

# **Argus** European Emissions Markets

Daily European greenhouse gas markets, news and analysis

Issue 24-84 | Tuesday 30 April 2024

#### MARKET COMMENTARY

#### EU allowances rebound

EU emissions trading system (ETS) allowances rallied on Tuesday to recover recent losses and post a firm month-onmonth increase.

The EU ETS December 2024 contract closed at  $\le 68.82/t$  of CO2 equivalent (CO2e), which was up by  $\le 3.12/t$  CO2e from Monday to reverse the previous two sessions' losses and post its highest close since 18 April. The product ended the month  $\le 6.87/t$  CO2e above where it had closed March, marking its second consecutive month-on-month gain and its largest since December.

Tuesday's gains pulled the contract back to a premium of roughly €2.25/t CO2e to its 20-day moving average, after having switched to a discount to the key technical level for the first time in over three weeks in the previous session.

The front year rose over the majority of Tuesday's session, posting an intraday low of €65.38/t CO2e in the first hour of trading and standing at €67.35/t CO2e by the time of the day's primary market auction of allowances at 10:00 BST (09:00 GMT).

The EU-wide sale for some 3.1mn permits drew bids for 4.41mn allowances, producing a bid-to-cover ratio of 1.42. This was down from 1.50 in the previous such auction and the lowest for any EU-wide sale since the first of the month. Cover ratios turned out at an average of 1.58 over April as a whole, exactly in line with the averages for both February and March.

Tuesday's auction cleared at €65.26/t CO2e, which was below trades of €65.40/t CO2e seen on the spot product in the secondary market in the 10 minutes leading up to the sale's close.

The auction's weak demand and price settlement limited upside to the front year, which stabilised to trade close to €67.50/t CO2e over the remainder of the morning and early afternoon. But renewed buying interest from around 13:30 BST pulled the product out of this range and into a steady rise, which peaked at an intraday high of €69.90/t CO2e shortly before market close.

The UK ETS December 2024 contract closed at £35.68/t CO2e (€41.80/t CO2e), having edged up by £0.21/t CO2e from Monday to halt a run of losses which had seen the product decline by £1.89/t CO2e cumulatively over the previous three sessions.

#### **PRICES**

EU allowa	nces			€/t CO2e
Scheme	Period	Bid	Offer	+/-
EU ETS	Spot	67.04	67.06	+3.05
EU ETS	Dec 2024	68.81	68.83	+3.12
EU ETS	Mar 2025	69.65	69.67	+3.18
EU ETS	Dec 2025	71.57	71.67	+3.25
EU ETS	Dec 2026	74.05	74.55	+3.37
EU ETS	Dec 2027	76.55	77.55	+3.35

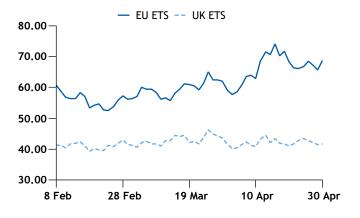
UK allowa	UK allowances						
Scheme	Period	Bid	Offer	+/-			
UK ETS	Spot	34.43	34.53	+0.17			
UK ETS	Dec 2024	35.67	35.69	+0.21			
UK ETS	Mar 2025	35.78	36.78	+0.21			
UK ETS	Dec 2025	37.28	38.28	+0.18			
UK ETS	Dec 2026	39.28	40.28	+0.18			
UK ETS	Dec 2027	41.78	43.78	+0.18			

The product ended the month £1.65/t CO2e below where it had closed March, its first month-on-month fall since January, as it failed to find support from any last-minute buying ahead of the scheme's annual compliance deadline on 30 April.

The contract closed on average around €24.20/t CO2e below its EU counterpart across April, compared with an average discount of €16.65/t CO2e in March.

EU ETS Dec 2024 vs UK ETS Dec 2024

€/t CO2e



#### **AUCTION AND EXCHANGE SETTLEMENTS**

EU ETS primary mark	ket auction results						
Latest auction date	Auction type	Host plat- form	Auctions remaining (2024)	Auction Volume (mn) remaining (2024)	Index type	Latest values	Change
	Spot Market - EU Primary Auction CAP3 - EUA	EEX	96 left out of 142	358.8755 left out of 501.4575	Price (€/t CO2e)	65.26	+1.74
					Bids (mn)	4.4070	-0.2320
					Volume (mn)	3.0995	+0.0000
					Cover ratio	1.42	-0.08
					Participants	26	+1
	Spot Market - EU Primary Auction CAP3 - EUA	EEX	97 left out of 142	361.9750 left out of 501.4575	Price (€/t CO2e)	63.52	-1.56
					Bids (mn)	4.6390	-0.5810
					Volume (mn)	3.0995	+0.0000
					Cover ratio	1.50	-0.18
					Participants	25	-3
Fri /6-Δnr-/U/4	Spot Market - German Pri- mary Auction - EUA	EEX	32 left out of 46	80.8755 left out of 106.0195	Price (€/t CO2e)	65.66	-2.11
	•				Bids (mn)	3.4515	-0.1200
					Volume (mn)	1.7960	+0.0000
					Cover ratio	1.92	-0.07
					Participants	25	-2

UK ETS primary ma	rket auction results						
Latest auction date	Auction type	Host plat- form	Auctions remaining (2024)	Auction Volume (mn) remaining (2024)	Index type	Latest values	Change
Wed, 17-Apr-2024	Spot Market - UK Primary Auction - UKA	ICE	17 left out of 25	46.9010 left out of 68.9730	Price (€/t CO2e)	33.50	+0.80
					Bids (mn)	3.6275	-0.3010
					Volume UKA (mn)	2.7590	+0.0000
					Successful Bids	19	+1
					Participants	21	+1

