

Climate Policy in the EU

The EU Emission Trading System

Claudia Kettner

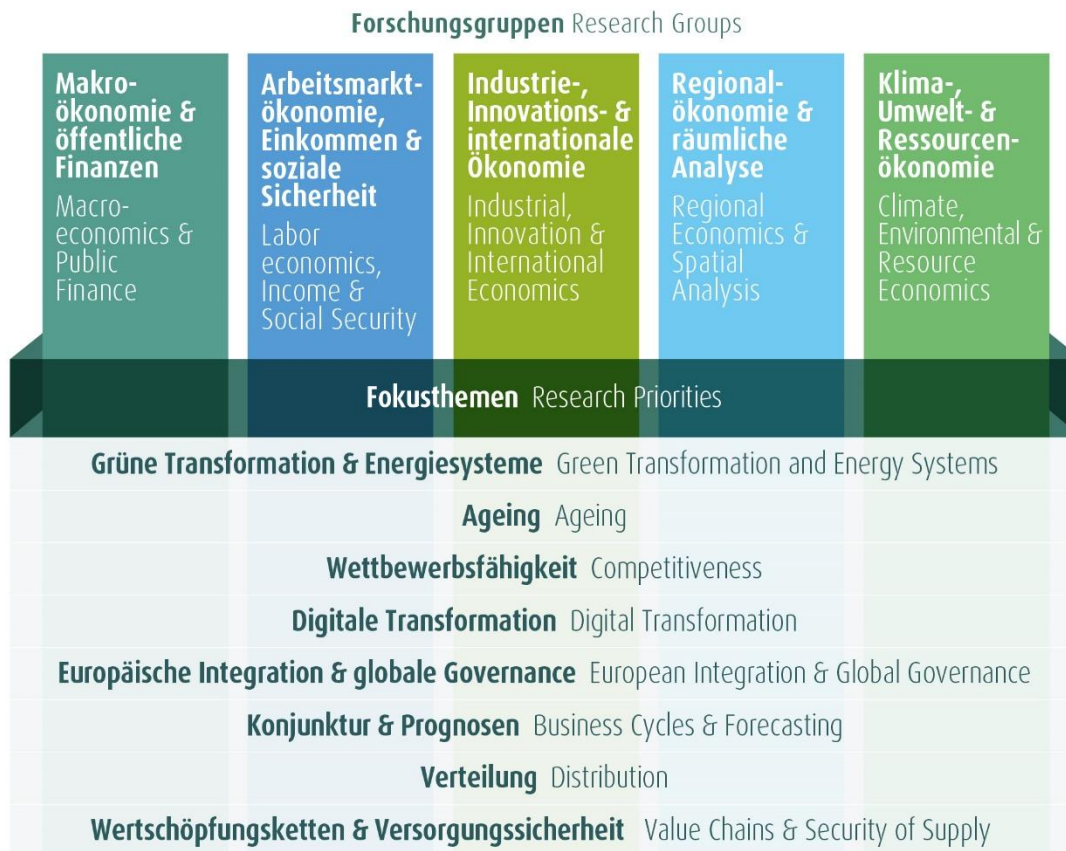
Austrian Institute of Economic Research

Österreichisches Institut für Wirtschaftsforschung (WIFO)

- WIFO is an independent non-profit research institute
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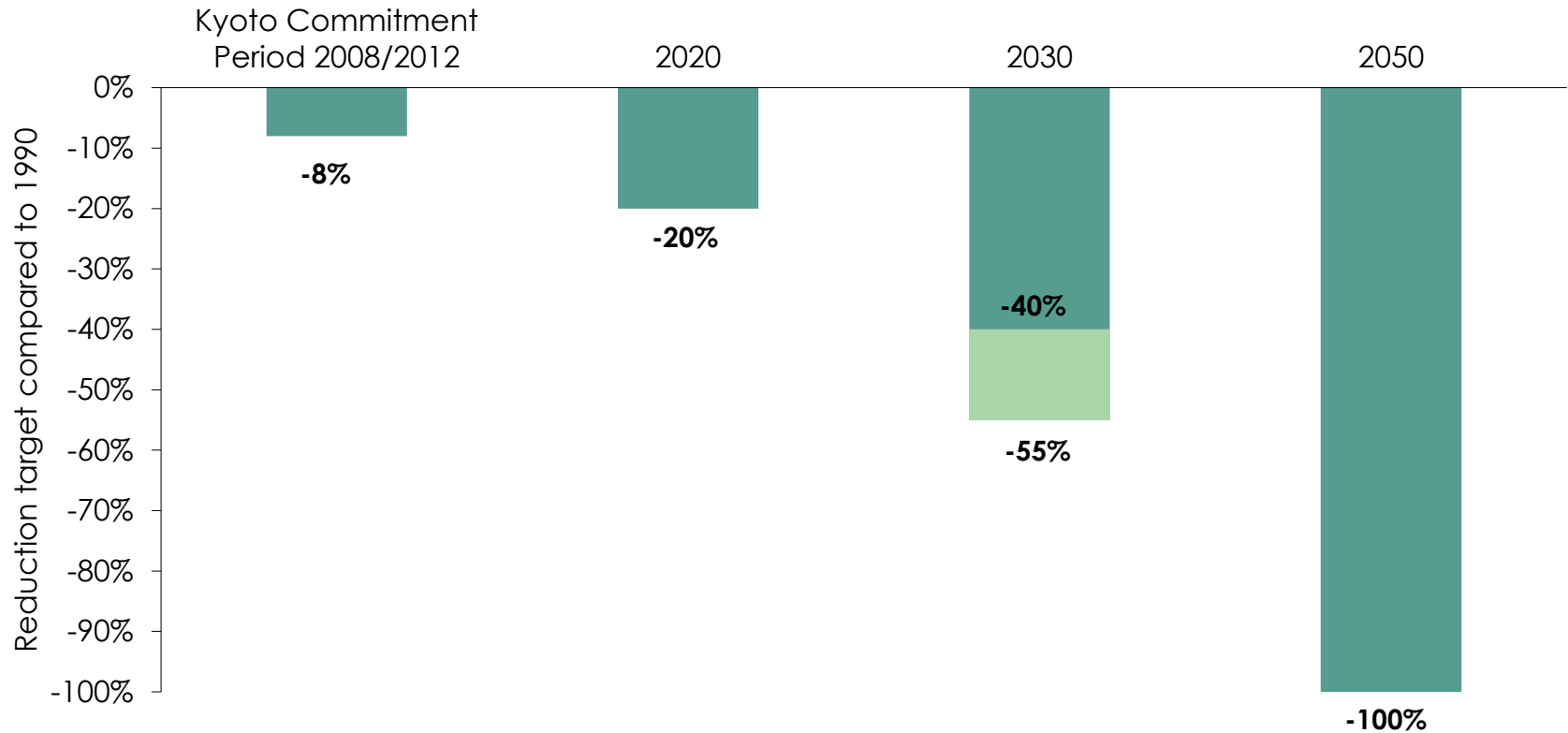
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Outline

