

MARKET HEADLINES

- UK: Premium to Dutch April narrows
- Germany: Week ahead below average at expiry
- German EV registrations at record high in Dec
- Nasdaq to reduce number of Epad contracts
- Sweden approves Lithuania-Poland power cable
- Belgian nuclear generation falls in 2022: TSO
- Serbian net imports at 18-month low in December
- Albania taxes power producers' windfall profits
- Work on Bosnian hydro plant may begin in March

German year ahead base load

€/MWh



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PRICES

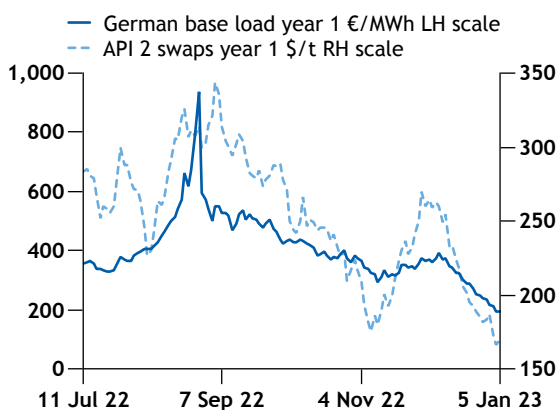
Argus European OTC assessments					€/MWh
	Day ahead	Week ahead	Month ahead	Quarter ahead	Year ahead
UK					
Base load	153.35	145.77	203.65	203.72	216.61
Peak load	176.06	176.04	253.74	242.77	283.09
Germany					
Base load	112.00	109.50	169.50	171.00	191.00
Peak load	138.60	140.75	203.85	191.50	252.75
Netherlands					
Base load	110.70	120.50	178.00	174.50	172.00
Peak load	143.00	146.65	204.75	192.30	221.90
France					
Base load	114.00	117.00	211.00	180.00	219.00
Peak load	150.60	158.90	270.00	211.50	368.00
Switzerland					
Base load	148.85	-	206.50	185.50	214.90
Peak load	184.60	-	256.80	207.75	277.55
Spain					
Base load	92.20	92.00	131.00	155.45	130.20
Peak load	-	-	-	-	-
Italy					
Base load	-	162.50	203.00	199.00	177.00
Peak load	-	178.25	244.20	223.20	201.15
Czech Republic					
Base load	118.80	115.50	181.50	173.75	193.00
Slovakia					
Base load	120.60	127.75	187.00	186.75	198.00
Peak load	-	-	-	-	-
Hungary					
Base load	142.00	139.50	196.50	190.50	201.25
Peak load	174.65	-	238.40	216.10	268.60
Serbia					
Base load	130.35	139.00	196.00	-	200.75
Peak load	-	-	-	-	-
Romania					
Base load	-	-	194.00	179.00	194.25
Peak load	-	-	-	-	-
Turkey					
Base load	-	-	195.51	164.84	139.71
Peak load	-	-	-	-	-

*UK year ahead is annual October/April. †No day-on-day change as first contract assessment