Ice, 17:00 London T	ime, 30 April 2024						
Month	Open	High	Low	Settle	Open Interest	Cumulative Vol	Weighted Avg
EU							€/t CO2e
EUA Dec 24	65.95	69.60	65.38	68.52	299350.00	31133.00	67.78
EUA Dec 25	68.60	72.36	68.30	71.32	130858.00	3552.00	70.58
EUA Dec 26	72.62	74.35	72.62	74.00	20790.00	111.00	73.37
EUA Dec 27	76.30	76.50	76.30	76.75	3437.00	53.00	76.42
Total						34849	
UK							£/t CO2e
UKA Dec 24	35.33	36.00	35.20	35.78	37399.00	1732.00	35.59
UKA Dec 25	na	na	na	37.88	1801.00	27.00	na
UKA Dec 26	na	na	na	39.88	na	0.00	na
Total						1759	



#### G7 puts timeframe on 'unabated' coal phase-out

G7 countries on Tuesday committed to phasing out "unabated coal power generation" by 2035- putting a timeframe on a coal phase-out for the first time.

The communique, from a meeting of G7 climate, energy and environment ministers in Turin, northern Italy, represents "an historic agreement" on coal, Canadian environment minister Steven Guilbeault said. Although most G7 nations have set a deadline for phasing out coal-fired power, the agreement marks a step forward for Japan in particular, which had previously not made the commitment, and is a "milestone moment", senior policy advisor at think-tank E3G Katrine Petersen said. The G7 countries are Italy — this year's host — Canada, France, Germany, Japan, the UK and the US. The EU is a non-enumerated member.

But the pledge contains a caveat in its reference to "unabated" coal-fired power — suggesting that abatement technologies such as carbon capture and storage could justify its use, while some of the wording around a deadline is less clear. The communique sets a timeframe of "the first half of [the] 2030s or in a timeline consistent with keeping a limit of 1.5°C temperature rise within reach, in line with countries' net-zero pathways".

OECD countries should end coal use by 2030 and the rest of the world by 2040, in order to align with the global warming limit of 1.5°C above pre-industrial levels set out in the Paris Agreement, according to research institute Climate Analytics.

The countries welcomed the outcomes of the UN Cop 28 climate summit, pledging to "accelerate the phase out of unabated fossil fuels so as to achieve net zero in energy systems by 2050". It backed the Cop 28 goal to triple renewable energy capacity by 2030 and added support for a global target for energy storage in the power sector of 1.5TW by 2030.

The group committed to submit climate plans — known as nationally determined contributions (NDCs) — with "the highest possible ambition" from late this year or in early 2025. And it also called on the IEA to "provide recommendations" next year on how to implement a transition away from fossil fuels. The G7 also reiterated its commitment to a "fully or predominantly decarbonised power sector by 2035" — first made in May 2022 and highlighted roles for carbon management, carbon markets, hydrogen and biofuels.

Simon Stiell, head of UN climate body the UNFCCC, urged the G7 and G20 countries to lead on climate action, in a recent speech. The group noted in Tuesday's outcome that "further actions from all countries, especially major economies, are required".

The communique broadly reaffirmed existing positions on

climate finance, although any concrete steps are not likely to be taken ahead of Cop 29 in November. The group underlined its pledge to end "inefficient fossil fuel subsidies" by 2025 or earlier, but added a new promise to "promote a common definition" of the term, which is likely to increase countries' accountability. The group will report on its progress towards ending those subsidies next year, it added.

#### Fostering energy security

The communique placed a strong focus on the need for "diverse, resilient, and responsible energy technology supply chains, including manufacturing and critical minerals". It noted the important of "guarding against possible weaponisation of economic dependencies on critical minerals and critical raw materials" — many of which are mined and processed outside the G7 group.

Energy security held sway on the group's take on natural gas. It reiterated its stance that gas investments "can be appropriate... if implemented in a manner consistent with our climate objectives" and noted that increased LNG deliveries could play a key role.

By Georgia Gratton

#### Denmark narrows gap to 2030 climate target

The gap between Denmark's current emissions and the reduction needed to meet its 2030 climate target has narrowed significantly over the past year, according to the latest government projections.

The government expects current plans to reduce the country's emissions by around 68pc, compared with 1990 levels, by 2030, representing a shortfall in cuts of some 1.5mn t of CO2 equivalent (CO2e) to reach its mandated target of a 70pc reduction.

This compares with a projected shortfall of 5.4mn t CO2e last year. And "considerable implementation work is pending" before 2030, the climate, energy and supply ministry said on Tuesday on the publication of the annual projections.

The ministry expects the country to cut its emissions by 55.5pc by 2025, compared with 1990 levels, surpassing its target of a 50-54pc reduction.

The reduction in the estimated gap in cuts to meet Denmark's 2030 climate target year on year stemmed partly from changes to the way carbon absorption by trees is modelled, as well as new information about emissions from low-lying soils. More electric vehicles have also been sold than previously thought, and changes to Swedish taxes have reduced the incentive for refuelling in Denmark.

The majority of expected emissions cuts out to 2030 are a result of the planned decarbonisation of electricity and district heating, as the country phases out its remaining



coal-fired power plants and replaces fossil pipeline gas with biogas. Agriculture is expected to account for the largest share of emissions by the end of the decade.

Denmark remains off track to meet its mandated emissions reductions for 2021-30 under the EU's effort-sharing regulation by some 100,000t CO2e, and to record a shortfall in its required cuts under EU rules in the land use, land use change and forestry sector. But it is expected to surpass its 2030 cuts in the latter by 200,000t CO2e.

