



EU EMISSION TRADING SYSTEM 101

CARBON MARKET WATCH . ORG



EMISSION TRADING SYSTEM

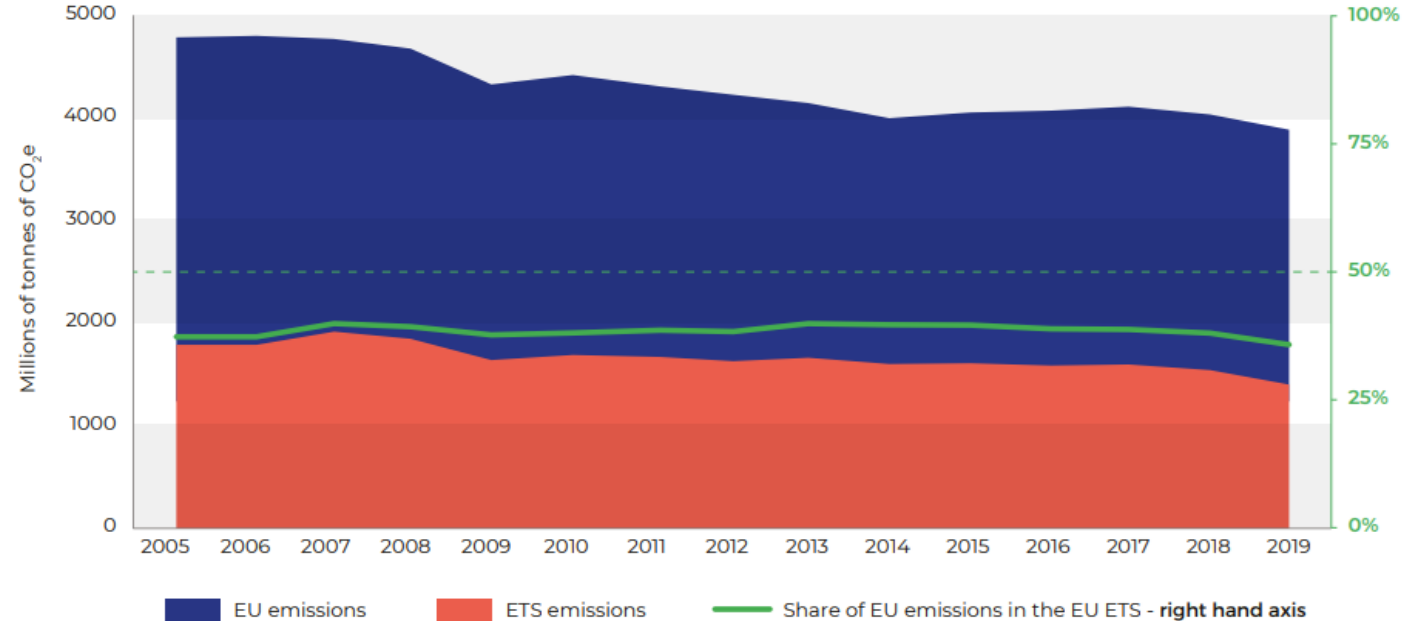
The EU ETS was launched in 2005 and became the world's first and biggest international carbon market

The ETS Directive (Art 1) “promotes reductions of greenhouse gas emissions in a cost-effective and economically efficient manner and provides for GHG reductions to be increased so as to contribute to the levels of reductions that are considered scientifically necessary to avoid dangerous climate change.”

EU ETS – scope and target

Scope:

- EU + Iceland, Norway & Liechtenstein + link to CH
- 11,000 installations (power + industry) and airlines (intra-EU)
- covers about 40% of all EU GHG emissions
- Extended to shipping in 2024
- Building and transport in a separate ETS2 in 2027



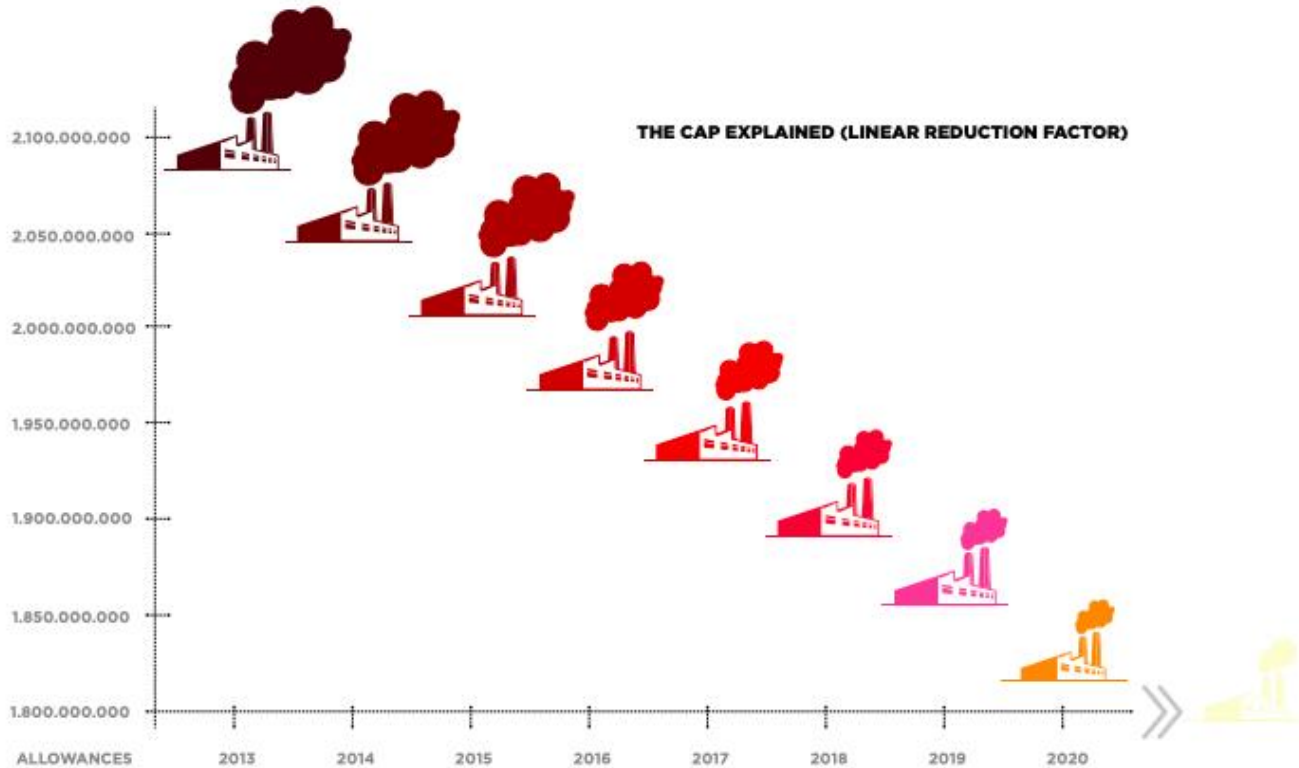
Objective:

Reduce GHG emissions where it is more cost-effective and economically efficient.

Target:

55% overall GHG reduction by 2030 (vs 1990)
translates into 62% ETS reduction (vs 2005).

How it works- CAP and TRADE



2013 – 2020: LRF= 1.74%

2021 – 2023: LRF = 2.2%

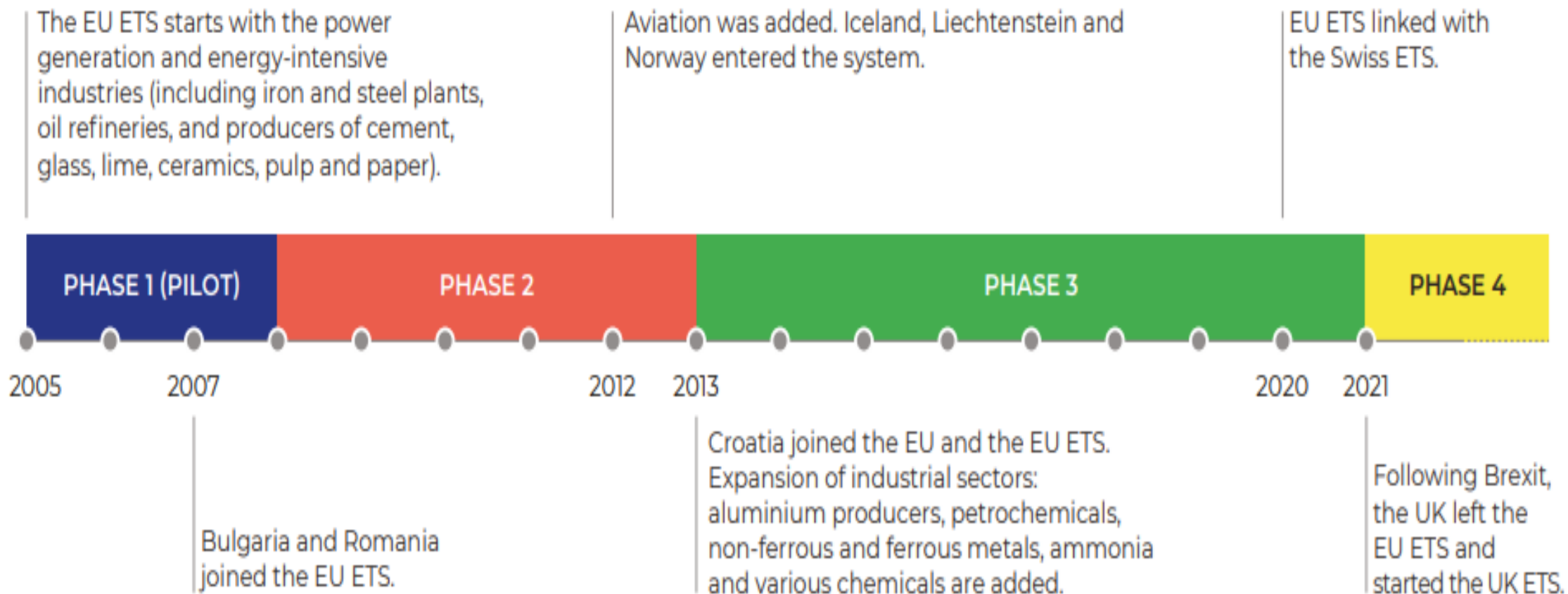
2024 – 2027: LRF = 4.3%

2028 – 2030: LRF = 4.4%

- It puts a limit (a ‘cap’) on the total volume of greenhouse gas (GHG) emissions that installations can emit.
- The installations receive or buy emission allowances European Union allowances (EUAs).
- 1 allowance = 1 tonne of CO₂. Allowances have to be surrendered each year. If not, penalties apply (100€/ton CO₂).
- The overall cap is reduced each year by a fixed percentage (“LRF”), which means that fewer allowances are available and therefore emissions are reduced over time.