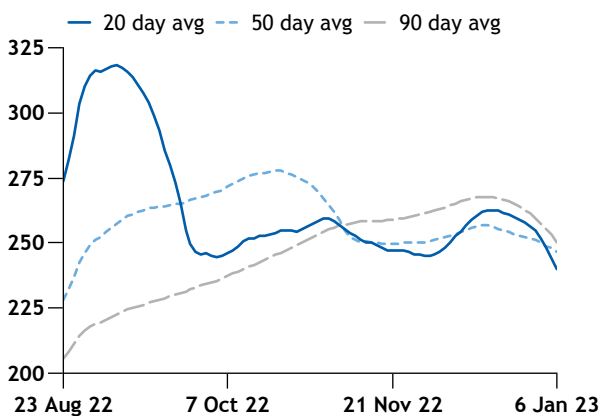
MARKET SUMMARY

Base load differentials to Germany					€/MWh
Country	Week ahead	Month ahead	Quarter ahead	Year ahead	
UK	+36.27 ▲	+34.15 ▲	+32.72 ▲	-	
France	+7.50 ▲	+41.50 ▲	+9.00 ▲	+28.00 ▼	
Switzerland	-	+37.00 ▼	+14.50 ▼	+23.90 ▼	
Netherlands	+11.00 ▲	+8.50 ▲	+3.50 ▲	-19.00 ▲	
Spain	-17.50 ▲	-38.50 ▲	-15.55 ▲	-60.80 ▲	
Italy	+53.00 ▼	+33.50 ▼	+28.00 ▼	-14.00 ▼	
Czech Republic	+6.00 ▼	+12.00 ▼	+2.75 ▼	+2.00 ▼	
Slovakia	+18.25 ▲	+17.50 ◀▶	+15.75 ◀▶	+7.00 ▲	
Hungary	+30.00 ▼	+27.00 ▼	+19.50 ▼	+10.25 ▼	
Serbia	+29.50 ▲	+26.50 ▲		+9.75 ▲	
Turkey	-	+26.01 ▼	-6.16 ▼	-51.29 ▼	

German year ahead vs coal



Germany year-ahead base-load moving averages €/MWh



Argus European OTC indexes					
		Day ahead	Month ahead	Season ahead	Total volume GWh
UK	€/MWh	133.90	184.82	177.71	2,442
Germany	€/MWh	112.00	175.27	-	946
France	€/MWh	112.72	211.00	-	177
Netherlands	€/MWh	110.70	186.53	-	511
Czech Republic	€/MWh	118.80	190.29	-	51

European day-ahead exchanges summary		€/MWh
		Base load
France		85.46
The Netherlands		86.35
Belgium		85.20
Germany		88.81
Austria Epex Spot		148.33
GB N2EX		119.27
GB Epex Spot		108.65
Ireland		205.96
Nordic system		77.13
Austria Exaa		125.62
Poland TGE		127.81
Czech Republic		106.57
Slovakia		134.08
Slovenia		141.59
Spain		23.77
Portugal		23.77
Greece		236.61
Romania		170.22
Italy Pun		192.76
Turkey		179.97
Croatia		149.18
Bulgaria		170.22
Hungary		175.22

UK AND IRISH MARKETS

Premium to Dutch April narrows

The UK base-load premium to the Dutch two front months widened on Friday while the April spread narrowed, just as cross-border capacity (CBC) auctions on the 1GW Britned interconnector were concluded. UK power prices recorded smaller movements compared with previous sessions.

February, March and April all traded on Friday for base-load delivery, while peak-load deals were seen for the two front months.

February base load was assessed just £0.50/MWh lower on the day at £179.50/MWh, while March gained £1/MWh to close at £169/MWh, narrowing its discount to the front month.

April was seen to trade twice at £190/MWh in the morning and £182.50/MWh in the middle of the afternoon. It was assessed lower at £178.50/MWh, slipping by £0.50/MWh from the previous day.

An auction for 75MW of Netherlands-GB capacity for April delivery was concluded on Friday at €21.51/MWh, while 110MW in the opposite direction fetched €5.30/MWh, with an implied UK premium of €16.21/MWh. April 2022 CBC had been auctioned at €16.70-17.80/MWh for the Dutch-GB direction and €0.10-0.15/MWh in the opposite direction in separate auctions last year.

And 50MW of Netherlands-GB capacity for the third quarter was sold on Friday at €12.10/MWh, with no auction yet for capacity in the reverse direction.

The UK April base-load premium to the Netherlands closed at the equivalent of €24.75/MWh on Friday, narrowing from €30.78/MWh on Thursday. The February and March premiums widened to €25.90/MWh from €20.42/MWh and to €12.46/MWh from €8.85/MWh, respectively.

Further out, the UK front quarter was unchanged at £180/MWh, with no trades seen for subsequent quarterly