The Danish climate council warned in its annual report last month that there is a "significant risk" that policies designed to deliver Denmark's 2030 emissions cut target will not lead to the expected reductions.

The council pointed in particular to the country's CO2 tax on industry, the effect of which it said is "very likely overestimated", an announced tax on greenhouse gases from agriculture "fraught with high risk", and potential issues arising from tight schedules for the development of carbon capture and storage.

By Victoria Hatherick

#### EU targets airline SAF. CO2 greenwashing

The European Commission is giving 20 airlines 30 days to bring their commercial practices into line with EU consumer law, pointing to several types of potentially misleading green claims.

The commission listed the "potentially" misleading practices as creating the "incorrect impression that paying an additional fee to finance climate projects with less environmental impact or to support the use of alternative aviation fuels can reduce or fully counterbalance the CO2 emissions".

The commission noted that firms used the term sustainable aviation fuels (SAFs) without clearly justifying the environmental impact of such fuels. Claims that an airline is moving towards net zero greenhouse gas emissions were also identified without clear and verifiable commitments, targets or independent monitoring. CO2 "calculators" for specific flights did not provide sufficient scientific proof, the commission found.

European consumer organisation Beuc filed an official complaint on the subject to the commission in June 2023, targeting over 17 airlines including Air France, Brussels Airlines, KLM, Lufthansa, Ryanair, SAS, Vueling and Wizz Air. The practices Beuc identified included the potentially misleading claims finally highlighted by the commission.

If the airlines involved do not take necessary steps, consumer authorities can decide to take further enforcement actions, including sanctions, the commission said.

"One can never be sure that the trees planted to compensate a flight's high emissions will capture the carbon back into the ground — if they are planted at all," Beuc directorgeneral Monique Goyens said.

By Dafydd ab Iago

#### UN eyes policy crediting for carbon markets

The UN is considering extending the scope of carbon mitigation credit generation under the Paris climate agreement to policy implementation.

The UN's climate arm has tasked research institute Perspectives Climate Group senior founding partner Axel Michaelowa with drawing up a paper on how to incorporate policy crediting into the new carbon market being developed under Article 6.4 of the Paris deal. This is expected to be finalised by the UN Cop 29 climate conference in Azerbaijan in November following persistent disagreements between countries at previous summits.

Policy crediting is increasingly viewed as crucial amid the rising urgency to scale up mitigation activities, Michaelowa said at an industry event in Zurich on Monday.

But policy crediting presents challenges, such as how to determine the additionality of the instruments for mitigation efforts.

The World Bank, which developed the first ever policy crediting activity — the Transformative Carbon Asset Facility - in 2016, determines additionality indirectly as the difference between the facility's baseline and actual emissions.

Michaelowa believes this is insufficient, urging separate additionality tests to prove the policy instrument mobilises mitigation.

An eligible policy instrument typically closes the cost gap between mitigation and business-as-usual technologies, Michaelowa said. "Creditable" policy instruments are mandates, or financial incentives, for deploying low-carbon technologies or behaviours.

Policies that reverse previous bad governance by eliminating obstacles to mitigation activities also qualify, Michaelowa said, for example a grid operator enforcing a stop on renewable power growth to ensure grid stability, as investments in the grid would be too costly.

Uzbekistan signed an agreement under the World Bank's facility in June 2023 under which it can sell carbon credits issued for the emissions reductions resulting from its cuts to high fossil fuel subsidies. The resulting funds are used to mitigate the impact of rising energy prices on the lowest income consumers, and fund awareness campaigns on the need for cost-covering energy tariffs.

Uzbekistan expects to reduce its emissions by 60mn t of CO2 equivalent (CO2e) between 2022-27 as a result of the cuts, of which 2mn-2.5mn t CO2e are attributed directly to the facility's intervention, funded with \$46.25mn by donor



countries to result in a carbon price of between \$18.50-23.12/t CO2e.

The World Bank is looking at other countries and sectors to apply the lessons learned from the Uzbekistan pilot, its senior climate finance specialist Nuyi Tao said. By Chloe Jardine

#### Eurofer cuts EU steel consumption forecast

European steel association Eurofer has downgraded its apparent steel consumption outlook for this year to 3.2pc from a previous forecast of 5.6pc owing to worsening geopolitical tensions, economic uncertainty, energy prices, inflation and higher interest rates.

In February, Eurofer revised its 2024 consumption outlook downward to 5.6pc growth from a previous 7.6pc, citing the same reasons, with the impact of those factors now greater than expected. Consumption in 2023 decreased by 9pc.

The association expects moderate quarterly improvements throughout the year, but volumes are anticipated to remain below pandemic levels because of high uncertainty in the steel industry driven by economic ambiguity in the EU.

Steel-using industries' output is set to decline by 1pc this year, whereas last year more resilient production levels were expected, with an increase of 1.1pc. The decrease is underpinned by the contracting construction sector, which accounts for 35pc of steel consumption in the EU. A moderate pick-up of 2pc is expected in the steel-using industries in 2025.

"We need a robust business case in Europe for a successful transition, with a set of enabling conditions under the umbrella of an effective EU industrial policy ranging from competitive clean energy, robust trade measures ensuring an international level playing field, to funding support and lead markets for green products," Eurofer director general Axel Eggert said.

By Elif Eyuboglu

#### Germany confirms winter grid reserves

German power grid regulator Bnetza on Tuesday confirmed the required grid reserve for the 2024-25 and 2026-27 winter half-years.

For winter 2024-25, Bnetza confirmed a need for 6.95GW of grid reserve capacity. Of this, 5.58GW will be domestic plants and the remaining 1.37GW will be covered by foreign units. Germany's transmission system operators will invite power plant operators abroad to register their interest in the grid reserve by mid-May.