- Energy and Climate Policy Targets of the EU and EU Climate Policy-making
 - Overview of the "Fit-for-55" Package
 - Specific policies: Emissions Trading (incl. Carbon Border Adjustment Mechanism)

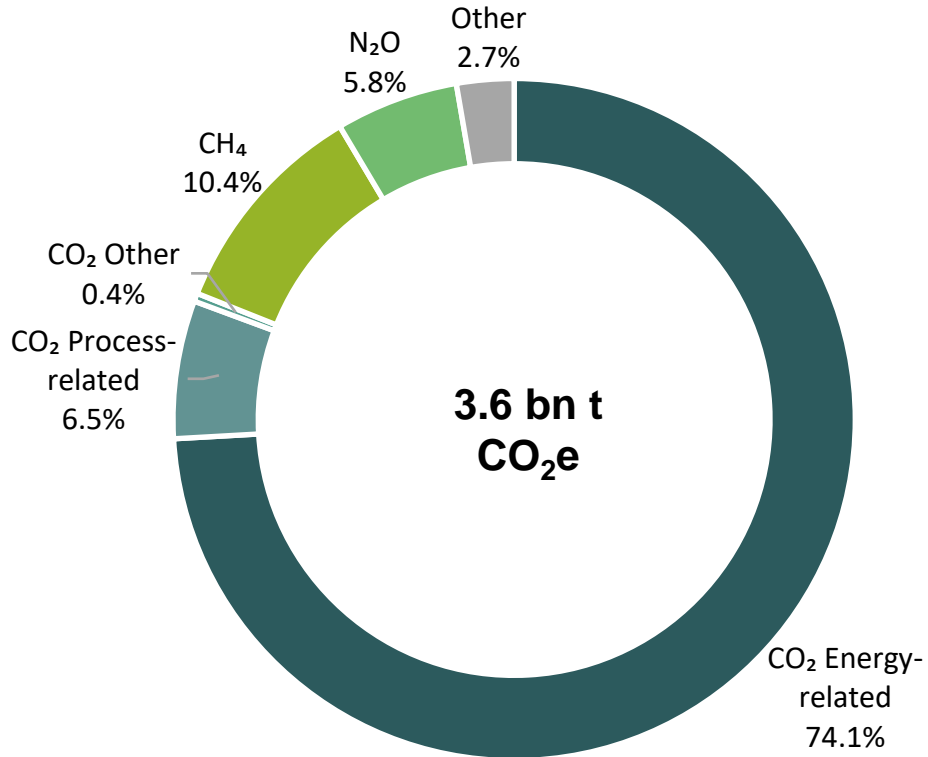
Emission Reduction Targets of the EU



The EU's Approach to Climate and Energy Policy

- Climate and energy policy are highly interrelated
- Since 2008/2009 the EU, the EU is developing "climate and energy" packages dealing simultaneously with the challenges of energy and climate policy
 - "20 20 by 2020 - Europe's climate change opportunity"
 - European Commission (2008). 20 20 by 2020. Europe's climate change opportunity. COM(2008) 30 final. <https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:52008DC0030&from=EN>
 - Energy Union Package
 - European Commission (2015). A Framework Strategy for a Resilient Energy Union with a Forward-Looking Climate Change Policy. COM(2015) 80 final. https://eur-lex.europa.eu/resource.html?uri=cellar:1bd46c90-bdd4-11e4-bbe1-01aa75ed71a1.0001.03/DOC_1&format=PDF
 - "Fit for 55" Proposal
 - European Commission (2021). 'Fit for 55': Delivering the EU's 2030 Climate Target on the way to climate neutrality. COM(2021) 550 final. <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52021DC0550>

Greenhousegas Emissions in the EU 2019



The "Fit for 55" Package (I)

- Set of inter-connected proposals **to achieve the emission reduction stipulated in the European Climate Law (Regulation (EU) 2021/1119)**
- Proposed by the EC in July 2021
- Overarching goal:
Ensuring a fair, competitive and green transition by 2030 and beyond
- Mix of revisions of existing legislative documents and new initiatives

The "Fit for 55" Package (II)

Pricing

- Revision of the EU ETS Directive
 - Stronger EU ETS including maritime transport
 - New, separate ETS (ETS2) for road transport and buildings
- Regulation establishing a Carbon Border Adjustment Mechanism
- Updated Energy Taxation Directive

Targets

- Updated Effort Sharing Regulation
- Updated Land Use Land Use Change and Forestry Regulation
- Updated Renewable Energy Directive
- Updated Energy Efficiency Directive