Argus UK OTC assessments	£/MWh					
	Base load			Peak load		
	Buy	Sell	±	Buy	Sell	±
Working day ahead	133.00	137.00	26.00	153.00	157.00	22.00
Saturday	93.00	97.00	2.00	120.00	124.00	5.00
Sunday	93.00	97.00	12.00	112.00	132.00	15.00
Monday	133.00	137.00		153.00	157.00	
Weekend	90.00	100.00	7.00			
Week ahead	126.35	130.35	-4.15	153.00	157.00	-4.00
Week 3	130.00	170.00	-3.00	161.00	201.00	-2.00
Week 4	148.25	188.25	-1.75	183.00	223.00	-1.00
Week 5	169.50	209.50	-0.50	217.00	257.00	-2.00
February	177.50	181.50	-0.50	221.65	225.65	-1.85
March	167.00	171.00	1.00	188.15	198.15	5.15
April	176.50	180.50	-0.50	208.00	218.00	-2.00
May	176.00	186.00	0.50	210.40	220.40	0.45
June	175.60	185.60	0.05	210.05	220.05	0.05
July	174.50	184.50	-3.50	211.00	221.00	-3.00
Q2 2023	178.00	182.00	nc	210.50	218.50	-0.50
Q3 2023	170.30	174.30	-3.70	200.75	210.75	-3.25
Q4 2023	219.10	223.10	-0.90	320.00	328.00	4.00
Q1 2024	199.90	203.90	-1.10	264.00	274.00	-6.00
Annual April 2023	191.85	195.85	-1.40	251.35	255.35	-1.40
Summer 2023	175.15	177.15	-1.85	206.15	214.15	-1.85
Winter 2023/24	209.50	213.50	-1.00	292.50	300.50	-1.00
Summer 2024	158.25	166.25	0.25	194.25	204.25	-2.75
Winter 2024/25	195.00	205.00	nc	280.00	290.00	nc
Summer 2025	136.00	146.00	-2.70	166.00	176.00	-2.70
Winter 2025/26	154.00	158.00	nc	206.50	216.50	nc
Summer 2026	93.50	103.50	-5.00	113.85	123.85	-6.00

UK assessed OTC clean spark spreads	£/MWh		
	Bid	Ask	±
February	24.15	34.15	3.45
March	12.70	22.70	4.00
April	17.30	27.30	2.40
Q2 2023	16.90	26.90	2.30
Q3 2023	8.00	18.00	-1.20
Summer 2023	12.45	22.45	0.55
Winter 2023	31.95	41.95	0.15

Base load, 49.13pc efficiency

Argus UK OTC indexes	£/MWh			
	Daily		Cumulative	
	£/MWh	Vol GWh	£/MWh	Vol GWh
Working day ahead	133.90	45	116.17	236
Weekend ahead	89.12	301	87.26	467
Week ahead	130.39	26	132.35	424
Month ahead	184.82	144	178.95	362
Cumulative month-ahead January			342.47	1,745
Season ahead	177.710	676	263.080	16,619
Total reported trade (all contracts)				2,442

Average prices weighted by volume of trades

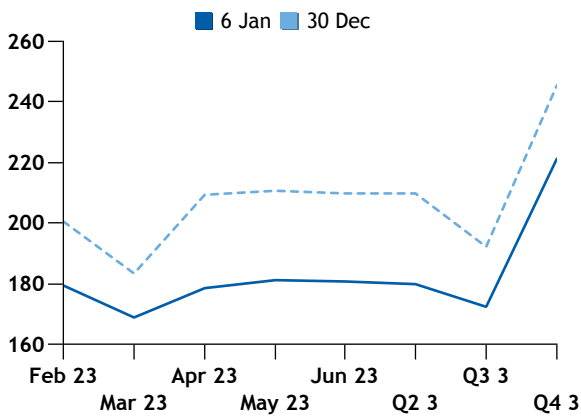
UK AND IRISH MARKETS

contracts.

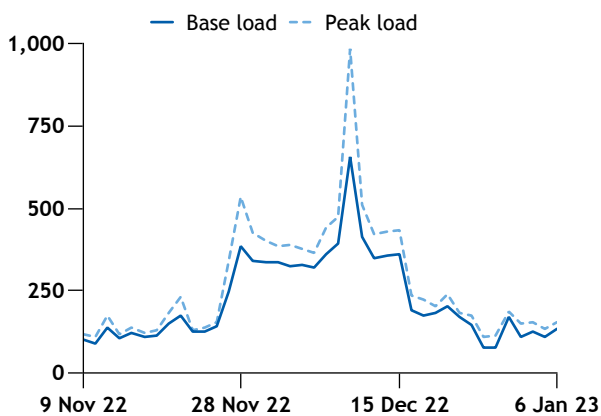
Summer 2023 and winter 2023-24 fell by £1.85/MWh and £1/MWh, respectively.

On the prompt, the N2EX settled at £105/MWh for Saturday, down only slightly from £107.89/MWh for Friday despite expectations of higher wind output and lower demand. The settlement on Epex Spot was much lower, at £95.65/MWh, down from £109.96/MWh in the previous day. Metered wind output is forecast to rise to 15.73GW on Saturday from 15.03GW on Friday.