The winter 2024-25 grid reserve is lower than the first estimate for the period in 2020 of around 8.04GW, and

is below the 8.26GW in the winter 2022-23 grid reserve. The lower requirement comes as individual grid expansion projects have been completed, Bnetza said, as well as the higher utilisation of the extra-high voltage grid, which is permitted until the end of March 2027.

For winter 2026-27, Bnetza confirmed a total of 9.2GW for the grid reserve. The reason for the increase is higher expected consumption as well as the expansion of crossborder trading capacities as required at a European level, the regulator said. Bnetza pointed to increased onshore wind expansion in northern Germany and large-scale ground-mounted solar photovoltaic systems located far from demand centres combining with an anticipated lag in grid expansion, preventing output from being transported to high-demand regions.

Several major projects aiming to address Germany's limited north-south connectivity are expected to be completed by the end of the decade, including the 4GW SuedOstLink line, the first section of which has been approved by Bnetza, transmission system operator Tennet said. The project is expected to come on line in two stages — the first in 2027 and the second in 2030. And the 4GW SuedLink line is expected to be commissioned in 2028, while Bnetza last month confirmed the planned 4GW SuedWestLink line in its approved 2037-45 grid development plan. By Helen Senior

#### German PV tender strongly oversubscribed

Germany's first solar photovoltaic (PV) tender for groundmounted systems this year is the fourth round in a row to be significantly oversubscribed, with the volume-weighted average bid value at its lowest since the last tender of 2021.

A total of 569 bids providing a combined 4.1GW of capacity were submitted for the record high 2.23GW offered through the tender, data from grid regulator Bnetza show. Capacity offered through the tender was up by more than 600MW from the previous tender owing to pressure to meet expansion targets, Bnetza said.

This is the fourth consecutive tender to be significantly oversubscribed. Bids were in a range of €36.20-54.90/MWh, with the volume-weighted average of successful bids at its lowest since the third 2021 tender round, at €51.10/MWh.

Successful bids exceeded total capacity offered through the tender by 3MW across 326 bids. Around half of the successful bids were for projects in Bavaria, with 156 awards for a total of 806MW. Projects in Schleswig-Holstein accounted for 221MW awarded across 17 bids, closely followed by Lower Saxony, where 20 bids were awarded for a combined 199MW. And 39 bids were excluded owing to errors, with the exclusion rate remaining at a "consistent level" with previous



tenders, according to Bnetza.

The next ground-mounted solar PV tender will take place at the start of July.

By Adrien Seewald

#### UK grid quickens connection of 7.8GW units

UK transmission asset owner National Grid has offered earlier connection dates to 7.8GW of projects looking to connect to the power grid as part of its Technical Limits programme, it announced on Tuesday.

A total of 203 projects with a combined capacity of 7.8GW have received improved offers for a connection date, National Grid said, with an average acceleration of 6.5 years. Some projects have received a new date that is 10 years sooner than their previous offer.

The Technical Limits programme allows projects to connect to lower-voltage distribution networks prior to upgrades and reinforcements taking place within the highvoltage transmission networks. A total of 393 projects are eligible for the programme, with a further 190 able to receive improved offers once they have completed the connection offer process, National Grid said.

The 24MW Horsey Levels solar farm in Somerset, England, became the first project to be energised under the programme when it was connected to the grid last month. A power purchase agreement for the plant's output was announced earlier this month.

The queue to connect to the UK's transmission and distribution networks has swollen in recent years, thanks in large part to a spike in applications for renewables and battery energy storage systems. The country's electricity system operator National Grid ESO expects it to exceed 800GW by the end of 2024 — more than four times the total capacity that the firm estimates will be needed by 2050. To combat this, the firm has proposed several reforms that aim to remove so-called "zombie projects" that are progressing slowly or not at all, and move more viable developments up the queue.

By Matt Bowen

# Argus is excited to announce the launch of Argus Workspaces



Argus Workspaces provide an easier and interactive way for you to get the most out of your Argus subscription. You can analyse pricing data and news by building your own dashboard that is tailored to fit your needs.

#### With Workspaces you can:

- Find relevant information more quickly and easily by showing only what's relevant to you
- Gain insight by organising content in a way that makes sense to you
- Combine data and news for various **commodity markets** to ensure you have the view you need
- Share your Workspace views with your team to ensure everyone can easily access the same insights

Click here to access Argus Workspaces »