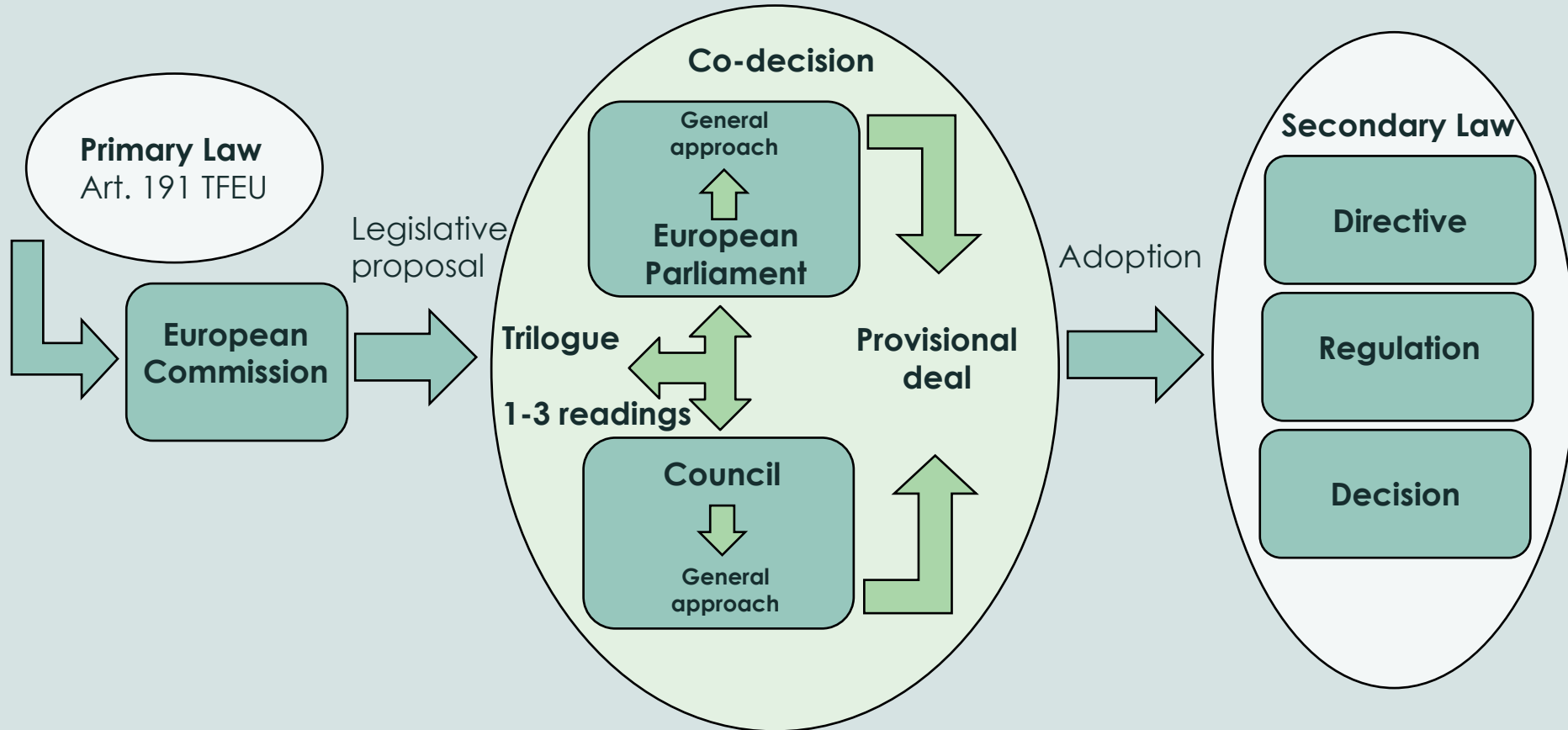
Rules

- Revision of the regulation on CO₂ performance for cars & vans
- Regulation on new infrastructure for alternative fuels
- Regulation on more sustainable aviation fuels (ReFuelEU)
- Regulation on cleaner maritime fuels (FuelEU)

Support measures

- Using revenues and regulations to promote innovation, build solidarity and mitigate impacts for the vulnerable, notably through the new Social Climate Fund and enhanced Modernisation and Innovation Funds.

EU (Environmental) Law Making



Types of legislation

■ Directives

- A "directive" sets out a goal that all EU MS must achieve
- It is up to the individual MS to devise their own laws to reach these goals
 - MS must adopt laws, regulations and procedures to give effect to the directive
- Directives are most frequently used in EU environmental policy-making

■ Regulations

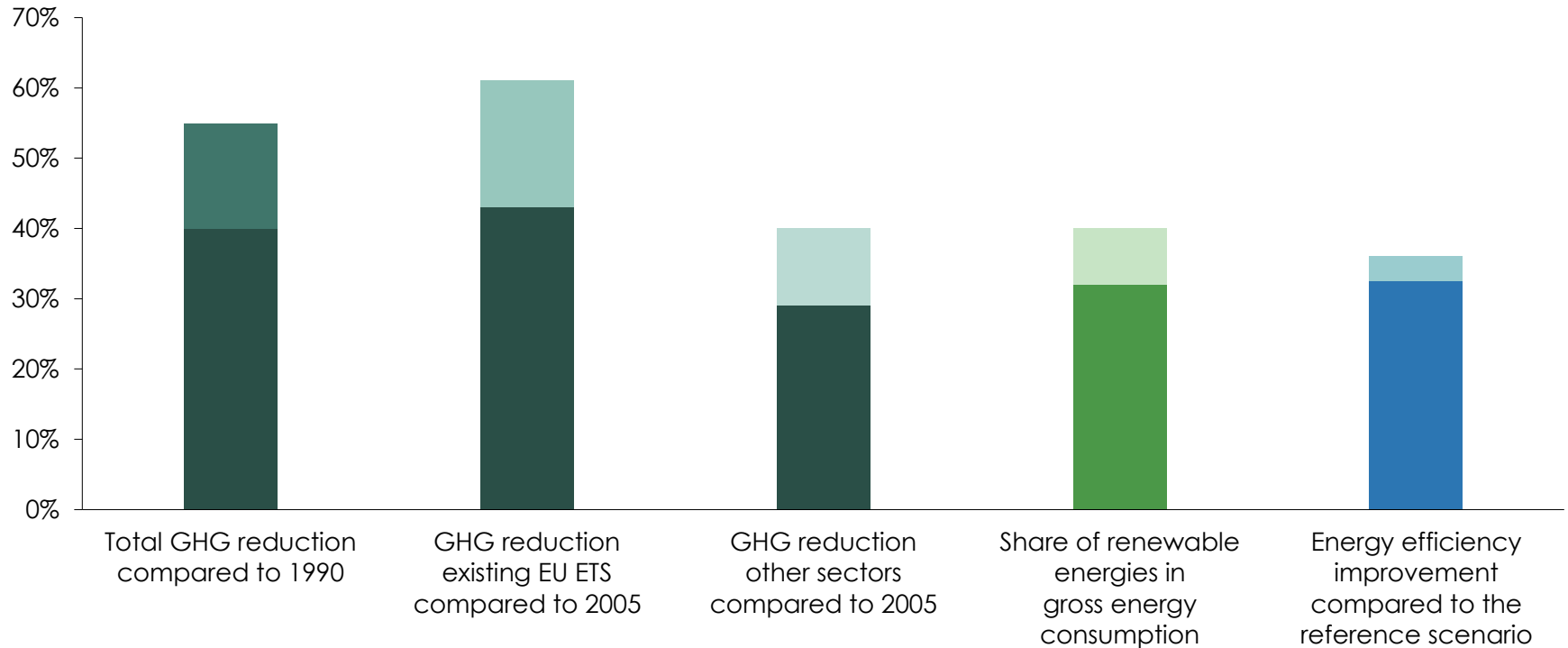
- A "regulation" is a binding legislative act
- It must be applied in its entirety across the EU – used when a unified system is needed
- MS must repeal conflicting national provisions

■ Decisions

- A "decision" is binding on those to whom it is addressed and is directly applicable
- It is focused in scope and application – specifies detailed requirements

2030 Targets

Current Legislation vs. "Fit for 55" Package



Source: European Commission (2020,2021).