UK forward curve base load



UK working day-ahead base load and peak load £/MWh



Argus UK Seasons	£/MWh	
Off peak	Buy	Sell
Annual April 2023	160.69	160.89
Summer 2023	157.16	157.36
Winter 2023/24	164.18	164.38
Summer 2024	141.59	141.79
Winter 2024/25	152.68	152.88
Summer 2025	124.23	124.43
Winter 2025/26	125.07	125.27
Summer 2026	87.09	87.29

N2Ex UK day ahead auction		
	£/MWh	±
Base load	105.00	-2.91
Peak load	138.94	+13.21

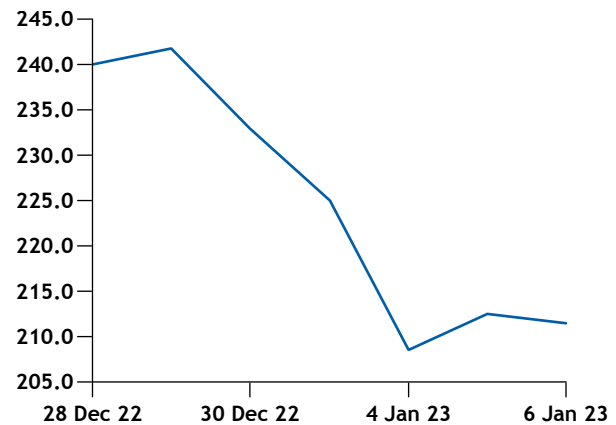
Epex Spot UK day ahead auction		
	£/MWh	±
Base load	95.65	-13.93
Peak load	120.88	-1.84

Argus UK day ahead block contracts	£/MWh		
	Bid	Offer	±
Blocks 1 + 2	105.50	109.50	39.50
Blocks 3 + 4	146.00	146.00	22.00
Block 5	173.00	173.00	22.00
Block 6	128.00	132.00	11.00

Argus Irish (ISEM) OTC assessments 04 Jan 2023	€/MWh		
	Buy	Sell	±
February	176.75	196.75	nc
Q2 2023	195.40	215.40	-37.75
Q3 2023	191.90	211.90	-29.30
Q4 2023	197.65	217.65	-34.45
Q1 2024	208.50	228.50	nc

Irish isem day ahead		
	£/MWh	€/MWh
Base load	171.04	205.96

UK winter-ahead base load £/MWh



GERMAN AND ALPINE MARKETS

2024 premium to 2025 at 6-month low

The week ahead expired below its average throughout the week despite wind output forecasts being revised down on Friday, while further along the curve the front-year premium to 2025 narrowed to its lowest in over six months.

The week ahead expired at €109.50/MWh, down over €10/MWh from its average of €121.08/MWh throughout the week. The contract expired at a discount of €25.50/MWh to week 3, having been assessed at an average discount of €25.92/MWh in the week. Wind output is forecast to average between 25.3-31.6GW next week, or at load factors between 41-52pc, although forecasts were revised down on Friday.

Renewables have accounted for over 63pc of total net electricity generation so far in the week at the time of writing, down from 73.4pc in week 52 of last year. The decline has largely been driven by falling onshore wind generation, the share of which in the power mix has fallen to 41.9pc from 48pc on the week despite 4 January seeing the highest generation in at least five years at an average of 40.75GW.

Continued high wind generation so far in January has kept thermal generation depressed, with average gas-fired output falling to its lowest since August 2021 while coal-fired generation has declined to an eight-month low. Several coal-fired units have been off line recently, including the 842MW RDK 8 unit between 28 December and 3 January, the 505MW RDK 7 unit between 5-8 January and the 726MW Bexbach block 1 between 1-7 January. And the 1.04GW Datteln 4 unit, which generated the most of any single coal-fired unit in 2022, has been experiencing “irregular operation” since 11 December, which is set to last until 8 January.