European weather - Departure from	n norm	al tempera	tures									°C
		1 May		2 May		3 May		4 May		5 May	Preci	pitation
Location												(mm)
	Avg	± normal*	Avg	± normal*	Avg	± normal*	Avg	± normal*	Avg	± normal*	5-day	15-day
UK — London Heathrow	13.5	1.0	15.7	3.2	13.3	0.7	13.3	0.6	14.4	1.7	26.2	37.5
Norway — Bergen Florida	16.2	6.6	17.8	8.1	18.3	8.5	18.5	8.7	16.3	6.4	7.3	35.1
Norway — Oslo Blindern	14.6	4.7	15.1	5.1	15.6	5.4	15.7	5.4	13.8	3.3	2.2	12.3
France — Paris Orly	15.7	2.2	13.8	0.2	12.9	-0.8	13.4	-0.3	15.3	1.5	21.5	39.4
The Netherlands — Amsterdam Schiphol	16.4	4.3	17.7	5.5	13.8	1.5	13.2	0.8	13.7	1.3	12.6	26.6
Germany — Essen	18.2	5.6	18.0	5.4	13.9	1.2	13.9	1.1	14.7	1.9	18.7	34.1
Germany — Berlin Tempelhof	20.4	7.5	20.6	7.6	19.0	5.9	16.8	3.6	16.2	2.9	6.9	18.5
Italy — Milano Malpensa	15.3	-1.4	13.2	-3.6	13.6	-3.4	14.6	-2.5	15.5	-1.8	54.3	89.2
Italy — Rome Fiumicino	15.9	0.5	14.0	-1.9	13.2	-3.8	14.4	-2.4	15.1	-1.2	32.6	41.2
Poland — Warsaw Okecie	18.2	5.9	18.4	6.0	18.3	5.7	17.3	4.6	15.3	2.5	3.3	16.5
Czech Republic — Prague Ruzyne	18.9	6.8	18.9	6.7	16.3	4.0	15.2	2.8	15.3	2.9	10.1	22.6
Hungary — Budapest Lorinc	17.7	2.2	17.4	1.8	16.8	1.1	17.8	2.0	17.7	1.8	11.1	25.6
Serbia — Belgrade Surcin	19.0	3.2	18.8	2.8	15.5	-0.6	16.2	0.0	16.9	0.6	22.6	41.7
Romania – Bucharest Imh	15.4	1.0	14.1	-0.5	15.2	0.5	14.9	0.0	15.1	0.0	10.6	34.8
Spain — Madrid Barajas	10.6	-4.3	10.2	-4.9	11.6	-3.6	14.8	-0.5	16.9	1.4	8.7	20.8

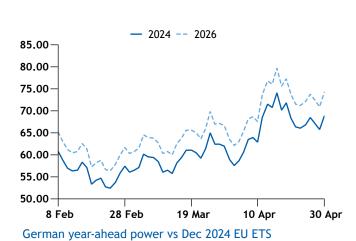
€/t CO2e

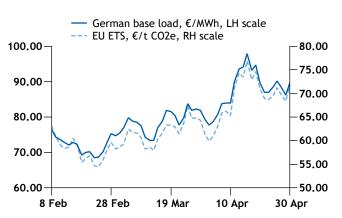
<sup>\*</sup>normal means cleaned 10-year average (2004-2013 inclusive)



Ensemble averages and cleaned weather data all supplied by Speedwell Weather Limited (12:00 GMT). For more information visit: www.speedwellweather.com

EU ETS Dec 2024 and 2026 allowances





#### Exchange rate: \$ to €



Emissions-adjusted bunker fuel	\$/t
EU CO2 weekly snapshot, 25 Apr	71.366
Rotterdam/Antwerp 0.5%S fuel oil weekly avg., week ending 25 $$ Apr	587.700
Rotterdam/Antwerp 0.5%S fuel oil including CO2 cost*	811.874
Rotterdam/Antwerp 0.5%S fuel oil including CO2 price increase	38.14%
*1t of VI SEO emits 3 151t of CO2 according to IMO's 2014 guidelines	

Global emissions pricing, 29 Apr		
	Price	±
Global compliance carbon index \$/t	57.35	-0.88
Global green power index \$/MWh	3.50	-0.01



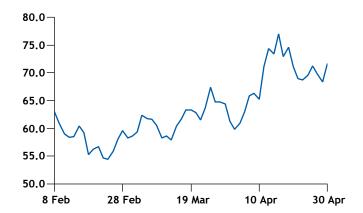
Verified emissions	from stationa	y installati	ons under t	he EU ETS					n	nn t CO2e
Country	2022	2021	2020	2019	2018	2017	2016	2015	2014	2013
Austria	26.63	28.70	27.01	29.54	28.38	30.53	28.97	29.46	28.02	29.77
Belgium	40.19	41.40	41.57	44.67	44.23	43.82	43.70	44.76	43.90	45.28
Bulgaria	33.95	28.94	23.85	29.19	31.03	34.91	33.41	36.26	34.31	32.70
Croatia	6.50	7.05	7.36	7.55	7.44	8.36	8.26	8.38	8.38	8.78
Cyprus	4.33	4.31	4.29	4.47	4.59	4.67	4.65	4.37	4.47	4.02
Czech Republic	57.20	57.87	54.68	62.52	66.91	66.98	67.53	66.65	66.69	67.71
Denmark	11.38	11.72	10.94	12.08	15.01	15.16	17.32	15.93	18.54	21.74
Estonia	8.41	6.85	5.62	8.49	13.85	14.67	13.45	11.89	14.97	15.92
Finland	19.08	20.29	19.56	23.22	26.14	25.01	27.09	25.36	28.94	31.49
France	85.43	88.22	82.85	95.05	98.15	107.53	102.48	100.09	100.92	117.02
Germany	356.75	356.68	322.29	365.31	425.10	439.74	454.97	457.71	463.40	483.00
Greece	32.91	33.25	31.73	40.48	47.11	49.58	46.31	49.89	55.38	58.64
Hungary	15.61	17.62	18.91	19.53	20.05	20.64	19.40	19.65	18.82	19.13
Iceland	1.88	1.84	1.78	1.81	1.85	1.83	1.78	1.81	1.75	1.78
Ireland	14.69	15.34	13.31	14.18	15.57	16.93	17.78	16.88	16.01	15.74
Italy	136.13	130.81	125.26	139.98	145.50	154.47	154.23	155.22	151.77	163.91
Latvia	1.72	2.06	2.02	2.49	2.61	2.05	2.20	2.31	2.35	2.65
Liechtenstein	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Lithuania	5.06	5.96	6.14	6.06	5.91	6.24	6.15	6.86	6.84	7.42
Luxembourg	1.13	1.32	1.38	1.50	1.47	1.49	1.50	1.66	1.93	1.85
Malta	0.18	0.20	0.29	0.17	0.18	0.16	0.00	0.10	0.78	0.88
Netherlands	68.72	74.12	74.09	83.73	87.39	91.43	93.88	94.13	89.08	86.97
Northern Ireland	3.00	3.11	2.81	2.75	2.98	3.42	3.98	3.83	3.81	4.07
Norway	22.48	22.68	23.40	24.31	24.93	25.14	24.92	25.41	24.66	24.41
Poland	173.84	181.71	162.40	172.02	186.46	189.50	185.19	186.91	185.90	194.24
Portugal	16.20	16.04	18.73	21.60	26.29	30.08	25.76	27.96	24.20	24.66
Romania	28.16	32.30	32.67	36.55	39.64	40.62	39.78	42.40	42.58	42.41
Slovakia	17.50	20.91	18.18	19.92	22.21	22.08	21.28	21.19	20.92	21.83
Slovenia	4.86	5.68	6.10	6.25	6.49	6.57	6.48	6.11	6.12	7.39
Spain	92.06	86.59	85.34	104.92	122.10	131.32	117.96	131.27	119.80	117.40
Sweden	17.84	18.57	16.72	18.90	20.01	19.77	19.89	19.24	19.33	20.15