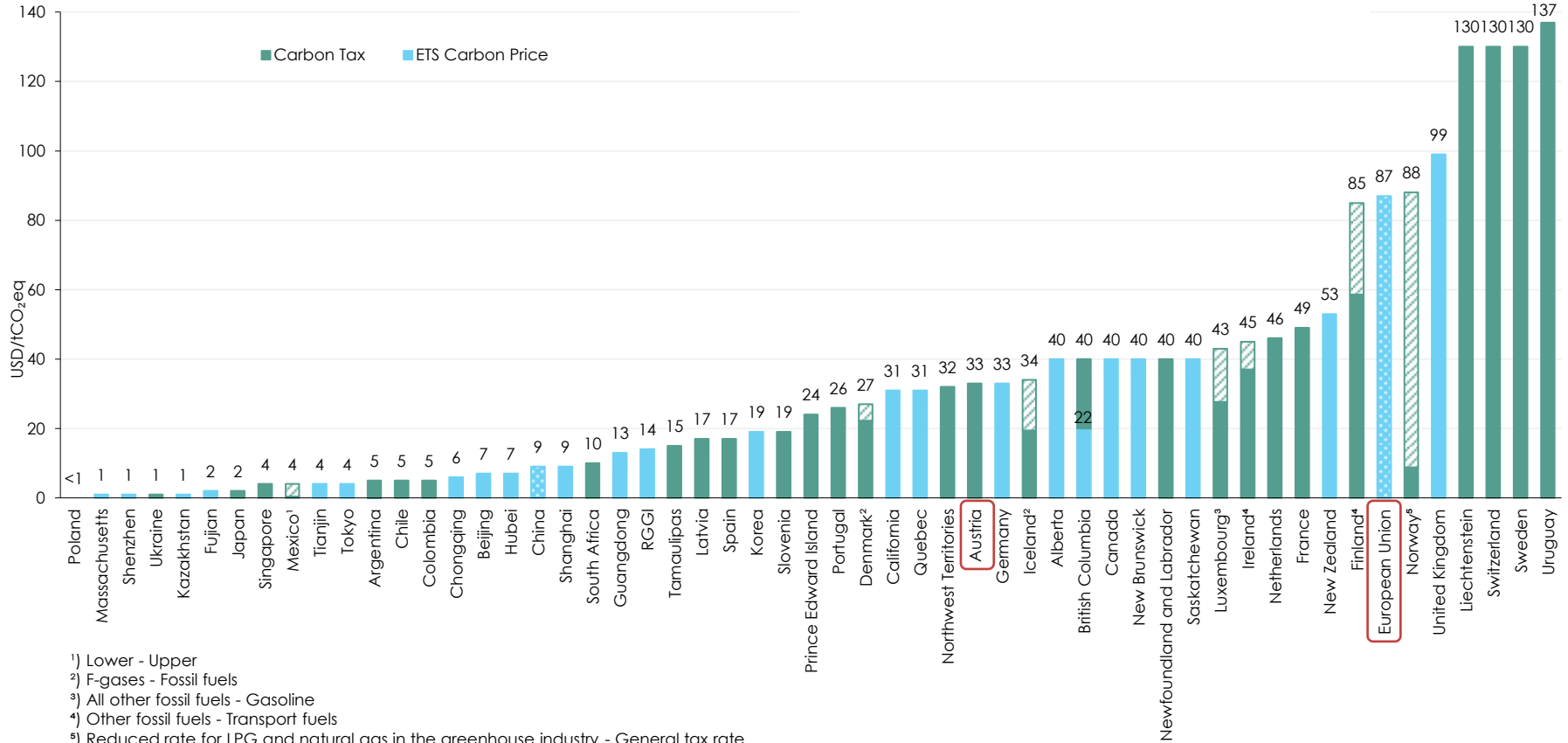
The "Fit for 55" Package

Status of Implementation

Pricing	Targets	Rules
<ul style="list-style-type: none">• Revision of the EU ETS Directive<ul style="list-style-type: none">• Stronger EU ETS including maritime transport• New, separate ETS (ETS2) for road transport and buildings• Regulation establishing a Carbon Border Adjustment Mechanism• Updated Energy Taxation Directive	<ul style="list-style-type: none">• Updated Effort Sharing Regulation• Updated Land Use Land Use Change and Forestry Regulation• Updated Renewable Energy Directive• Updated Energy Efficiency Directive	<ul style="list-style-type: none">• Revision of the regulation on CO₂ performance for cars & vans• Regulation on new infrastructure for alternative fuels• Regulation on more sustainable aviation fuels (ReFuelEU)• Regulation on cleaner maritime fuels (FuelEU)
Support measures		
<ul style="list-style-type: none">• Using revenues and regulations to promote innovation, build solidarity and mitigate impacts for the vulnerable, notably through the new Social Climate Fund and enhanced Modernisation and Innovation Funds.		

Source: Adapted from European Commission COM(2021) 550.

Pricing Carbon (Inter)National and Regional Initiatives (II)



1) Lower - Upper

2) F-gases - Fossil fuels

3) All other fossil fuels - Gasoline

4) Other fossil fuels - Transport fuels

5) Reduced rate for LPG and natural gas in the greenhouse industry - General tax rate

Source: Based on World Bank (2022).

The EU Emission Trading Scheme (EU ETS)

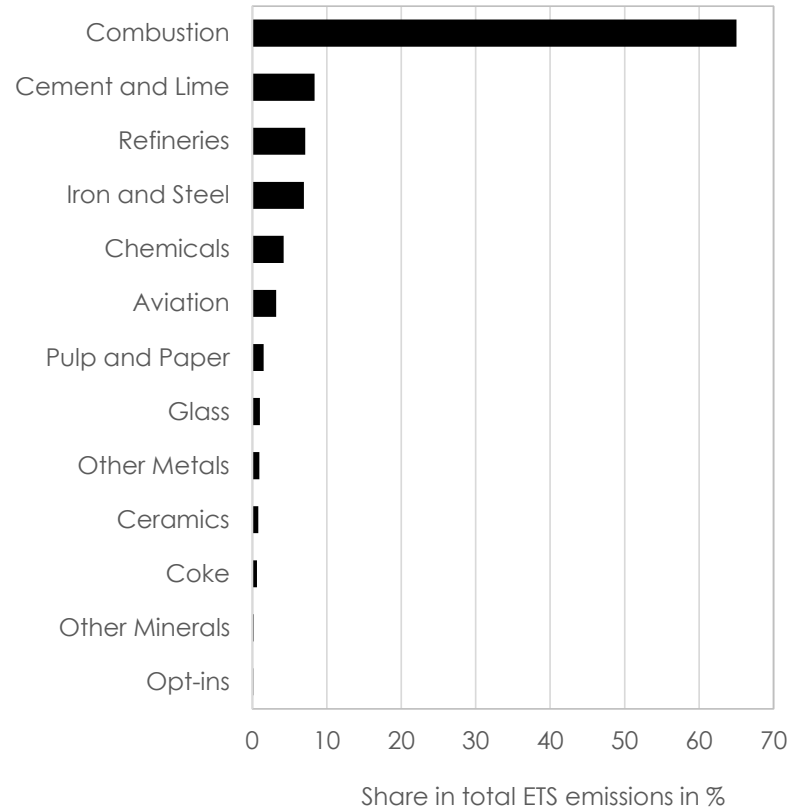
The EU Emission Trading Scheme

Key Facts

- The EU Emission Trading Scheme (EU ETS) is a key instrument in European climate policy
- Covers approximately 55% of EU GHG emissions
- Broad range of activities covered by the scheme
- Trading phases
 - Phase 1 (2005 - 2007) – "Pilot Phase"
 - Phase 2 (2008 - 2012) – Kyoto Commitment Period
 - Phase 3 (2013 - 2020)
 - Phase 4 (2021 - 2030)