The 715MW Bergkamen A coal-fired unit had its outage extended by another day on Friday, with the unit now set to return on 7 January, according to a Remit notice. The unit went off line on 27 December and was originally set to return on 29 December. Bergkamen A has operated intermittently since the beginning of December, with Fraunhofer ISE data suggesting the unit generated power on fewer than half the days in the month. But coal-fired unavailability is set to lift throughout January, with no units over 400MW capacity

Argus Swiss OTC assessments							€/MWh
	Base load			Peak load			
	Buy	Sell	±	Buy	Sell	±	
Working day ahead	146.85	150.85	2.35	182.60	186.60	11.70	
February	204.50	208.50	-1.90	246.80	266.80	-2.95	
Q2 2023	184.50	186.50	5.50	197.75	217.75	7.95	
Q3 2023	195.90	199.90	-0.10	223.70	243.70	-0.10	
2024	212.90	216.90	-2.60	267.55	287.55	-2.00	

Argus German OTC assessments							€/MWh
	Base load			Peak load			
	Buy	Sell	±	Buy	Sell	±	
Working day ahead	111.50	112.50	-3.50	136.60	140.60	8.60	
Saturday	90.50	91.50	-4.00	96.50	100.50	-12.45	
Sunday	59.50	60.50		59.15	63.15	nc	
Weekend	74.50	76.50	-3.50				
Week ahead	109.25	109.75	-6.25	138.75	142.75	-6.25	
Week 3	134.75	135.25	-11.00	168.00	172.00	-11.00	
Week 4	154.75	155.25	-9.75	181.50	185.50	-9.75	
Week 5	169.20	173.20	2.10	205.30	209.30	-1.90	
February	169.25	169.75	-5.50	202.85	204.85	-5.85	
March	170.75	171.25	-6.00	191.50	193.50	-6.50	
April	167.75	168.25	-1.00	191.50	195.50	1.50	
May	160.95	162.95	-3.05	183.50	187.50	1.50	
June	182.00	184.00	-2.00	193.50	197.50	4.50	
July	191.50	195.50	1.90	224.65	228.65	1.40	
Q2 2023	170.75	171.25	-2.00	190.50	192.50	2.50	
Q3 2023	197.50	198.50	1.90	225.50	227.50	1.40	
Q4 2023	239.75	240.25	-0.75	320.00	322.00	-5.75	
Q1 2024	231.80	232.80	-6.20	325.20	329.20	-3.25	
Q2 2024	161.50	162.50	-2.50	188.40	192.40	-3.25	
Q3 2024	160.00	162.00	-2.50	193.80	197.80	-3.25	
2024	190.75	191.25	-4.50	251.75	253.75	-6.25	
2025	159.75	160.25	-3.25	214.75	218.75	-3.25	
2026	133.50	135.50	-0.50	182.50	186.50	-0.50	
2027	124.50	128.50	-0.50	154.60	158.60	-0.50	

Argus German OTC indexes				
	Daily		Cumulative	
	€/MWh	Vol GWh	€/MWh	Vol GWh
Working day ahead	112.00	0	69.35	31
Week ahead	107.93	57	119.48	314
Month ahead	175.27	42	176.41	256
Quarter ahead	177.14	175	171.04	830
Year ahead	200.24	132	200.09	966
Total reported traded (all contracts):				945.84
<i>Average prices weighted by volume of trades</i>				

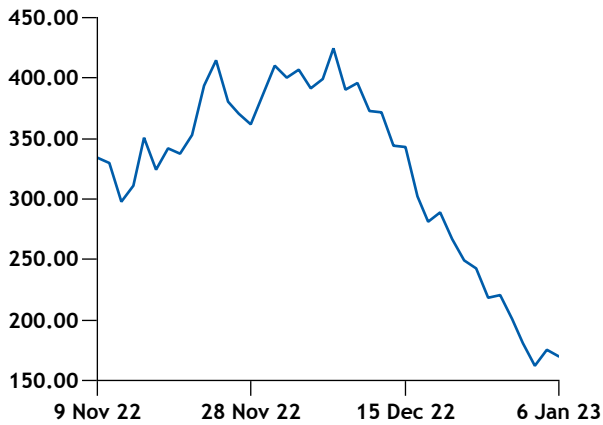
Argus Austrian OTC assessments							€/MWh
	Base load			Peak load			
	Buy	Sell	±	Buy	Sell	±	
Working day ahead	129.10	135.10	8.70	183.45	187.45	40.00	
February	197.85	201.85	-5.50	234.05	238.05	-5.85	
Q2 2023	176.00	180.00	-2.00	196.70	200.70	2.50	
Q3 2023	205.00	209.00	1.90	234.10	238.10	1.40	
2024	208.00	208.50	-7.25	271.10	275.10	-6.25	
2025	178.00	182.00	-1.25	232.95	236.95	-3.25	