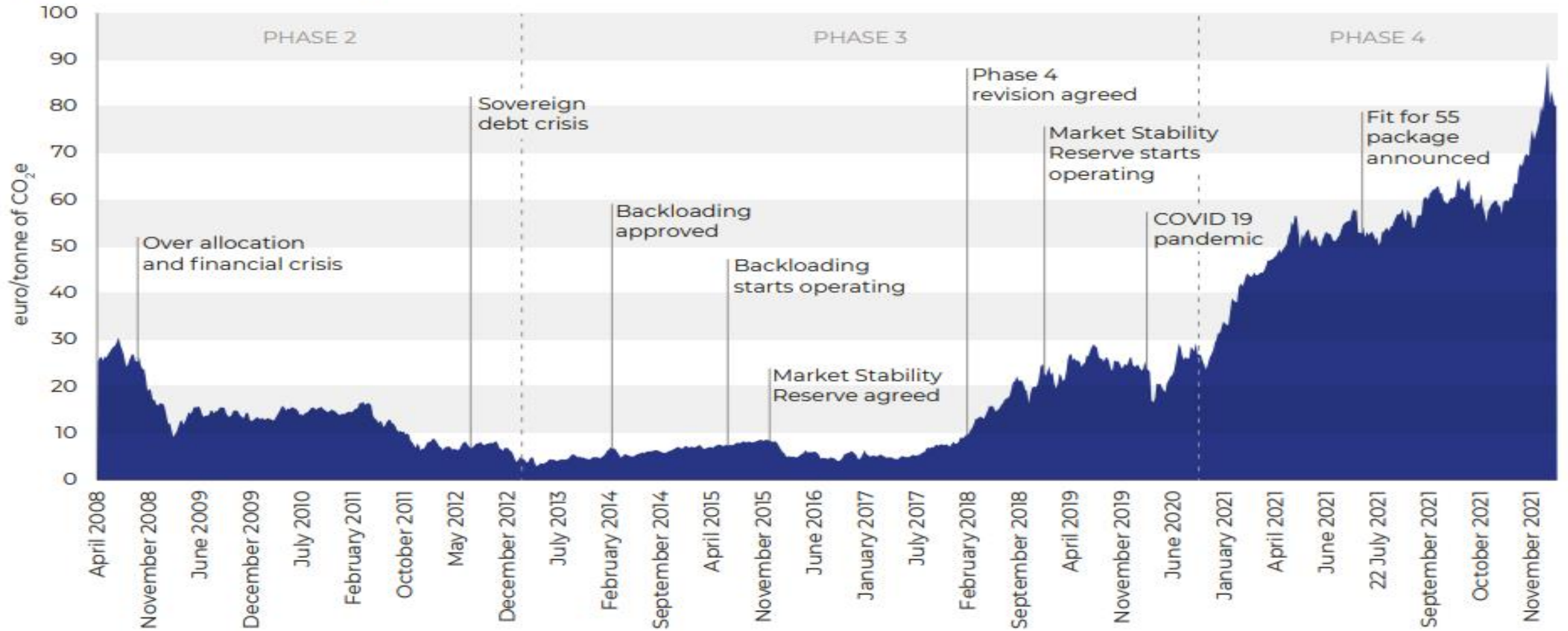
Design evolution

Main changes to the coverage of the EU ETS



Price evolution

Figure 8: EU carbon prices since the start of Phase 2



EU carbon market emissions

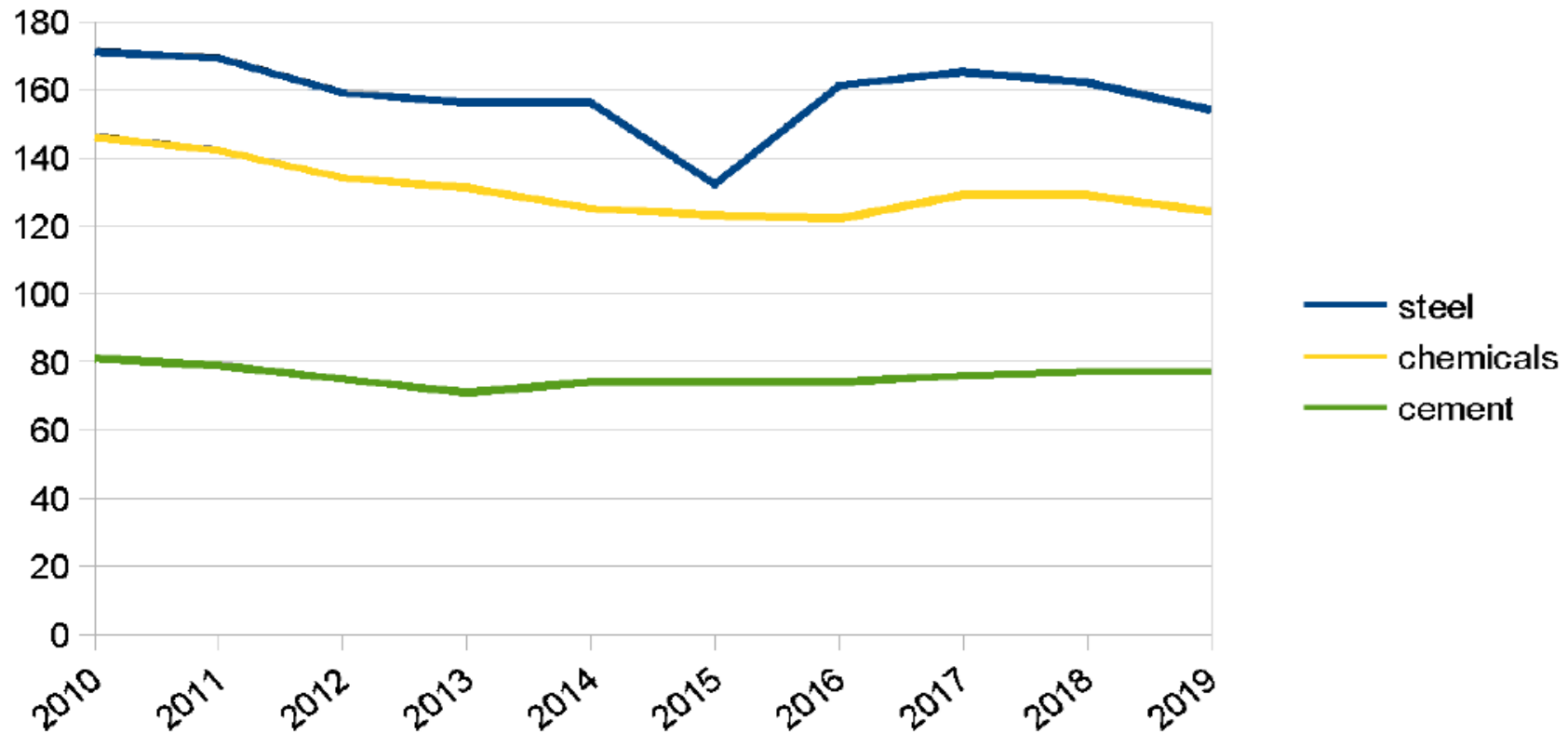
power sector vs. industry – 2012-2020



Greenhouse gas emissions relative to 2012. Data from Sandbag (2019), EEA (2020) and own calculations (2021).

Sectoral emissions

Comparison of greenhouse gas emissions in the three largest industrial sectors in the EU27 for the period 2010-2019 (in MtCO₂-e)



EU ETS - financial flows (2021-2030 @80€/tCO₂)

Auctioning by member states:

- 4 billion ETS allowances, national revenue total of €320 billion
- 100% to be invested in “climate-related purposes”

Free allocations:

- 5 billion ETS allowances, handing out about €400 billion to steel, cement, chemical ... sectors - foregoing government revenue

State aid (indirect cost compensation):

- decided at the national level, for electro-intensive industry currently around €0.5 billion/year in 12 member states

Innovation Fund:

- supports innovation, including innovative renewables, energy intensive industries, carbon capture, utilisation and storage (CCUS) and energy storage
- 575 million ETS allowances, worth about €45 billion

Modernisation Fund:

- supports investments in modernising the power sector in ten lower-income Member States
- 650 million ETS allowances, worth about €52 billion

: Auctioning revenues received by EU Member States and report usage (2013-2022)