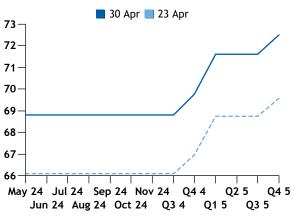
#### EU ETS Dec 2025 allowances

€/t CO2e

#### EU ETS forward curve

€/t CO2e





#### Spark spread calculations

Spark spreads for various thermal efficiencies are calculated from Argus outright fuel,  $CO_2$  emissions and electricity prices, and are not assessments based on actual spark-spread trades. Fuel, emissions and electricity prices are taken from the Argus European Electricity, Argus European Natural Gas, Argus Coal Daily International, Argus European Products and Argus European Emissions Markets daily reports.

A selection of spark and dark spreads are published in the print report. A full range of spark and dark spreads can be accessed through Argus Direct. Please contact sales@argusmedia.com to arrange access.

UK ETS and CSP adj	usted spark	and dark s	oreads	£/MWh
	NBP	55%	ARA Co	oal 40%
Contract	base load	peak load	base load	peak load
Working day ahead	6.010	9.010	-3.360	-0.360
May	-0.457	3.543	-10.853	-6.853
June	-0.647	3.453	-11.350	-7.250
July	2.101	5.851	-10.546	-6.796
August	-0.057	3.443	-	-
September	4.411	9.611	-	-
October	6.625	16.825	-	-
3Q24	2.101	6.301	-8.982	-4.782
4Q24	4.439	15.139	0.706	11.406
1Q25	5.745	18.845	5.221	18.321
2Q25	1.427	6.677	-4.929	0.321
Winter 2024	5.092	16.992	2.962	14.862
Summer 2025	1.161	6.511	-	-
Winter 2025	5.019	18.019	-	-
Summer 2026	0.212	5.362	-	-
2025	3.630	12.830	-1.010	8.190

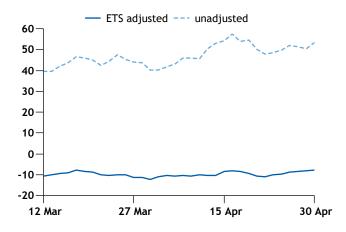
UK unadjusted spark spreads		£/MWh
	NBP 4	9.13%
Contract	base load	peak load
Working day ahead	18.162	21.162
May	12.148	16.148
June	11.995	16.095
July	14.773	18.523
August	12.548	16.048
September	16.720	21.920
October	18.815	29.015
3Q24	14.629	18.829
4Q24	16.242	26.942
1Q25	17.523	30.623
2Q25	13.896	19.146
3Q25	13.480	18.930
Winter 2024	16.883	28.783
Summer 2025	13.688	19.038
Winter 2025	17.372	30.372
Summer 2026	14.433	19.583
2025	15.907	25.107

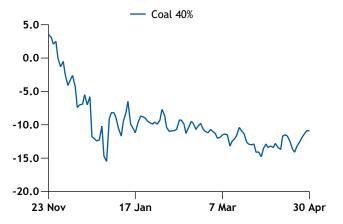
#### German calendar-year base-load dark

#### €/MWh

#### German year-ahead adjusted dark spread









German ETS adjusted	spark and dark s	preads		€/MWh
	Germany	VTP 55%	ARA Co	al 40%
Contract	base load	peak load	base load	peak load
Working day ahead	-36.785	-47.335	-50.636	-61.186
May	-17.617	-23.267	-32.136	-37.786
June	-11.699	-13.249	-25.801	-27.351
July	-8.390	-11.190	-24.144	-26.944
August	-8.521	-6.071	-	
September	-1.521	1.929	-	-
October	-2.621	9.329	-	-
3Q24	-6.194	-5.144	-20.624	-19.574
4Q24	3.164	21.514	-4.376	13.974
1Q25	6.910	21.460	1.761	16.311
2Q25	-9.054	-8.504	-18.171	-17.621
3Q25	-3.377	3.123	na	na
4Q25	5.559	23.459	-	-
2025	0.014	9.864	-7.911	1.939
2026	-3.858	6.042	-21.286	-11.386
2027	-8.353	1.897	-32.189	-21.939

