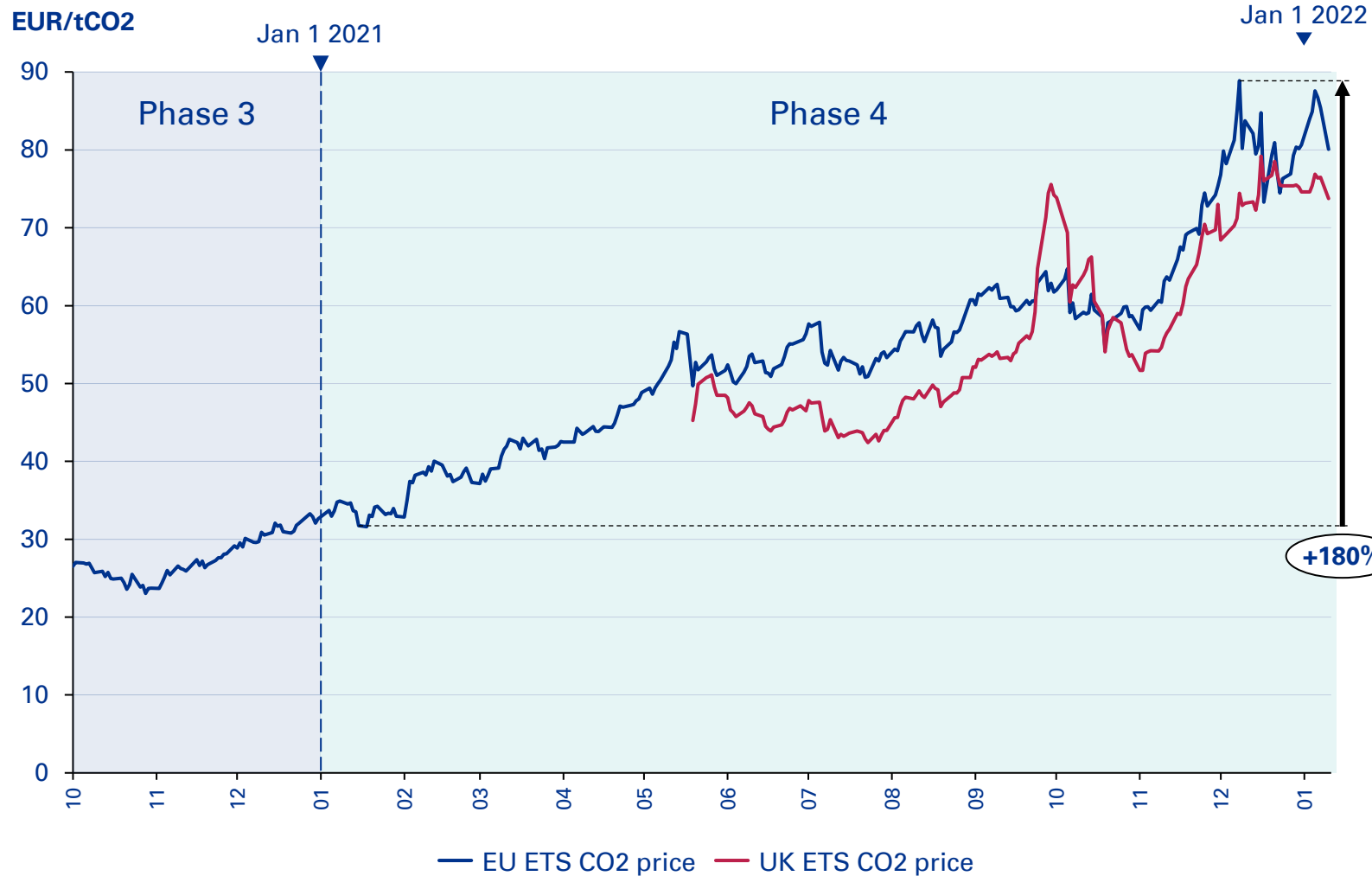
	Phase 1 2005 – 2007	Phase 2 2008 - 2012	Phase 3 2013 - 2020	Phase 4 2021 - 2030
Key aims	Pilot 'learning by doing' preparation for Phase 2	First commitment period of the Kyoto Protocol	Reformed ETS framework	Strengthening the EU ETS
Emission cap	National caps (,bottom-up' approach)	National caps	EU-wide cap ('top-down approach') Annual decline rate: 1,74%	EU-wide cap Annual decline rate: 2,2%
Allowance allocation	~100% free allocation	~96% free allocation	Default method: auctioning ~46% free allocation	Default method: auctioning Continuous decrease in free allocations
Countries involved	EU Member States	Extended with Iceland, Liechtenstein, Norway	Extended with new Member State, Croatia	Linked with Swiss ETS
Sectors covered	Power generators Energy-intensive industries	Extended with Aviation (from 2012)	Extended with aluminium production and petrochemicals production	Same as in Phase 3
GHGs covered	Carbon-dioxide (CO ₂)	Extended with Nitrous oxide (N ₂ O)	Extended with Perfluorocarbons (PFC)	Same as in Phase 3

CO₂ price is effected by several internal and external factors



- Market price is **determined mainly by the balance of supply and demand**
- Economic crisis situations have a **decreasing effect** on the market price
- Low CO₂ price has a low incentive on reducing emissions
- Market stability mechanisms were **aimed at increasing CO₂ price**:
 - Back-loading: 2013-2015
 - Market Stability Reserve (MSR): from 2019
- Announcing **'Fit for 55'** increased market price to a level expected initially for 2030

Ambitious climate targets have a significant impact on the market



Changes since 1 Jan 2021

- Start of Phase 4
- 2,2% annual cap reduction
- UK's withdrawal from the EU ETS
- Announcing the Fit for 55 package
- Increasing number of speculative trades

Expected future market trends

- Developing Fit for 55 binding targets
- Increasing CO₂ price
- Continuous allowance withdrawal due to the MSR mechanism
- Extension of EU ETS sectoral coverage
- Introducing the CBAM



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