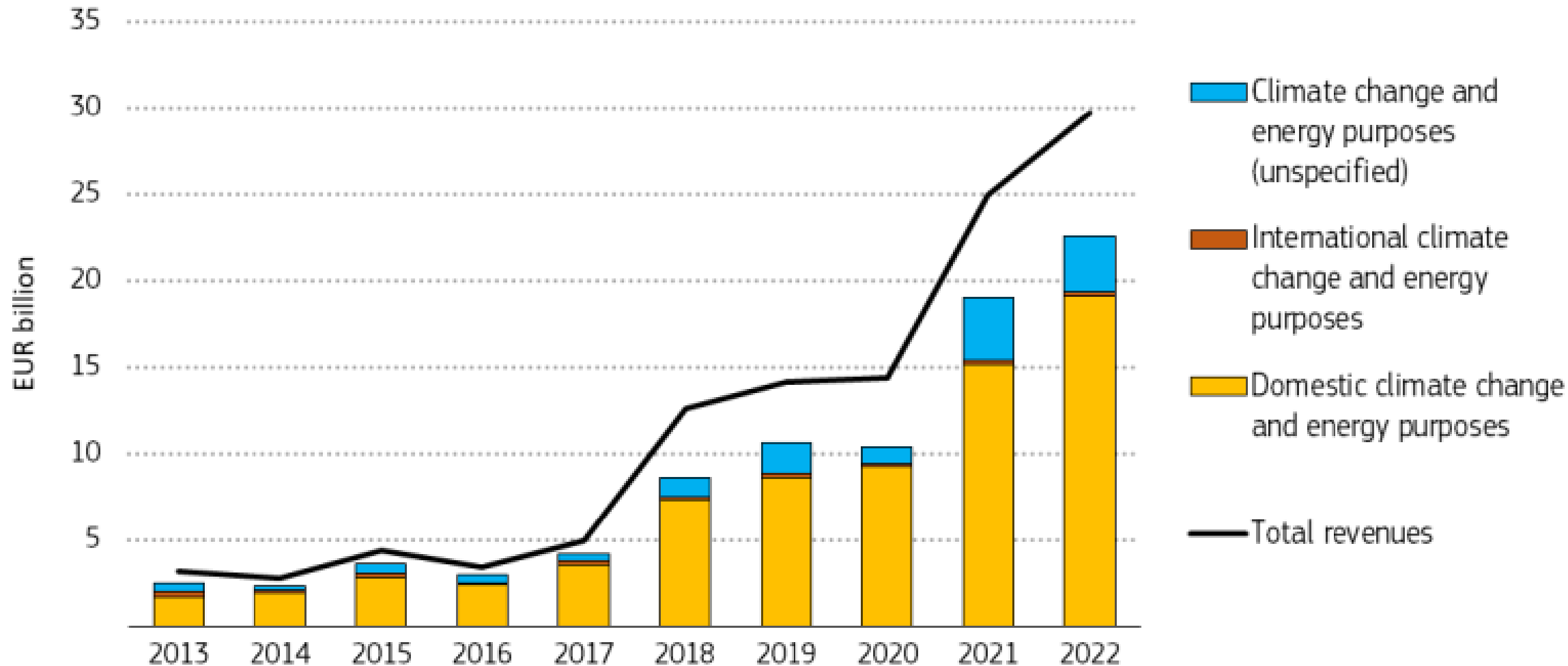
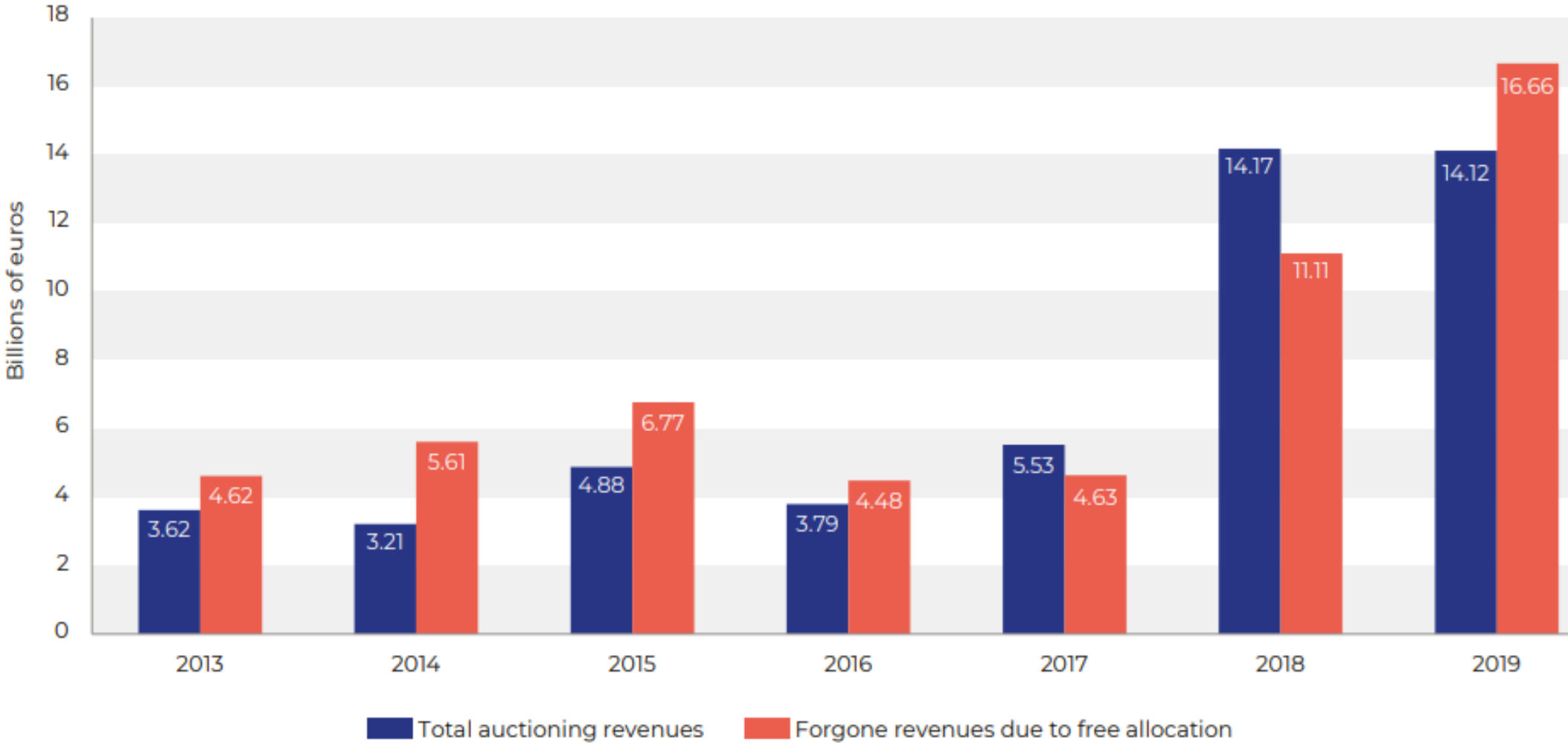


Figure 10: foregone revenues due to free allocation, compared with auctioning revenues (2013-2019)



FREE ALLOCATION

Free allocation: Emission allowances allocated for free to installations (as opposed to being auctioned)

WHY? To help avoid so-called carbon leakage

WHAT IS CARBON LEAKAGE?

Carbon leakage is a term used to describe the hypothetical situation where stringent climate policies would force companies to move their production abroad to countries with less ambitious climate measures to lower their production costs. This could lead to a rise in global greenhouse gas emissions.

HOW ARE FREE ALLOWANCES ALLOCATED?

Based on a product benchmark system for the sector considered at high risk of carbon leakage = high trade intensity and/or cost exposure

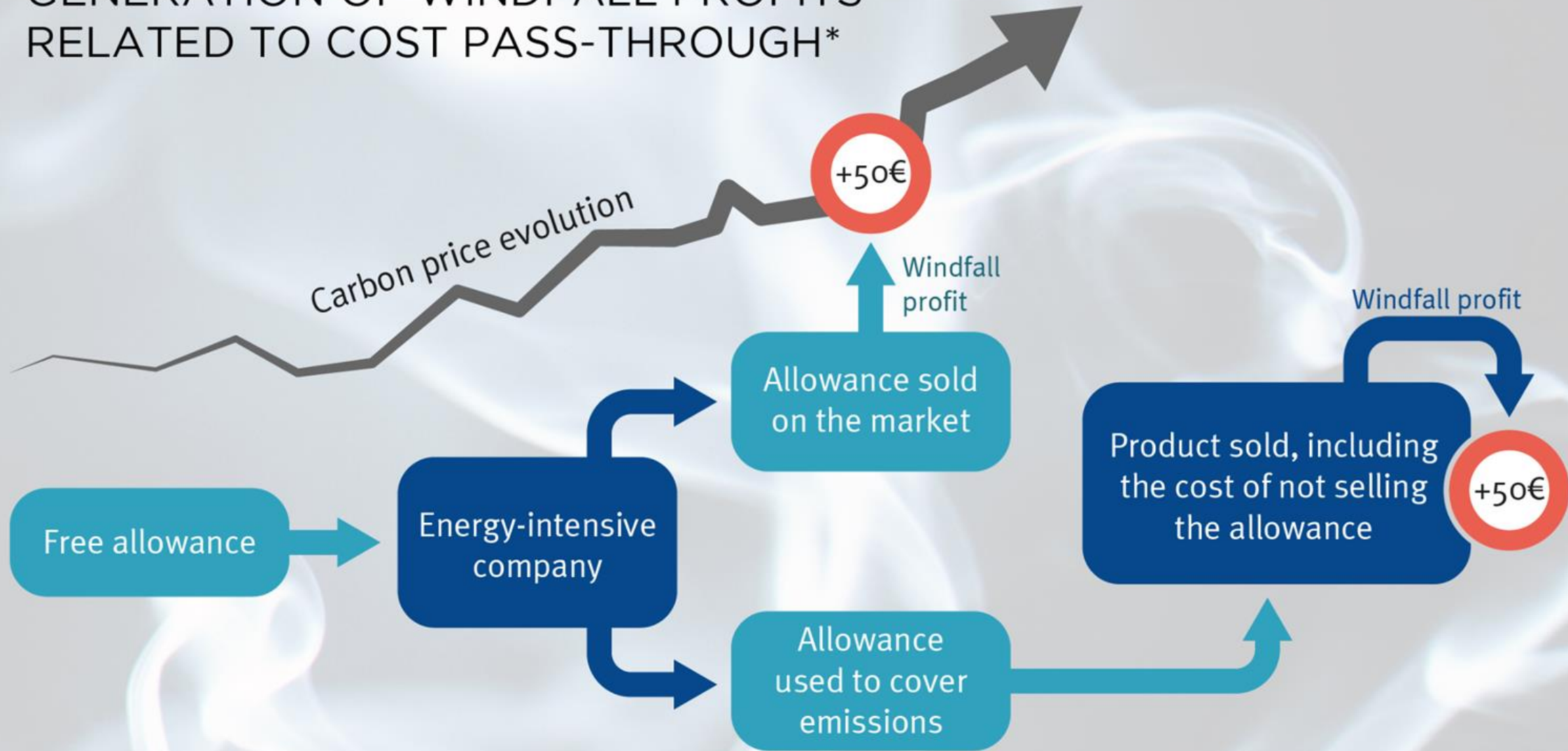
- 2013 – full auctioning for the power sector
- Industry? More than 90% of its pollution is covered by free allocation
- CBAM will gradually replace free allowances between 2026 and 2034

Carbon leakage and free emission allowances

Why are free emission allowances a problem?

- 1.** The risk of “carbon leakage” is grossly exaggerated. Empirical studies detect no carbon leakage since the ETS was established in 2005.
- 2.** Member States (ie. Finance Ministries) are losing auctioning revenues. Between 2021 and 2030 about 5 billion free emissions allowances are to be handed out - worth around € 400 billion (at ETS prices of about 80€/ton CO₂)
- 3.** Industrial sectors profit from free allowances they receive (cost-pass through of the opportunity cost) and their incentive to decarbonize is muted. Note that sectors as steel, cement and chemicals did hardly reduce their carbon pollution in the past decade (but: covid drop upcoming)