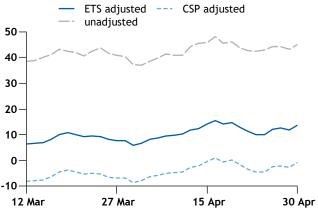
German unadjusted d	ark spreads	€/MWh	
	ARA Coal 40%		
Contract	base load	peak load	
Working day ahead	6.524	-4.026	
May	26.533	20.883	
June	32.868	31.318	
July	34.525	31.725	
3Q24	38.045	39.095	
4Q24	55.088	73.438	
1Q25	62.817	77.367	
2Q25	42.885	43.435	
3Q25	-	-	
2025	53.335	63.185	
2026	42.250	52.150	
2027	33.496	43.746	

#### UK calendar-year base-load dark

#### £/MWh

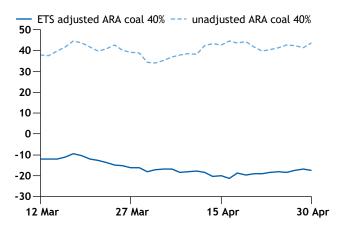
#### French calendar-year base-load dark

#### €/MWh



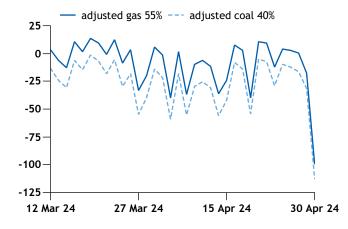


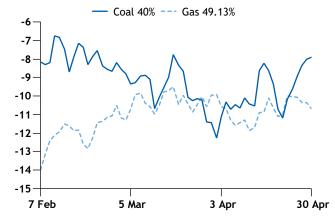




German year-ahead adjusted spark and dark







Dutch ETS adjusted spark and dark spreads €/MWh				
	TTF	55%	ARA Coal 40%	
Contract	base load	peak load	base load	peak load
Working day ahead	-48.217	-99.017	-61.886	-112.686
May	-21.567	-34.367	-36.086	-48.886
June	-17.540	-26.490	-31.751	-40.701
July	-14.699	-21.849	-30.544	-37.694
3Q24	-10.849	-15.299	-25.424	-29.874
4Q24	1.205	15.155	-7.326	6.624
1Q25	3.082	16.882	-2.839	10.961
2Q25	-14.399	-13.499	-24.971	-24.071
2025	-4.613	1.987	-13.911	-7.311
2026	-4.477	1.573	-23.586	-17.536
2027	-7.721	-4.921	-33.239	-30.439

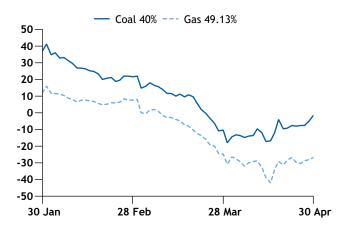
Italian ETS	adjusted	d spark a	nd dark s	preads		€/MWh
	PSV	55%	ARA Coal 40%		ARA Coal 40% (incl. fuel tax)	
Contract	base load	peak load	base load	peak load	base load	peak load
Day ahead	6.901	0.001	-5.386	-12.286	-9.613	-16.513
May	3.624	3.624	-8.986	-8.986	-13.214	-13.214
June	7.169	7.169	-4.951	-4.951	-9.179	-9.179
July	16.224	11.324	3.106	-1.794	-1.121	-6.021
3Q24	14.174	15.124	1.826	2.776	-2.401	-1.451
4Q24	20.323	32.223	12.974	24.874	8.746	20.646
1Q25	21.360	31.610	16.711	26.961	12.483	22.733
2Q25	5.987	11.687	-1.721	3.979	-5.948	-0.248
2025	12.714	19.914	5.689	12.889	1.462	8.662
2026	7.705	14.055	-9.086	-2.736	-13.313	-6.963

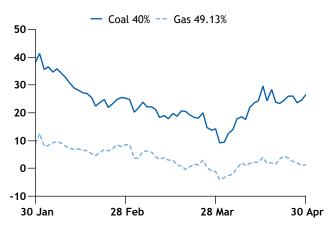
#### French front-month base-load spreads



#### German month-ahead base-load sparks

#### €/MWh



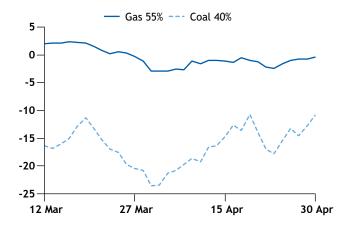


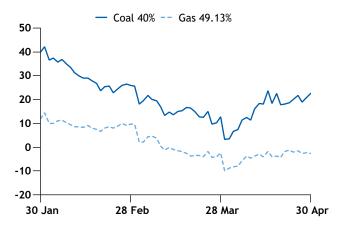
#### UK front-month base-load spark vs dark