Sectoral shares in ETS emissions

Average Phase 3



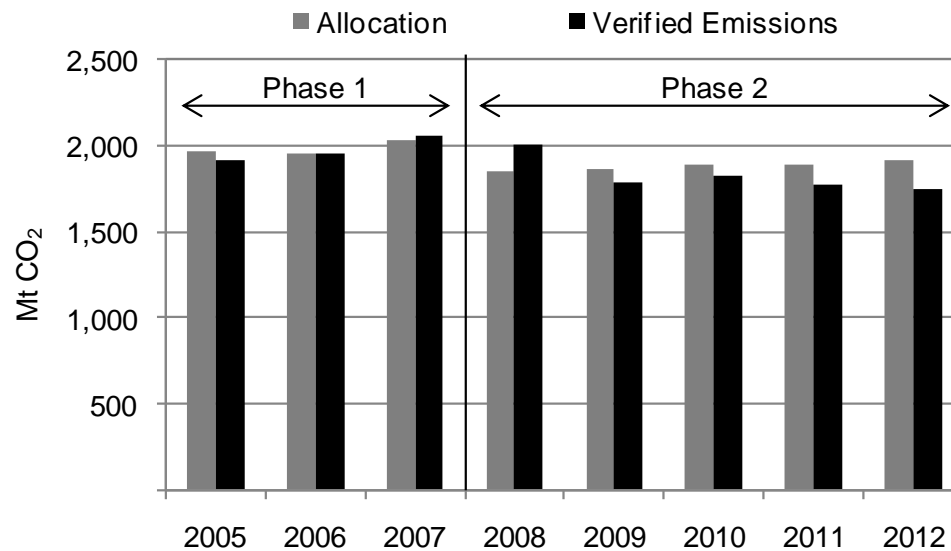
*Preliminary emission data

The EU Emission Trading Scheme

Design in Phases 1 & 2

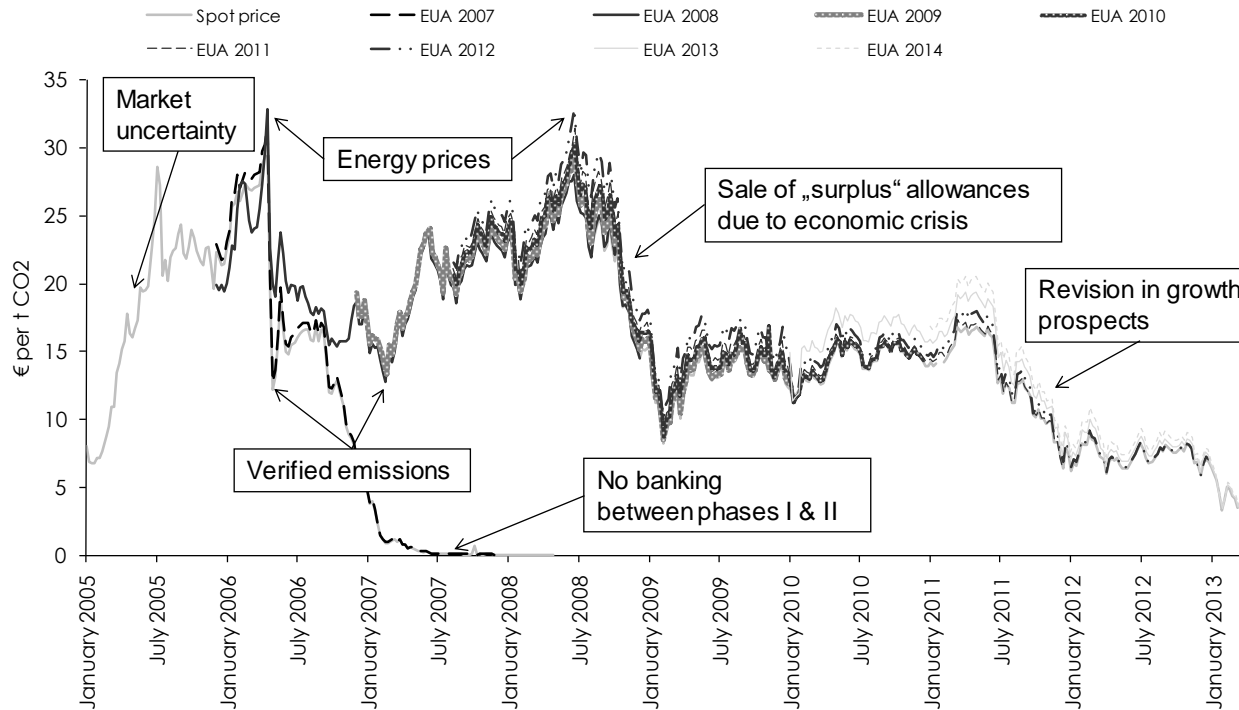
- Allocation Principles
 - Allocation of allowances at Member State level in National Allocation Plans (NAPs)
 - Grandfathering as allocation principle
- Allowance Transfers
 - No banking between Phase 1 and Phase 2
 - Banking of allowances between Phase 2 and Phase 3
 - Offsets could be used within the limits defined in the NAPs
- Penalty for non-compliance (100 € per t CO₂)

Allocation and Emissions Phases 1 - 2



Source: EUTL; own calculations.