GENERATION OF WINDFALL PROFITS RELATED TO COST PASS-THROUGH*

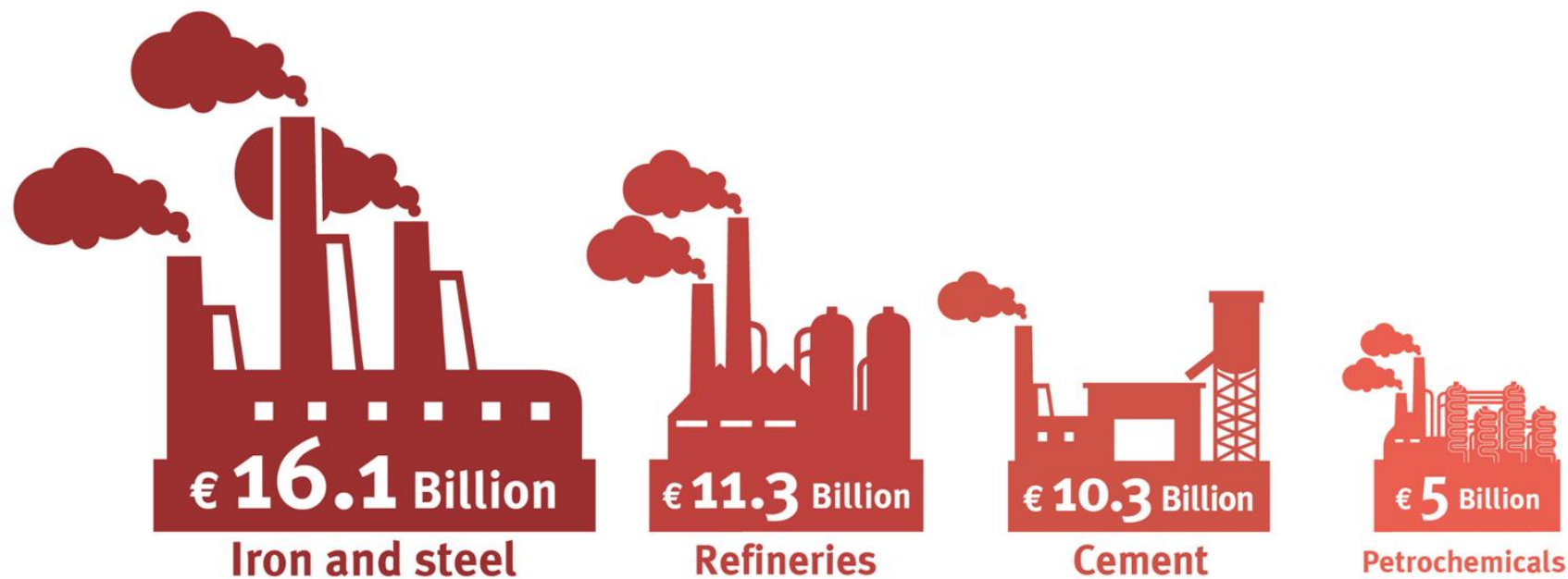


*Case for illustration – assuming linear demand and supply curves and perfect competition. Real pass-through rates may be lower or higher than 100%.

INDUSTRY WINDFALL PROFITS BY SECTOR IN MILLION EUR 2008-2019*

Sector	Windfall profits from surplus	Windfall profits from int. offsets	Windfall profits from average cost pass-through	Total windfall profits
Refineries	-1,800	630	12,460	11,300
Petrochemicals	600	320	4,010	5,000
Cement	3,000	610	6,630	10,300
Iron and steel	-710	850	16,000	16,100

* All figures (rounded) are taken from the CE Delft (2021) report: Additional profits of sectors and firms from the EU ETS 2008-2019



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Data sources

- Background info: [Carbon Market Watch lobbying guide to the EU ETS](#)
- “How much did the chemical sector under the EU ETS emit in Spain in 2016?” ([EEA data viewer](#))
- “How much free allowances did ArcelorMittal receive for their plant in Gent (Belgium) in 2019? And how much did they emit?” ([EU Transaction Log](#) -operator holding accounts, or download [Excel files](#) with compliance data, lists of transactions)
- “Where can I find the all the EU ETS installations near Mannheim, Germany?” ([EUETS.info](#))
- “Which other pollutants (beyond CO2) are emitted by Tata Steel in Ijmuiden, Netherlands?” ([European Industrial Emissions portal](#))
- “How did the Polish government use its ETS auctioning revenues in 2019?” (EEA - [Central Data Repository](#))
- “How much does a tonne of CO2 cost today?” ([77.3 €!](#))

Some ideas for reporting on the EU ETS

- NEW CMW research 22 November: **The Emissions' Aristocracy**- How 30 companies cause 50% of ETS emissions and how they avoid footing the bill
- Environmental delivery: where are the ETS1's **sectoral pathways** (steel, cement, chemicals) currently leading? Who is on track for climate neutrality, who is not?
- The **EU Carbon Border Adjustment Mechanism**: reporting on embedded emissions of imported goods (how clean is EU production really when compared to the rest of the world? Is there a risk of underreporting, importers using loopholes?)
- Use of **ETS Funds and State Aid** (quality of the projects implemented by the ETS Modernisation and Innovation Funds, potential misspending of ETS auctioning revenues, the effects of ETS State Aid - who benefits?)
- What to expect from the **new EU ETS2 for buildings and transport**? How does it impact consumers? What can countries do to ensure a fair treatment of lower-income households?



THANK YOU

CARBON MARKET WATCH . ORG



« Cashing on carbon credits »

A cross-border investigation by Emmanuelle Picaud, Guillaume Delacroix and Luc Martinon



It began with a few words...

Just two sentences in a report of 86 pages

“free allowances were a real opportunity for most cement manufacturers, who sold them on the carbon market. A study by CE Delft shows that the cement industry benefited from an over-allocation of 231 MtCO₂, generating profits of around 3 billion euros, including 230 million in France”



How to built a story ?

You have clues. But you are still not sure of your story. Take your phone and speak to people

- NGOs (Carbon Market Watch, Sandbag)
- Researchers or experts who previously worked on the subject (Google, Google Scholar, Pubmed)
- Politicians that spoke about this case before (newspapers, official speeches, reports)
- Experienced investigative journalists



The literature was already there but...



EU ETS, Free Allocations and Activity Level Thresholds

The devil lies in the detail

Frédéric Branger^{1,2}, Jean-Pierre Ponsard³, Oliver Sartor⁴, Misato Sato⁵

18th May 2015

Forthcoming in the *Journal of the Association of Environmental and Resource Economists*

DATE 30/06/2021



New EU ETS: time for steel, cement and chemicals to (be)come clean

The EU carbon market has helped drive down carbon pollution from Europe's power sector but has failed to do the same for heavy industries such as cement, steel and chemicals. A part of the reason is the free allocation of pollution permits, which means that the industry has little incentive to clean up its act. While publicly embracing Europe's new climate ambition, our new [report](#) finds that the same companies continue to push back on any meaningful reforms of the carbon pricing scheme.

While seeing some successes in driving down emissions from producing electricity, the EU carbon market has provided a very weak framework for reducing carbon pollution from sectors that consume much of this energy, such as steel, cement and chemicals.

No more free lunch

Ending free allowances in the EU ETS to the benefit of innovation

Searching for carbon leaks in multinational companies

Antoine Dechezleprêtre [†] Caterina Gennaioli [‡] Ralf Martin [§]

Mirabelle Muûls [¶] Thomas Stoerk ^{||}

February 2021

Abstract

Does unilateral climate change policy cause companies to shift the location of production, thereby creating carbon leakage? In this paper, we analyse the effect of the European Union Emissions Trading System (EU ETS) on the geographical distribution of carbon emissions by multinational companies. The empirical evidence is based on unique data for the period 2007-2014 from the Carbon Disclosure Project, which tracks



You need proof, you need a database

We used the database from the **EUETS site. info**, based on the **European Union Transaction Logs (EUTL)** registers. Two millions transactions were reported by Jan Abrell, the creator

EUETS.INFO Installations Accounts Countries Downloads FAQ Contact

Accounts

Select registry... | Select account type...
Search for account or account holder | Select trading system...

Name	Account Type	Registry	Active	Account Holder
Löschungskonto 1	Voluntary Cancellation Account (Type 3)	Austria	✓	Bundesministerium für Nachhaltigkeit und Tourismus
Ausbuchungskonto	Retirement Account	Austria	✓	Bundesministerium für Nachhaltigkeit und Tourismus
Löschungskonto	Voluntary Cancellation Account (Type 3)	Austria	✓	Bundesministerium für Nachhaltigkeit und Tourismus
Konto der Vertragspartei	Party Holding Account	Austria	✓	Bundesministerium für Nachhaltigkeit und Tourismus
Qatar Airways	Aircraft Operator Account	Germany	✓	Qatar Airways
		United Kingdom	×	
AXPO Trading AG	Person Account in National Registry	Austria	×	AXPO Solutions AG
EXAA	Person Account in National Registry	Austria	×	EXAA Abwicklungsstelle für Energieprodukte AG


Our methodology (1/3)

For each company we examined :

- The list of accounts corresponding to the plants, and then the associated transactions.
- To estimate the value of a transaction, we used the historical daily prices of carbon allowances at the monthly average prices <https://www.sendeco2.com/es/precios-co2>



Our methodology (2/3)

overview for all Known Accounts   
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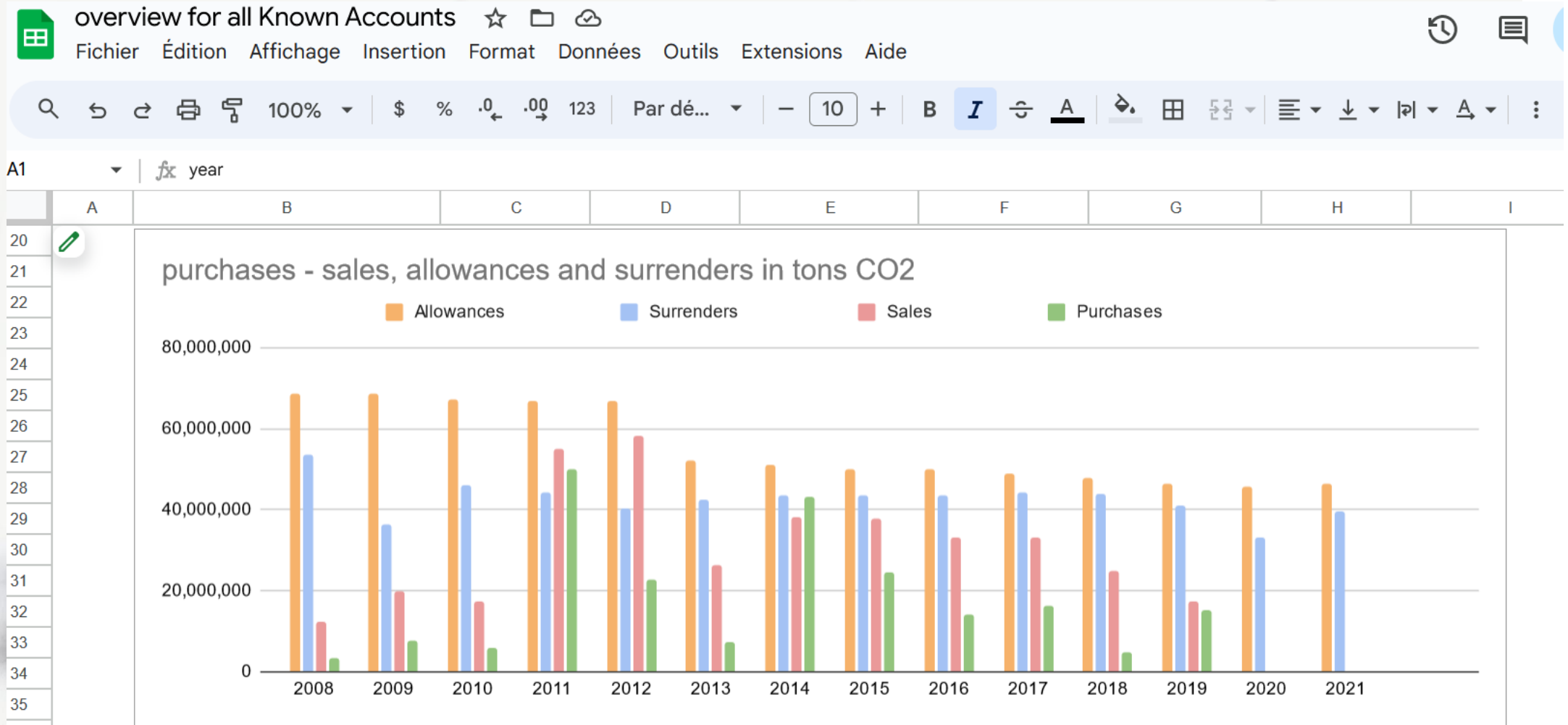
B1