#### £/MWh

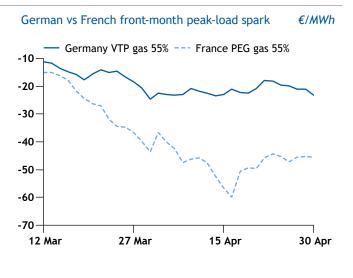
Dutch front-month base-load spreads

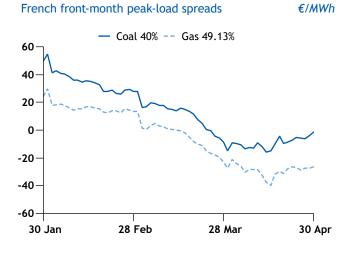
€/MWh

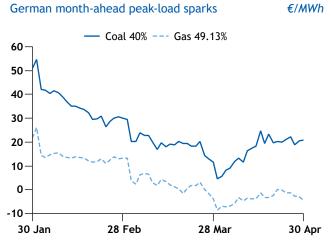


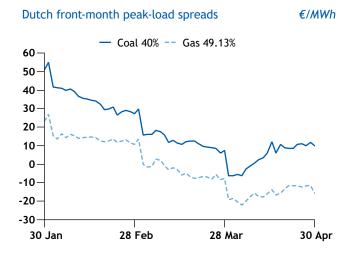


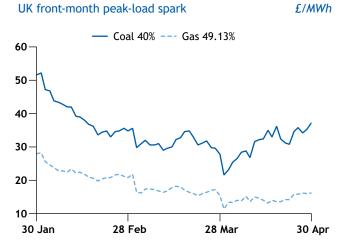
French ETS adjusted spark and dark spreads €/MWh					
	ARA Co	al 40%	Peg 55%		
Contract	base load	peak load	base load	peak load	
Working day ahead	-68.886	-70.886	-55.035	-57.035	
May	-60.236	-60.186	-45.626	-45.576	
June	-52.601	-50.001	-38.162	-35.562	
July	-41.894	-33.044	-25.640	-16.790	
3Q24	-38.074	-31.074	-23.135	-16.135	
4Q24	-5.476	9.124	4.146	18.746	
1Q25	3.661	25.461	10.673	32.473	
2Q25	-38.321	-33.721	-	-	
2025	-17.511	-5.011	-7.122	5.378	
2026	-37.136	-21.086	-	-	
2027	-41.439	-23.689	-	-	





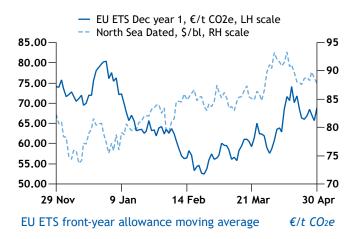


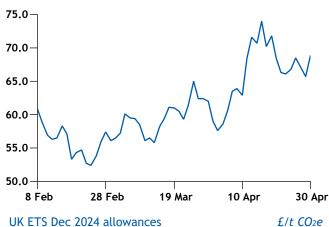


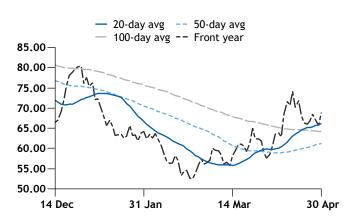


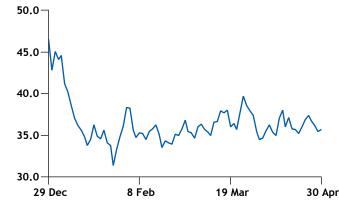
#### EU ETS Dec 2024 allowances

€/t CO2e











Argus European Emissions Markets is published by Argus Media group

Registered office Lacon House, 84 Theobald's Road. London, WC1X 8NL Tel: +44 20 7780 4200

ISSN: 1746-7837

#### Copyright notice

Copyright © 2024 Argus Media group

All rights reserved

All intellectual property rights in this publication and the information published herein are the exclusive property of Argus and/or its licensors (including exchanges) and may only be used under licence from Argus. Without limiting the foregoing, by accessing this publication you agree that you will not copy or reproduce or use any part of its contents (including, but not limited to, single prices or any other individual items of data) in any form or for any purpose whatsoever except under valid licence from Argus, Further, your access to and use of data from exchanges may be subject to additional fees and/or execution of a separate agreement, whether directly with the exchanges or through Argus.

#### Trademark notice

ARGUS, the ARGUS logo, ARGUS MEDIA, INTEGER, ARGUS EUROPEAN EMISSIONS MARKETS, other ARGUS publication titles and ARGUS index names are trademarks of Argus Media Limited. Visit www.argusmedia.com/Ft/trademarks for more information.

#### Disclaimer

The data and other information published herein (the "Data") are provided on an "as is" basis. Argus and its licensors (including exchanges) make no warranties, express or implied, as to the accuracy, adequacy, timeliness, or completeness of the Data or fitness for any particular purpose. Argus and its licensors (including exchanges) shall not be liable for any loss, claims or damage arising from any party's reliance on the Data and disclaim any and all liability related to or arising out of use of the Data to the full extent permissible by law.

All personal contact information is held and used in accordance with Argus Media's Privacy Policy https://www.argusmedia.com/en/privacy-policy

Publisher Adrian Binks

Chief operating officer Matthew Burkley

Global compliance officer Vladas Stankevicius

Chief commercial officer

President, Expansion Sectors Christopher Flook

Global head of editorial

Editor in chief Jim Washer

Managing editor Andrew Bonnington

Senior editor Claudia Perotti

Manager Justin Colley

Customer support and sales:

support@argusmedia.com sales@argusmedia.com

London, Tel: +44 20 7780 4200 Houston, Tel: +1 713 968 0000 Singapore, Tel: +65 6496 9966



### **Emissions**

illuminating the markets®



# Market-based solutions to decarbonisation in the EU and globally

## Why attend?



Stay informed on the expansion of the EU ETS into the transport and shipping industry, and ensure your business adheres to current government regulations for enhanced market integration within Europe, Asia, and the US.



Hear about the latest market dynamics through panel discussions, fireside chats, and presentations with investors, corporates, standards, energy experts and policymakers.



Gain insights directly from project managers about new technological innovations including BECCS, DACCS, and more.

# Network across the supply chain with:

- Government and regulation bodies
- Project developers
- Voluntary carbon markets and carbon registries
- Traders, brokers and financial intermediaries
- Corporations and utilities
- Consultants and analysts

# Sponsorship and exhibition opportunities:

Are you interested in establishing yourself as a leader in carbon markets? Do you want to showcase your products or elevate your business? Get in touch to find out more about tailored sponsorship packages.



Contact Beata Griskevic:
T: +44 (0) 20 8158 5518
E: sponsorship@argusmedia.com
for more information