Price Development Phases 1 - 2



The EU Emission Trading Scheme

Design in Phase 3

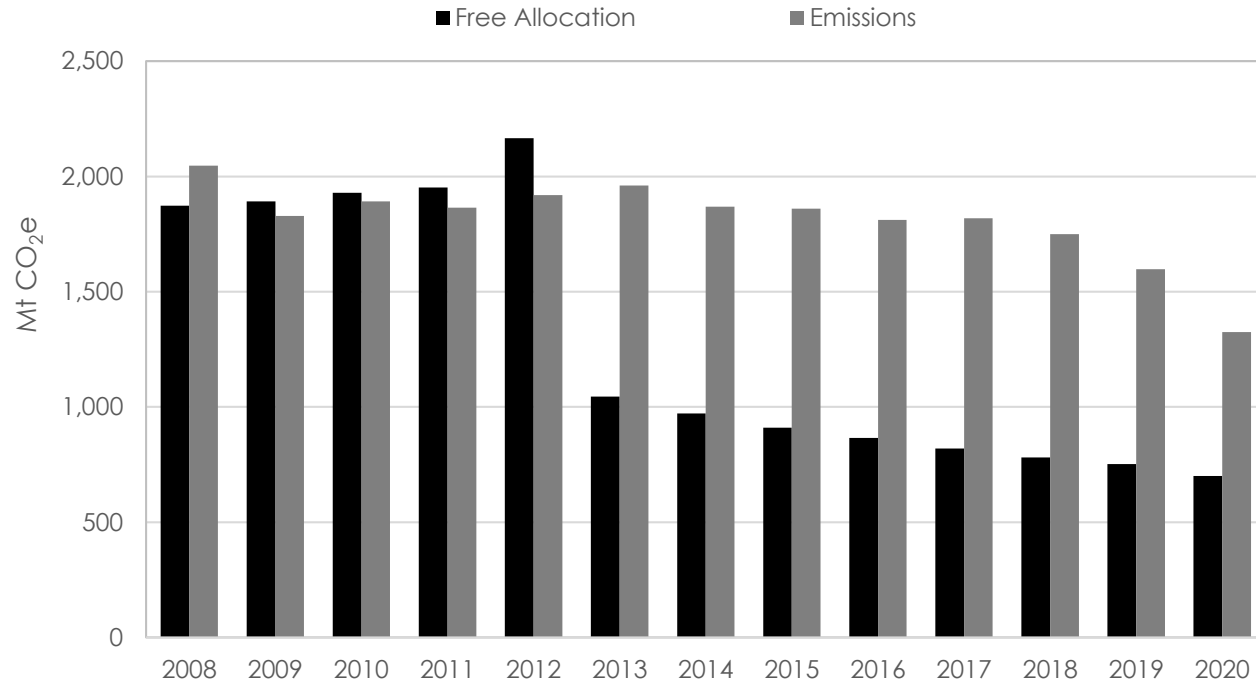
- Allocation Principles
 - EU-wide cap declining over Phase 3 (-1.74% p.a.)
 - EU-wide allocation process
 - Power sector: Full auctioning
 - 'Exposed' sectors: 100% free allocation
 - 'Normal' sectors: 80% free allocation in 2013 (30% in 2020)
 - Free allocation is based on EU-wide sectoral benchmarks
- Quantity management
 - Protection against excessive price increases
 - Backloading of allowances
 - Market stability reserve

Market Stability Reserve Decision (EU) 2015/1814

- In 2018, an MSR was established that started operation in 2019
- At the beginning, the following allowances were placed in the MSR
 - 900 million allowances that were deducted from auction volumes in 2014 - 2016 (initially the auctioning of these allowances should have only been shifted to the end of Phase 3, "backloading")
 - Allowances that were not allocated as planned (plant closures, unused quotas for new entrants)
- Generally
 - Each year, 12% of the total number of allowances in circulation (TNAC) shall be deducted from the auction volume and placed in the MSR (unless the number of allowances to be placed in the MSR would be less than 100 million)
 - If the TNAC is below 400 million, 100 million allowances are to be released from the MSR and added to the auction quantity
 - In case of 'excessive price fluctuations' (Art. 29a ETD)* 100 million allowances are released from the MSR
- Amendments (in the context of the reform of the EU ETS, Directive (EU) 2018/410)
 - Until 31 December 2023, the percentages of the TNAC to be put in the MSR is doubled.
 - Unless otherwise decided in a review, from 2023 allowances held in the reserve above the total number of allowances auctioned during the previous year shall no longer be valid

* If, for more than six consecutive months, the allowance price is more than three times the average price of allowances during the two preceding years on the European carbon market

Allocation and Emissions Phases 2 - 3

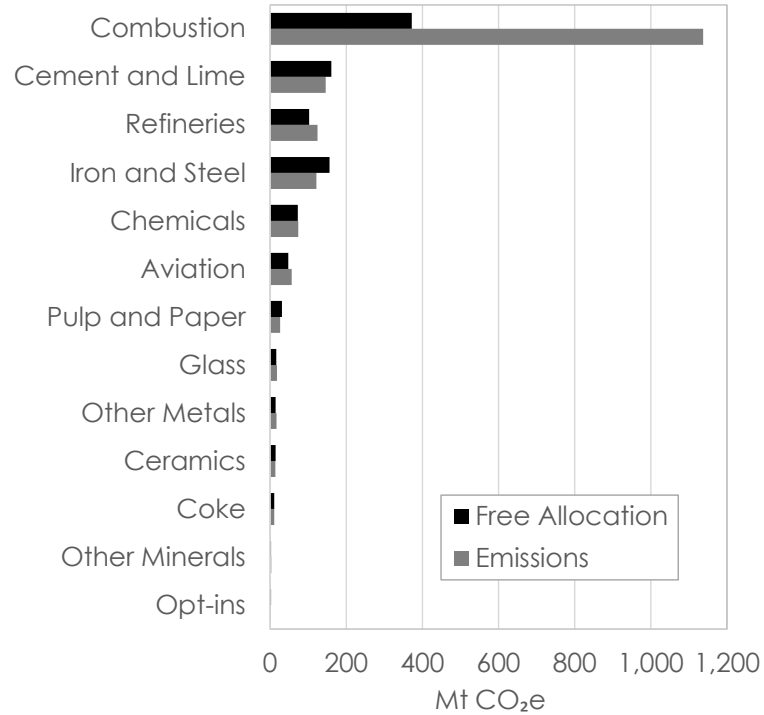


*Excluding aviation; preliminary emission data

Source: EC; own calculations.