account

	A	B	C	D	E	F	G	H	I	J	
1	year	account	sales	sales_price	purchases	purchases_price	surrenders	allowances	installations	tot_a_s	tot_tra
126	2020	Eqiom	0	€0.00	0	€0.00	1,189,242	1,056,534	4	-132,708	
127	2021	Eqiom	0	€0.00	0	€0.00	1,355,536	1,019,186	4	-336,350	
128	2008	Heidelberg materials	5,185,962	€79,127,597.57	1,743,998	€33,838,078.63	29,658,572	31,207,125	64	1,548,553	3
129	2009	Heidelberg materials	6,451,901	€88,047,599.75	2,491,203	€29,561,804.53	25,464,262	31,409,441	64	5,945,179	3
130	2010	Heidelberg materials	11,845,016	€163,445,997.22	4,061,476	€57,823,094.62	24,732,017	31,683,780	64	6,951,763	7
131	2011	Heidelberg materials	13,737,469	€164,658,270.34	7,200,822	€83,475,666.44	25,906,589	31,683,852	64	5,777,263	6
132	2012	Heidelberg materials	16,173,813	€107,676,802.86	9,027,633	€52,020,433.13	23,968,517	31,683,814	64	7,715,297	7
133	2013	Heidelberg materials	5,298,080	€17,091,618.14	5,973,031	€14,902,068.46	21,719,076	25,305,230	64	3,586,154	
134	2014	Heidelberg materials	5,776,503	€28,039,370.83	4,758,250	€17,836,642.09	22,157,870	22,734,650	64	576,780	1
135	2015	Heidelberg materials	7,545,095	€54,036,759.03	2,383,315	€17,368,971.21	21,387,627	22,551,155	64	1,163,528	5
136	2016	Heidelberg materials	4,228,299	€25,213,158.67	2,400,000	€12,914,000.00	21,423,307	22,324,775	64	901,468	1
137	2017	Heidelberg materials	208,066	€1,003,674.82	500,000	€3,685,000.00	22,243,653	21,649,535	64	-594,118	
138	2018	Heidelberg materials	126,309	€2,133,473.64	750,000	€13,025,000.00	23,407,789	21,227,338	64	-2,180,451	
139	2019	Heidelberg materials	48,533	€1,328,833.54	1,423,998	€27,923,804.68	23,017,365	20,799,945	64	-2,217,420	-1
140	2020	Heidelberg materials	0	€0.00	0	€0.00	22,022,714	19,673,362	64	-2,349,352	

Our methodology (3/3)



Technical obstacles

The database has its own limitations :

- It is derived from the compilation of several European registers, which are themselves incomplete
- It contains transaction history but not ownership history for industrial plants



Droits à polluer : notre méthodologie

Nous avons exploité pour les besoins de cette enquête les données du site [EUETS.info](#), elles-mêmes issues des registres européens [EUTL](#) (European Union Transaction Logs). Ce site a été créé par le chercheur allemand Jan Abrell, spécialiste de la modélisation des risques liés au changement climatique. Jamais traitées jusqu'ici par un média, ces données répertorient les allocations gratuites de quotas de CO₂ et les émissions déclarées par les entreprises industrielles, ainsi que les achats et les ventes de quotas. Cela représente deux millions de transactions.

Pour chaque entreprise passée au crible – dans les secteurs de la sidérurgie et du ciment, en France et en Espagne –, nous avons d'abord établi la liste des comptes correspondant aux usines, et ensuite les transactions associées. Nous avons écarté les transactions entre filiales d'un même groupe industriel : celles-ci correspondent

Other obstacles

- Pitch story to newspapers (who does not want it)
- Find new reliable sources for your investigation after the main sources left
- Nobody has a skill in your team and you are lost
- Deal with the loss of one team member
- Deal with companies disinformation at the final rush



Thank you

Linkedin : Emmanuelle Picaud

emma.picaud@gmail.com

Twitter : @epicaud1



Emissionshandelssystem: Eine Flatrate auf Monsteremissionen

Der Bund erliess den grössten Umweltverschmutzern von 2013 bis 2020 drei Milliarden Franken an CO2-Abgaben und schenkte ihnen gleichzeitig Emissionsrechte im Wert von schätzungsweise 361 Millionen Franken. Das zeigen bislang unveröffentlichte Berechnungen vom Onlinemagazin das Lamm.

ALEX TIEFENBACHER, LUCA MONDGENAST 27.02.2023

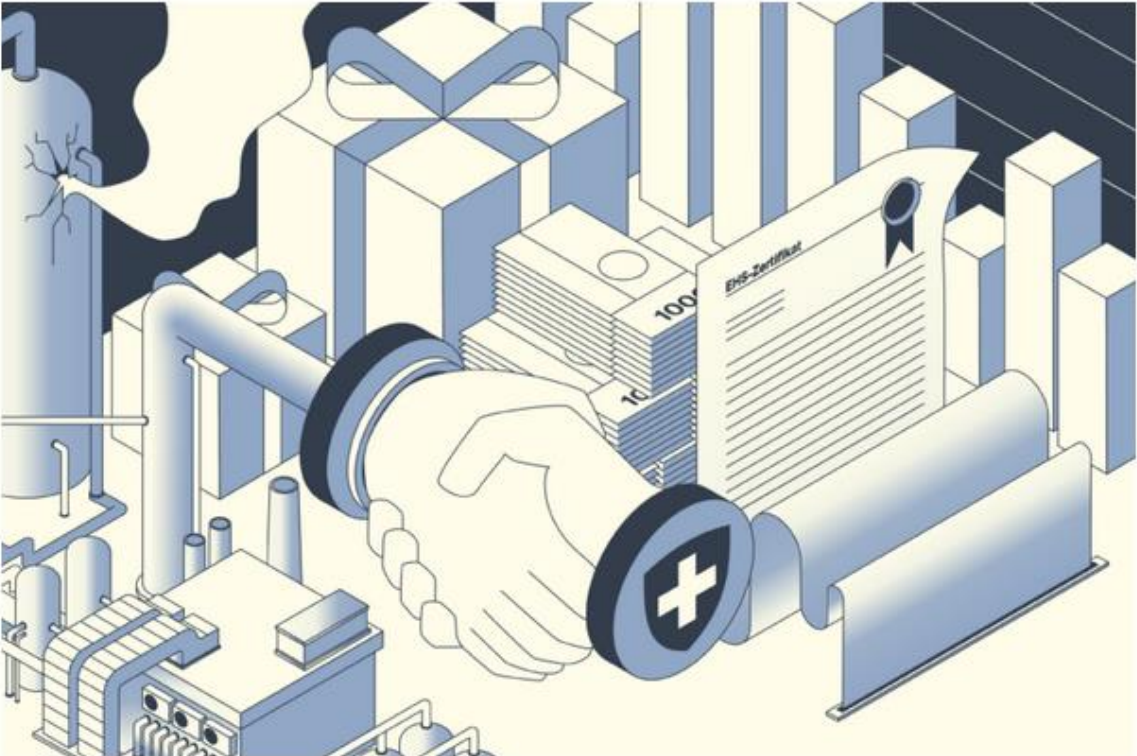


Illustration: Luca Mondgenast

Emissions trading system: A flat rate on monster emissions

- 1) Method
- 2) Results
- 3) Possible stories: Backdoors and strategies in the ETS
 - a) Perlen: Outsourcing of emissions
 - b) Holcim: pass on CO2 surcharge
 - c) Klybeck: Industry disappears, ETS remains
 - d) Dottikon Exclusive Synthesis: no adjustment of free allocations



Essential Criteria	In the EU ETS	In the ETS of Switzerland
Mandatory nature of the participation in the ETS	Participation in the ETS shall be mandatory for the installations carrying out the activities and emitting the greenhouse gases ("GHG") listed below.	Participation in the ETS shall be mandatory for the installations carrying out the activities and emitting the GHG listed below.
The ETS shall cover at least the activities set out in:	Annex I to Directive 2003/87/EC, as in force on the date of signature of this Agreement	Article 40, paragraph 1, and Annex 6 of the CO ₂ Ordinance, as in force on the date of signature of this Agreement
The ETS shall cover at least the GHGs set out in:	Annex II to Directive 2003/87/EC, as in force on the date of signature of this Agreement	Article 1, paragraph 1, of the CO ₂ Ordinance, as in force on the date of signature of this Agreement
A cap shall be set for the ETS, which is at least as stringent as the one in:	Directive 2003/87/EC as in force on the date of signature of this Agreement	— Article 18, paragraph 1, of the CO ₂ Act — Article 45, paragraph 1, of the CO ₂ Ordinance as in force on the date of signature of this Agreement

Article 10

Development of legislation

1. This Agreement is without prejudice to the right of each Party to amend or adopt legislation of relevance to this Agreement, including the right to adopt more stringent protective measures.