Free Allocation and Emissions

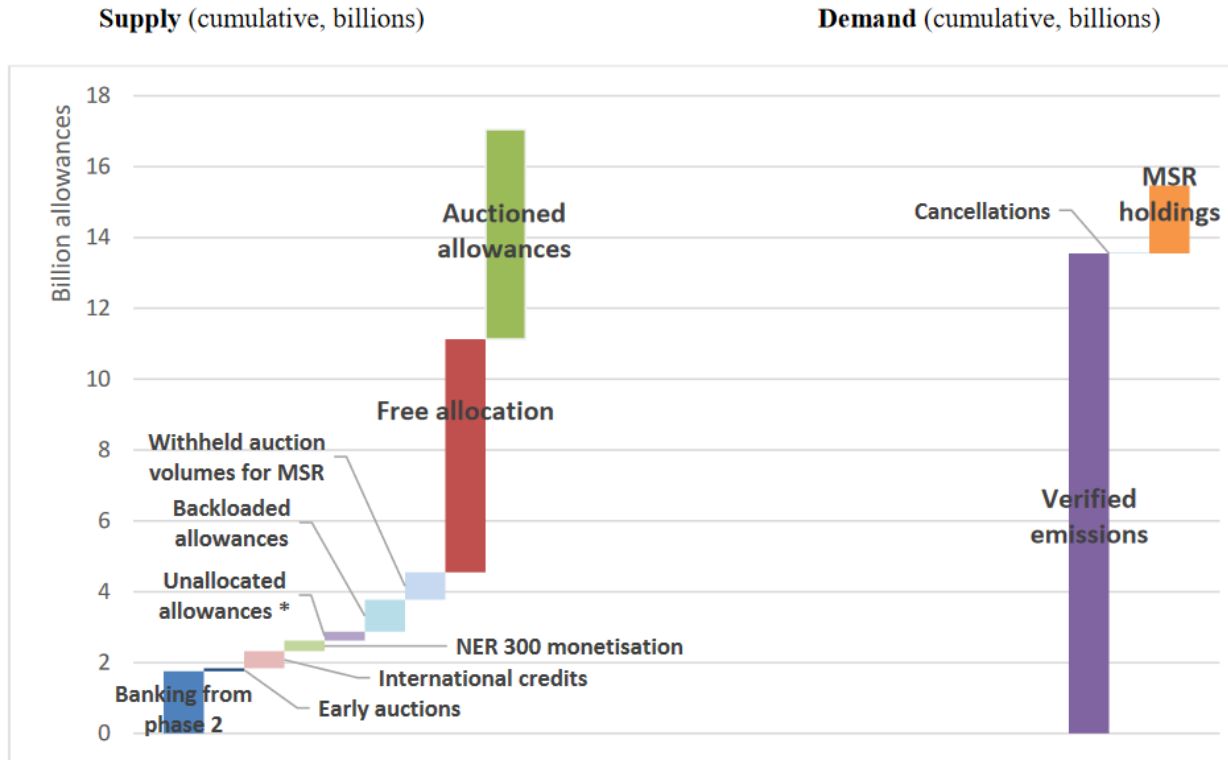
Sector level, Phase 3



*Preliminary emission data

Source: EC; own calculations.

Cumulated Allocation and Emissions 2020



Source: EC (2021).

The EU Emission Trading Scheme

Design in Phase 4 – Cap and Allocation Principles

Directive 2018/410 EU

- Emission reduction target of the ETS sectors for 2030:
-43% compared to 2005
- Linear reduction factor of the cap increased to 2.2% p.a.
- Continued mix of auctions and free allocation – share of auctioned allowances fixed to 57%

"Fit for 55" Proposal

- Emission reduction target of the ETS sectors* for 2030:
-62% compared to 2005
- Linear reduction factor of the cap to be increased to
 - 2024-2027: 4.3% p.a.
 - 2028-2030: 4.4% p.a.

* Shipping will be integrated into the existing ETS

The EU Emission Trading Scheme

Design in Phase 4 – Carbon Leakage Provisions

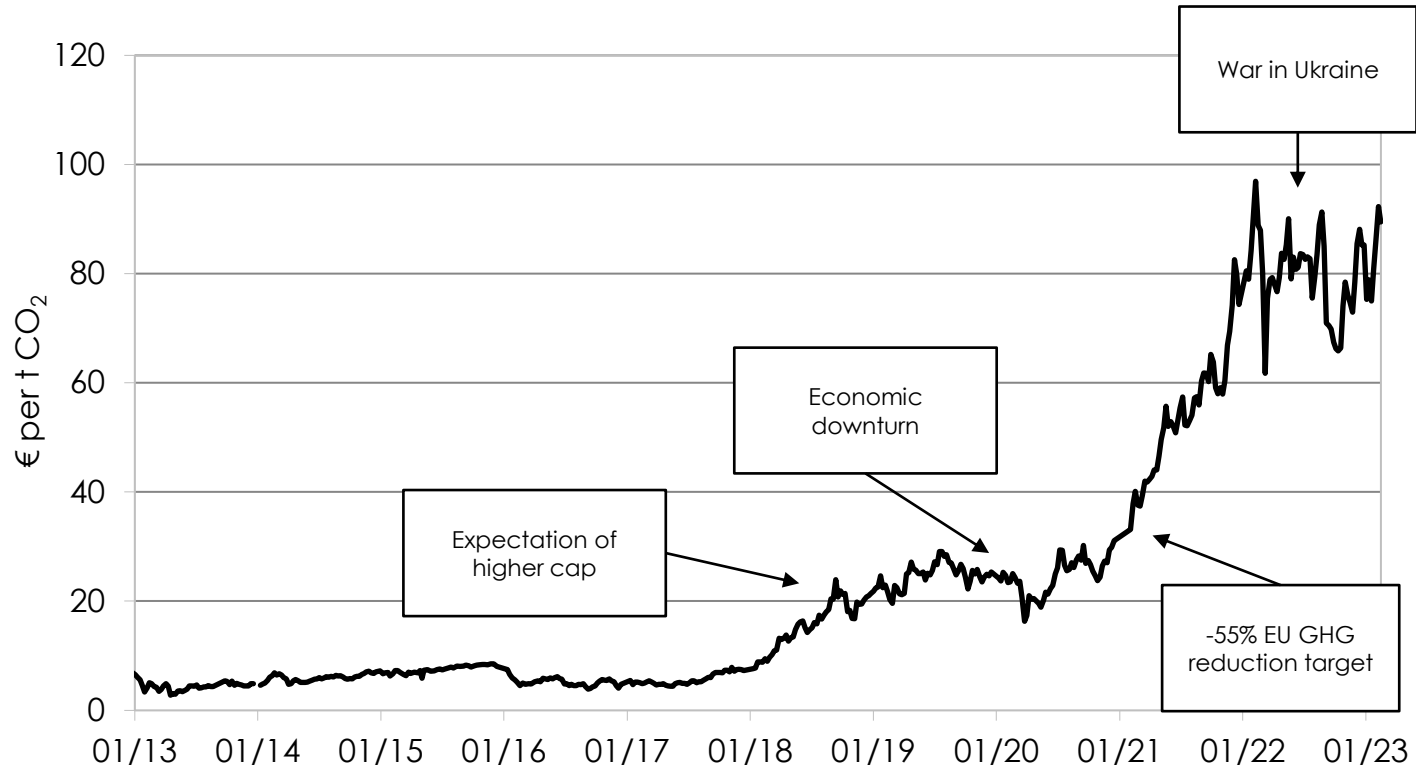
Directive 2018/410 EU

- Sectors potentially affected by carbon leakage continue to receive free allocation
- Criteria for determining carbon leakage are adjusted
- Update of benchmark values for free allocation