1) Method

- Separate ETS but same rules (linking agreement)
- Smaller ETS:
 - 2013 – 2020: 50 plants
 - 2021 – 2030: 100 plants
- Own data base: Swiss emissions trading registry
<https://www.emissionsregistry.admin.ch>
- Aim of the research :
 - analysis the trading period 2013 - 2020
 - Compare with the national pricing system (CO2-tax)
- Calculation method and assumptions
 - CO2 levy not paid: not 100% overlapping
 - Estimated costs via ETS: never anything from reserve
 - Estimated value of emission rights: everything first from reserve



Willkommen

Anmeldung

Versteigerungen

Termine und Resultate

Auswertungen ab 2020

Zugelassene Teilnehmer

Whitelist/Projekte

Öffentliche Informationen

Konten

Transaktionsliste

Nationale Bescheinigungen

Internationale Bescheinigungen

EHS Anlagenbetreiber

Zuteilung

Abgabepflicht

Abgegebene Einheiten

Übersicht Handelsperiode

EHS Luftfahrzeugbetreiber

Zuteilung

Stand am Tue Oct 31 13:56:20 CET 2023

Jahr: 2022

Suchen

Zuteilung 2022

Genehmigungsnummer	Anlagenname	Einheitentyp	Zuteilung
2013-50108	Weidmann Electrical Technology, Rapperswil	0-9-CHU	5'672
2013-50214	Veolia Industry Building Switzerland AG	0-9-CHU	44'839
2013-50314	Siegfried Evionnaz SA	0-9-CHU	4'873
2013-50607	Commune de Lausanne, site chaufferie Malley	0-9-CHU	62
2013-60101	Lonza, Standort Visp	0-9-CHU	41'307
2013-60104	F. Hoffmann-La Roche, Standort Basel	0-9-CHU	15'012
2013-60106	Flughafen Zürich, Flughafen Kloten	0-9-CHU	4'331
2013-60109	VARO Refining, site Cressier	0-9-CHU	275'375
2013-60111	DSM Nutritional Products, Standort Sisseln	0-9-CHU	76'158
2013-60112	Stahl Gerlafingen AG, Standort Werk Gerlafingen	0-9-CHU	81'785
2013-60115	Constellium Valais, site Siere-Chippis	0-9-CHU	3'972
2013-60117	Constellium Valais, site Steg	0-9-CHU	9'921
2013-60118	Kalkfabrik Netstal, Standort Netstal	0-9-CHU	43'856
2013-60120	Steeltec AG, Standort Emmenbrücke	0-9-CHU	54'769
2013-60201	Transitgas, Standort Station Ruswil	0-9-CHU	4'067
2013-60202	Tela GmbH	0-9-CHU	12'907
2013-60203	BASF, Standort Kaisten	0-9-CHU	30'781
2013-60205	GE TEC PARK, Standort Werk Schweizerhalle	0-9-CHU	22'874

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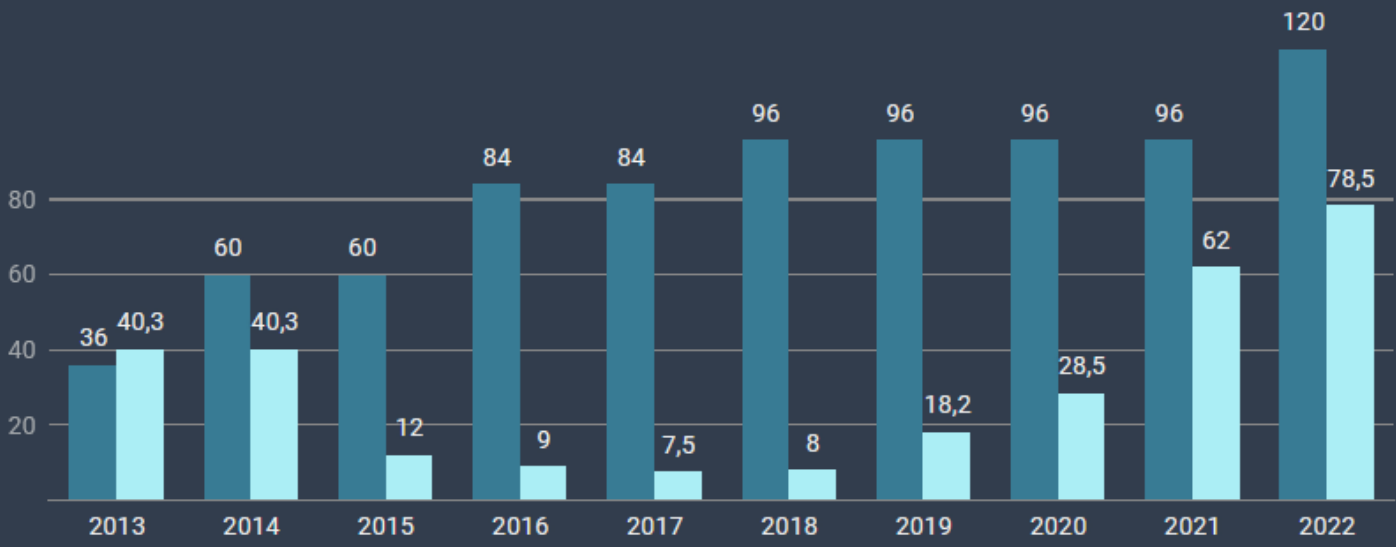




Das EHS von 2013 bis 2020: CO2-Abgabe und EHS-Preis über die Zeit

Sowohl die CO2-Abgabe, wie auch der Zertifikatspreis im EHS für eine Tonne Klimagase haben sich über die Zeit verändert. Die CO2-Abgabe stieg per Gesetz. Der Preis für eine Tonne CO2 über das EHS auf dem Emissionsmarkt.

■ CO2-Abgabe (CHF) ■ EHS-Zertifikat* (CHF)



*Jahreshöchstpreis bei den Versteigerungen vom Bundesamt für Umwelt

Grafik: Onlinemagazin – Das Lamm • Daten herunterladen • Erstellt mit Datawrapper

Dark blue: CO2-tax (CHF)
Light blue: ETS-price (CHF)

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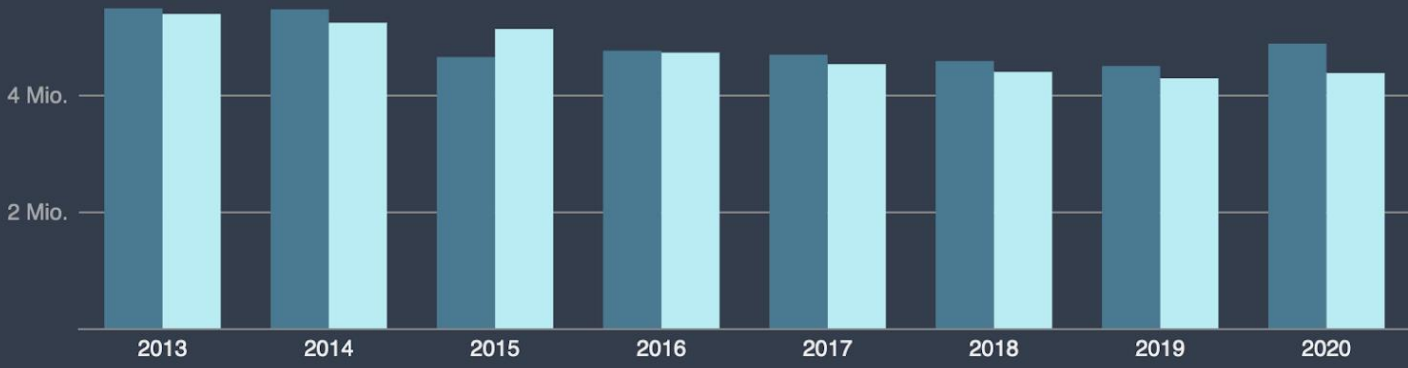


Übersicht 5: CO₂-Steuern weltweit (2022)

Land	Bereich	Jahr der Einführung	Anteil der abgedeckten nationalen THG-Emissionen in %	CO ₂ -Preis [US\$/tCO ₂ e]
Ostasien und Pazifischer Raum				
Japan	National	2012	83,4	2,36
Singapur	National	2019	n.V.	3,69
Europa				
Deutschland ¹⁾	National	2021	40,0	33,0
Österreich ¹⁾	National	2022	40,3	33,0
Ukraine	National	2011	66,7	1,03
Frankreich	National	2014	38,8	49,29
Vereinigtes Königreich	National	2013	29,6	23,65
Norwegen	National	1991	98,0	87,61 / 8,81 (regulär/reduzierter Satz)
Finnland	National	1990	76,0	85,10 / 58,58 (Transport/ andere fossile Brennstoffe)
Irland	National	2010	53,8	45,31 / 37,02 (Transport/ andere fossile Brennstoffe)
Niederlande	National	2021	14,2	46,14
Schweden	National	1991	86,7	129,89
Portugal	National	2015	37,1	26,44
Dänemark	National	1992	48,0	26,62 / 22,29 (fossile Brennstoffe/ F-Gase)
Polen	National	1990	4,1	0,08
Schweiz	National	2008	39,3	129,86
Slowenien	National	1996	62,4	19,12
Luxemburg	National	2021	65,5	43,35 / 27,63 (Treibstoff / alle anderen fossilen Brennstoffe)
Spanien	National	2014	2,9	16,58
Island	National	2010	55,4	34,25 / 19,46 (fossile Brennstoffe/ F-

Quelle: Der Beitrag des österreichischen Abgabensystems zur sozioökologischen Transformation (Seite 9), Österreichisches Institut für Wirtschaftsforschung, 2023

■ Emissionen ■ Gratiszertifikate



Eine Einheit entspricht jeweils einer Tonne CO₂-Äquivalent

Grafik: Onlinemagazin – Das Lamm • Quelle: [Emissionshandelsregister](#) • [Daten herunterladen](#) • Erstellt mit [Datawrapper](#)

Dark blue: emissions
Light blue: free emissions permits

2) Results

- Reductions: CH (minus 10%) - DE (minus 34%)
 - Carbon leakage state: CH (76%) - (DE: 57%)
- CO₂ levy not paid: 2.9 Billions
→ Estimated costs via ETS: 92 Millions
→ Estimated value of emission rights: 360 Millions



das Lamm



CO2-tax
not paidEstimated costs
via ETSEstimated value of
emission allowances

2) Results

Namen	▼ Erlassene CO2- Abgaben in CHF <i>Davon wurden die EHS- Firmen befreit.</i>	Kosten via EHS in CHF <i>Das mussten die Firmen anstelle der CO2-Abgabe schätzungsweise bezahlen.</i>	Geschätzter Wert der EHS- Zertifikate in Reserve in CHF <i>Zertifikatspreis Stand. 25. Jan. 2023</i>
	Total	2.940.693.984	92.224.019
Holcim <i>Siggenthal</i>	331.922.916	570.594	29.808.240
Ciments Vigier <i>Péry</i>	302.622.144	1.402.275	9.689.120
Jura-Cement-Fabriken <i>Wildegg</i>	298.734.360	2.594.036	0
Lonza <i>Visp</i>	271.808.532	22.231.669	0
Holcim <i>Untervaz</i>	263.508.504	391.116	114.328.640
Holcim <i>Eclépens</i>	237.677.784	808.620	58.550.240
VARO Refining <i>Cressier</i>	226.374.024	7.910.893	0
Jura-Cement-Fabriken <i>Cornaux</i>	110.806.128	4.021.069	0
CIMO <i>Monthey</i>	78.068.844	3.738.285	0
TAMOIL <i>Raffinerie Collombey</i>	67.131.432	14.939.792	0
Stahl Gerlafingen AG <i>Gerlafingen</i>	59.596.056	536.397	1.945.600

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dAS **RAM**



Emissionshandelssystem: Eine Flatrate auf Monsteremissionen

Der Bund erliess den grössten Umweltverschmutzern von 2013 bis 2020 drei Milliarden Franken an CO2-Abgaben und schenkte ihnen gleichzeitig Emissionsrechte im Wert von schätzungsweise 361 Millionen Franken. Das zeigen bislang unveröffentlichte Berechnungen vom Onlinemagazin das Lamm.