"Fit for 55" Proposal

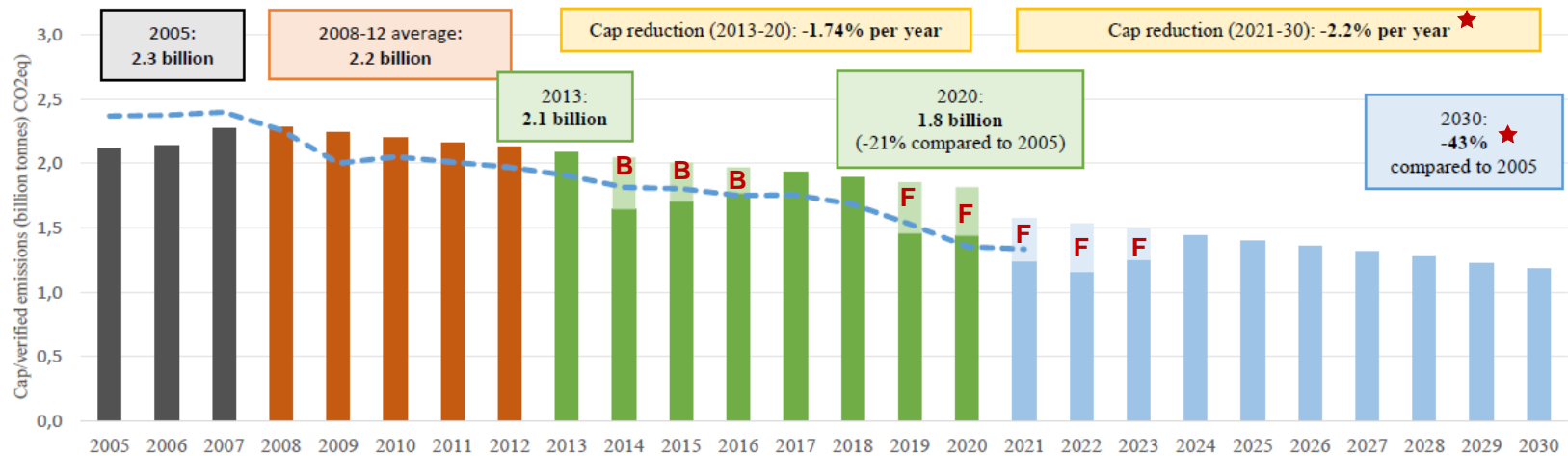
- From 2026 on, gradual introduction of a Carbon Border Adjustment Mechanism (CBAM) replacing free allocation
- For installations that are obliged to carry out an energy audit according to the Energy Efficiency Directive free allocation shall only be granted fully if the recommendations of the audit report are implemented

Price Development Phase 3 and beyond



Source: EEX; own illustration.

Development of ETS cap and emissions



- B** Backloading
- F** Feed in MSR
- ★** Old target – needs to be revised

Source: Adapted from EC (2021).

The Carbon Border Adjustment Mechanism (CBAM)

Basic principles

- CBAM should prevent the risk of carbon leakage by creating a level playing field for goods produced in the EU and imports
- CBAM should progressively replace free allocation
- CBAM requires importers of certain goods to surrender emission certificates for emissions embodied in the products

Key facts

- Between *January 2023* and December 2025 reporting obligation for declarants
- Afterwards submission of CBAM certificates for the embedded emissions
- Goods covered from the beginning generally include
 - Cement (CO₂)
 - Electricity (CO₂)
 - Fertilizers (CO₂ and N₂O)
 - Iron and Steel (CO₂)
 - Aluminium (CO₂ and PFCs)
 - Chemicals (CO₂)
 - Polymers (CO₂ and N₂O)
- Exemptions for imports from
 - Goods produced in countries included in the EU ETS
 - Electricity generated in countries applying the same/similar provisions for the electricity market

CBAM declaration

- Goods shall only be imported by a declarant authorised by a competent authority
- CBAM declarants need to open an account at the central EU registry and to submit the certificates and a CBAM declaration for the preceding year by May 31st incl.
 - Quantity of each type of goods imported (in tonnes or MWh)
 - Embedded emissions in those goods (t CO₂e / tonne or t CO₂ / MWh)
 - Total number of CBAM certificates to be surrendered
- Calculation method for embedded emissions includes both direct and indirect emissions (for complex goods)
- Either actual emissions or default values can be used for the calculations
- CBAM declarants shall ensure that the number of certificates on their account at the end of each quarter corresponds to at least 80% of the embedded emissions

Purchase of CBAM certificates

- CBAM certificates shall be sold on a central common platform that shall be established by the Commission
- Price of CBAM certificates
 - Average price of the closing prices of EU ETS allowances on the common auction platform (EEX) for each calendar week
 - Carbon price paid in a country of origin can be subtracted from CBAM price

Repurchase of CBAM certificates

- Up to 1/3 of certificates bought by the declarant can be repurchased (upon notification by end of June)
- The repurchase price for each CBAM certificate shall be the price paid by the authorised CBAM declarant for that certificate at the time of purchase
- All remaining certificates will be cancelled

Penalties

- CBAM declarants failing to surrender the required number of certificates by May 31st have to pay a penalty for each CBAM certificate that has not been surrendered
- The penalty is identical to the penalty for non-compliance in the EU ETS
- Importers that are not registered declarants will have to pay a penalty three to five times as high

**The EU Emission Trading Scheme
for Buildings, Road Transport and
Additional Sectors
(EU ETS2)**

Key facts

- Separated system (allowances **cannot** be exchanged between EU ETS & ETS2)
- Upstream approach
- Allowances for ETS2 are to be auctioned
- Planned start: 2027
- Linear reduction factor
 - 2027: 5.15% p.a.
 - 2028-2030: 5.43% p.a. (compared to the average of the period 2024-2026)
- Potential postponement of emissions trading for buildings, road transport and additional sectors until 2028 in the event of exceptionally high energy prices
- Possibility for MS to exempt suppliers from surrendering allowances until December 2030, if they are subject to a carbon tax at national level higher than auction prices

Additional Provisions

- Market stability reserve for quantity management
- When prices are higher than 45€, additional allowances will be released
- Revenues from ETS2 shall be used for climate- and energy-related purposes (including of funding of the Social Climate Funds)
- Regulated entities have to report the average share of costs related to the surrender of allowances which they passed on to consumers for the preceding year

Summary

- EU Climate Policy is increasing in ambition
 - Targets for 2020 have been achieved
 - Action must be stepped up to reach the 2030 targets
 - Achieving climate neutrality only by 2050 not in line with the targets of the Paris Agreement
- The EU has competence in climate policy making and has taken a leading role
- Carbon pricing is one of the key pillars in EU climate policy
- Final details on changes in the design of EU ETS and design of ETS2 not fixed yet

Thank you!

Questions: claudia.kettner@wifo.at

EU Supply Chain Law

- Proposal for a Directive of the European Parliament and of the Council on Corporate Sustainability Due Diligence (COM COM/2022/71 final, <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52022PC0071>)