ALEX TIEFENBACHER, LUCA MONDGENAST 27.02.2023

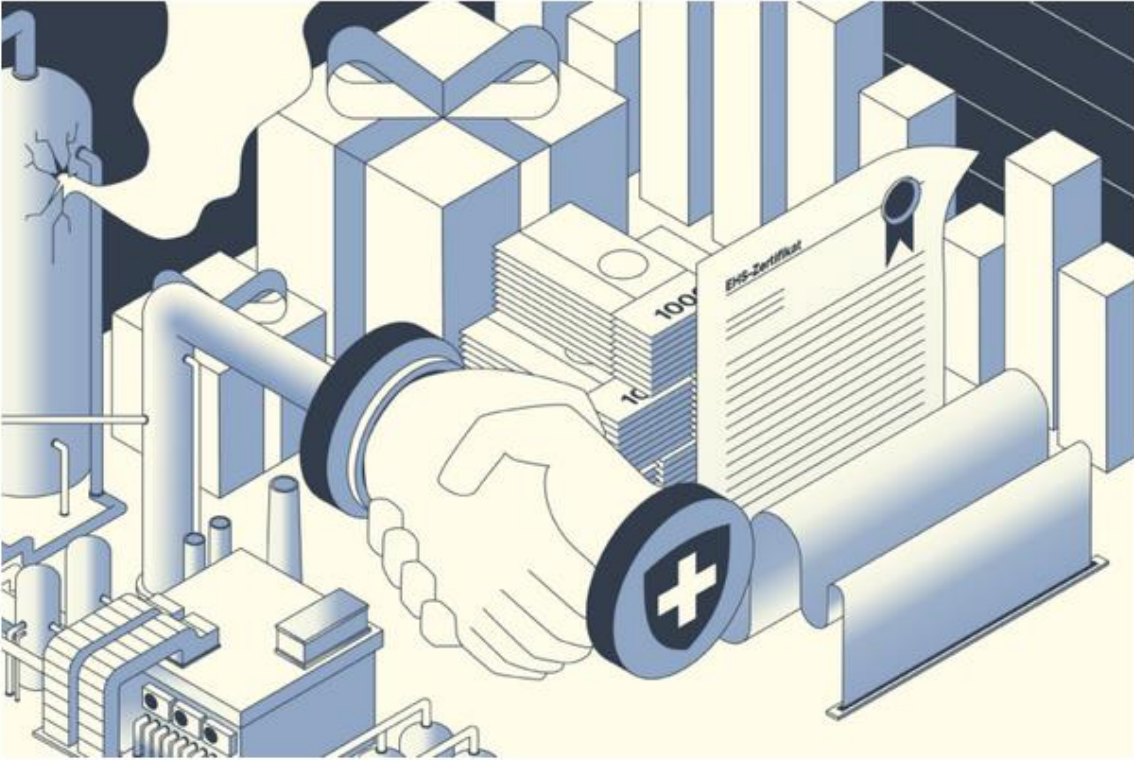


Illustration: Luca Mondgenast

Emissions trading system: A flat rate on monster emissions

- 1) Methode
- 2) Ergebnisse
- 3) Possible stories: Backdoors and strategies in the ETS
 - a) Perlen: Outsourcing of emissions
 - b) Holcim: pass on CO2 surcharge
 - c) Klybeck: Industry disappears, ETS remains
 - d) Dottikon Exclusive Synthesis: no adjustment of free allocations



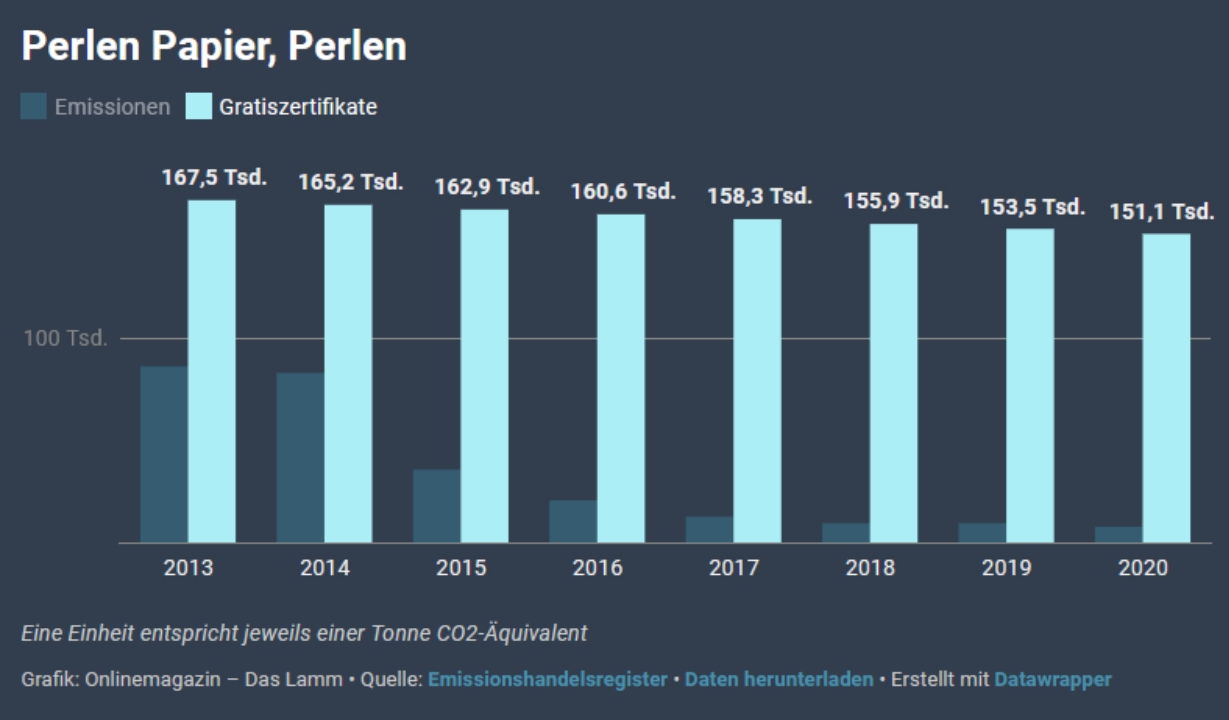


3) Possible stories: backdoors and strategies in the ETS

a) Perlen: Outsourcing of emissions

Reduction: 90%.

Der The decrease is mainly due to steam purchase from the incineration plant called Renergia (50% fossil waste).



Dark blue: emissions
Light blue: free emissions permits

Namen	CO2-tax not paid	Estimated costs via ETS	Estimated value of emission allowances
Perlen Papier <i>Perlen</i>	15.722.688	22.882	81.590.320

▼ Erlassene CO₂-Abgaben in CHF
Davon wurden die EHS-Firmen befreit.

Kosten via EHS in CHF
Das mussten die Firmen anstelle der CO₂-Abgabe schätzungsweise bezahlen.

Geschätzter Wert der EHS-Zertifikate in Reserve in CHF
Zertifikatspreis Stand. 25. Jan. 2023

Tabelle: Onlinemagazin – Das Lamm • Quelle: [Emissionshandelsregister](#) • [Daten herunterladen](#) • Erstellt mit [Datawrapper](#)



3) Possible stories: backdoors and strategies in the ETS

b) Holcim: Pass on CO2 surcharge

- unused emission rights from 2013 to 2020: around 2 million (all three plants together)

- from 2021: some allowances had to be bought

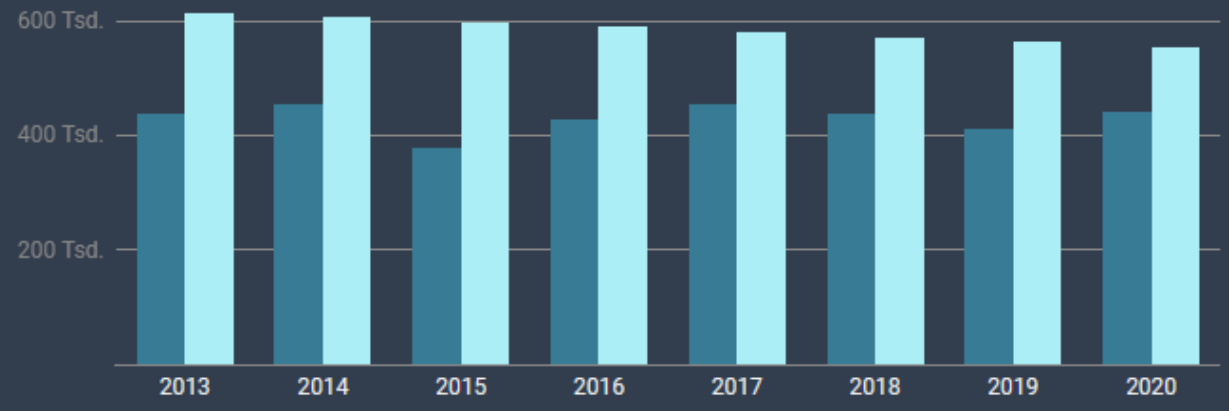
2021: 100'000 tons

2022: 130'000 tons 2022: 130'000 Tonnen

- from 2021: a CO2 surcharge was then introduced across the entire industry

Holcim, Untervaz

Emissionen Zuteilungen



Eine Einheit entspricht jeweils einer Tonne CO2-Äquivalent

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Dark blue: emissions

Light blue: free emissions permits

	CO2-tax not paid	Estimated costs via ETS	Estimated value of emission allowances
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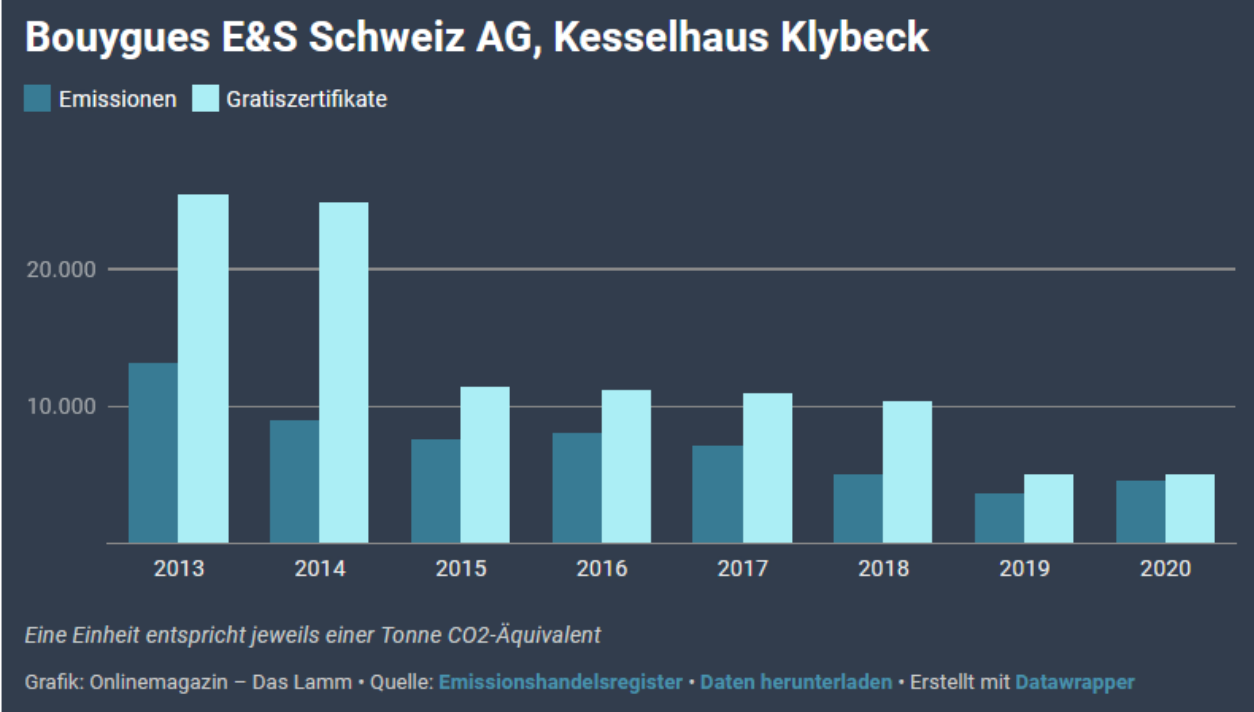
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Holcim Eclépens	237.677.784	808.620	58.550.240

Bohrpfahlbeton nach SN EN 206						
Sortenbezeichnung	Druckfestigkeit	Konsistenz	Grösstkorn Dmax [mm]	Preis ab Werk [CHF/m ³]	Energie-Zuschlag [CHF/m ³]	CO ₂ -Zuschlag [CHF/m ³]
Pfahlbeton – Einbringen im Trockenem – P1-H						
HN01	C25/30	F4	32	231.30	6.00	3.40
Pfahlbeton – Einbringen unter Wasser – P2-I						
IN01	C25/30	F5	32	235.30	6.00	3.40

CO₂-ZUSCHLAG

Der Klimawandel ist eine der grössten globalen Herausforderungen. An der Klimakonferenz in Paris Ende 2015 wurde für die Zeit nach 2020 ein neues Übereinkommen verabschiedet, welches alle Staaten zur Reduktion von Treibhausgasemissionen verpflichtet. Ziel ist es, die durchschnittliche globale Erwärmung auf 1.5°C zu begrenzen. Das Cembureau, der Verband der europäischen Zementindustrie, ist sich diesbezüglich seiner Verantwortung bewusst und hat eine strategische Roadmap mit Etappenzielen entwickelt. Für unsere Zukunft bedeutet dies, dass wir entlang der gesamten Zement- und Beton-Wertschöpfungskette Wege identifizieren, um bis zum Jahr 2050 CO₂-neutral zu produzieren.

Die Europäische Union hat bereits im Jahr 2005 den **EU-Emissionshandel (EU-EHS)** eingeführt, dem die Schweiz seit 2021 unterliegt. Hier werden die für jede Tonne freigesetztes CO₂ benötigten Emissionszertifikate frei am Markt gehandelt. Als erstes globales Baustoffunternehmen unterzeichnete Holcim die Initiative «Business Ambition for 1.5°C»



Dark blue: emissions
Light blue: free emissions permits

3) Possible stories: backdoors and strategies in the ETS

c) Klybeck: Industry disappears, EHS remains

Reductions: minus 65%

- How did they achieve the reductions?
 → The owners: *“The Klybeck area between ... is being 'transformed' and will gradually grow together with the surrounding neighborhoods over the next few decades.*

CO2-tax not paid Estimated costs via ETS Estimated value of emission allowances

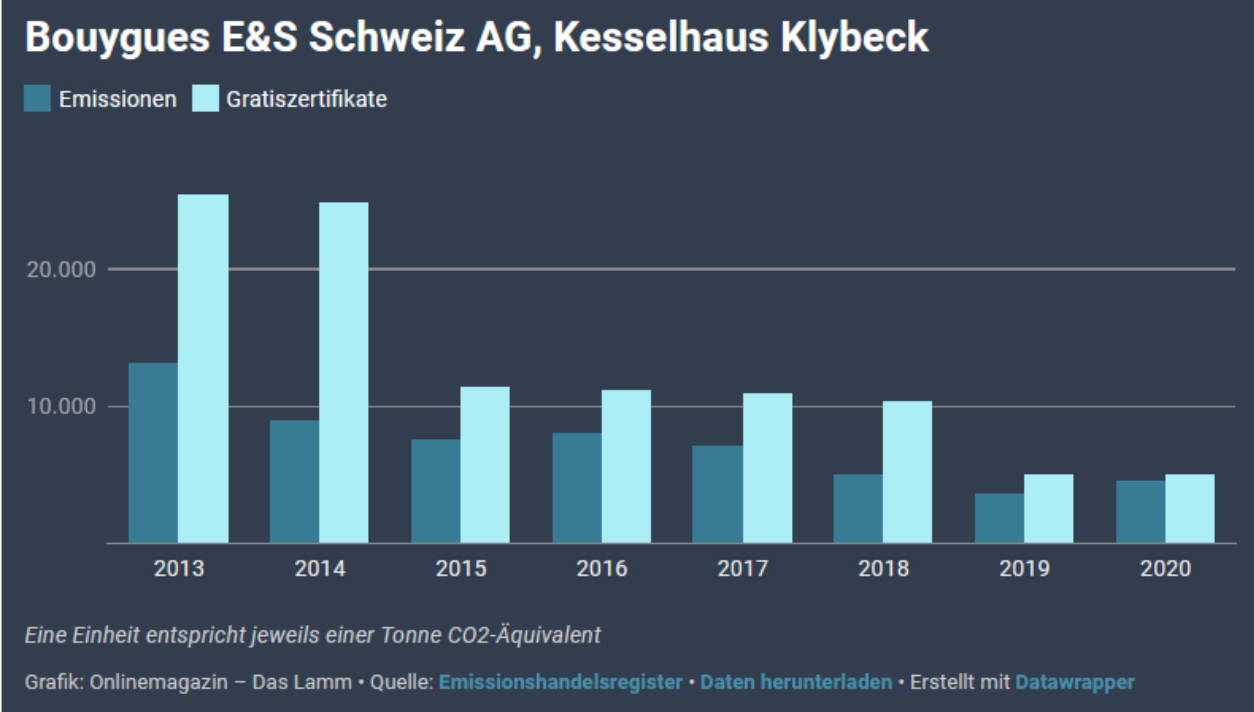
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Bouygues E&S Schweiz AG <small>Kesselhaus Klybeck</small>	4.023.156	34.702	5.076.080





Leasing

Restaurants, studios, offices, handicraft businesses, event locations, cultural meeting places and much more: The multifaceted Klybeck site with its industrial buildings steeped in history offers enormous potential in the coming years for innovative companies that appreciate the unique environment and would like to set their own impulses and accents in the redevelopment of the future quarter.



Dark blue: emissions
Light blue: free emissions permits

Namen	CO ₂ -tax not paid	Estimated costs via ETS	Estimated value of emission allowances
Bouygues E&S Schweiz AG <i>Kesselhaus Klybeck</i>	Erlassene CO₂-Abgaben in CHF <small>Davon wurden die EHS-Firmen befreit.</small> 4.023.156	Kosten via EHS in CHF <small>Das mussten die Firmen anstelle der CO₂-Abgabe schätzungsweise bezahlen.</small> 34.702	Geschätzter Wert der EHS-Zertifikate in Reserve in CHF <small>Zertifikatspreis Stand. 25. Jan. 2023</small> 5.076.080

3) Possible stories: backdoors and strategies in the ETS

c) Klybeck: Industry disappears, EHS remains

Reductions: minus 65%

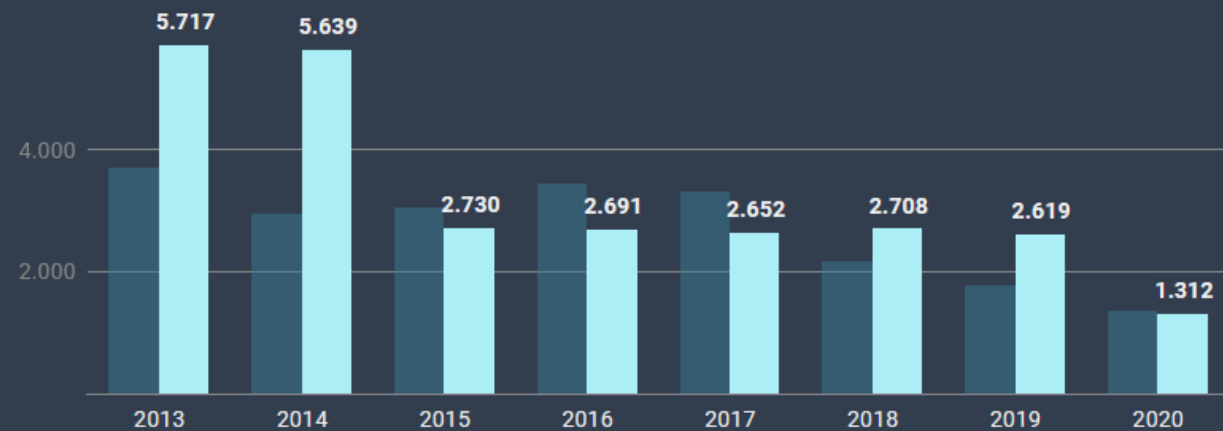
- How did they achieve the reductions?
 → The owners: *“The Klybeck area between ... is being 'transformed' and will gradually grow together with the surrounding neighborhoods over the next few decades.*

- When to get out of the ETS ?
 → *Federal Office for the Environment (Bafu): As long as the plants exist, with which the performance of an activity according to Annex 6 of the CO₂ Ordinance remains possible, the operator of the plants remains in principle in the ETS*



Dottikon Exclusive Synthesis, Dottikon

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CO ₂ -tax not paid	Estimated costs via ETS	Estimated value of emission allowances
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Dottikon Exclusive Synthesis <i>Dottikon</i>	1.572.960	20.748	478.000

3) Possible stories: backdoors and strategies in the ETS

d) Dottikon: no adaptation of free allocations

- 2015: decrease in free emission rights → did the ETS suddenly become stricter?

- No: adaptations were only made when the activity rate dropped by at least 50% (in the last trading period, currently at - 15%)

- Conclusion: ETS did not become more strict in 2015, but before that Dottikon probably got too much.



THANKS

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