GERMAN AND ALPINE MARKETS

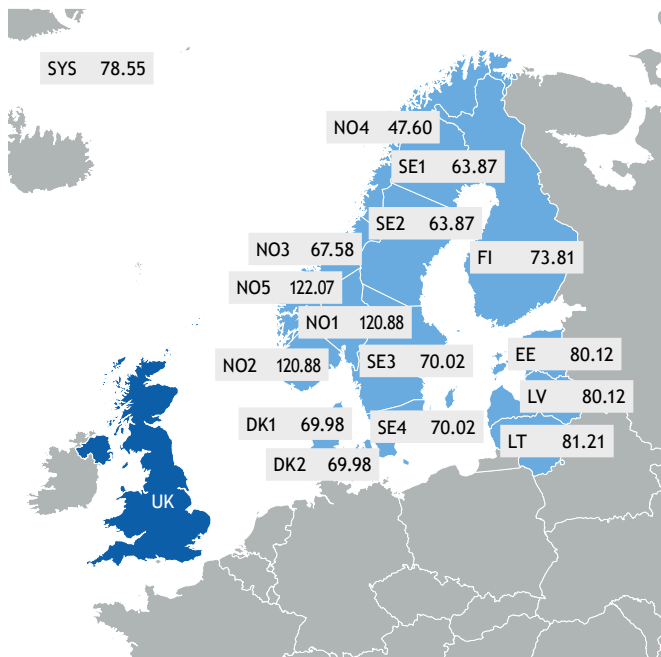
currently set to be off line next month.

At the back of the curve, the front year narrowed its premium to 2025 to the lowest since the end of June 2022 at €31/MWh as the former contract led losses among the calendar years despite 2025 leading losses among the German VTP gas calendar year contracts.

German month-ahead base load €/MWh



Nordic spot prices: seven-day moving averages €/MWh



German day-ahead exchange			
	Hours	€/MWh	±
Base load	01-24	88.81	-28.66
Peak load	09-20	96.14	-32.18
Off peak 1	21-24	92.52	-2.12
Off peak 2	01-08,21-24	59.40	-71.21

Austrian day-ahead exchange			
	Hours	€/MWh	±
Base load	01-24	148.33	+20.30
Peak load	09-20	166.86	+24.18

Austrian Exaa day ahead			
		€/MWh	±
Base load		125.62	-2.41

Swiss day-ahead exchange			
	hours	€/MWh	±
Base load	01-24	147.16	+15.63
Peak load	09-20	156.78	+13.42
Off peak I	01-08, 21-24	138.12	+17.62

NORDIC MARKET

Nasdaq OMX Nordic futures			€/MWh
	Base load	Closing Price	±
Day ahead	45.00		na
Week 02	91.00		-1.38
Week 03	122.00		-3.25
February 2023	150.00		+9.60
March 2023	127.00		+12.00
April 2023	116.00		+6.00
Q2 2023	85.00		+5.00
Q3 2023	62.00		+3.00
Q4 2023	117.00		+1.00
Q1 2024	136.88		+0.38
2024	75.28		+1.28
2025	64.30		+1.30

Nord Pool physical spot day ahead			
	€/MWh	±	NKr/MWh
Systemwide	77.13	-30.41	772.69

GUARANTEES OF ORIGIN

Guarantee of origin certificates	€/MWh											
	Nordic hydro			European wind			European solar			European biomass		
	Bid	Ask	±	Bid	Ask	±	Bid	Ask	±	Bid	Ask	±
2022	5.95	6.11	0.040	5.95	6.11	0.040	5.95	6.11	0.040	5.93	6.03	0.040
2023	6.40	6.60	-0.310	6.40	6.60	-0.310	6.40	6.60	-0.310	6.28	6.48	-0.200
2024	4.45	4.65	0.050	4.45	4.65	0.050	4.45	4.65	0.050	4.30	4.50	0.075
2025	3.68	3.78	0.030	3.68	3.78	0.030	3.68	3.78	0.030	3.45	3.75	0.030
2026	3.40	3.70	0.030	3.40	3.70	0.030	3.40	3.70	0.030	3.38	3.48	0.030

UK Regos	€/MWh					
	Non-biomass			Biomass		
	Bid	Ask	±	Bid	Ask	±
Compliance period 21	7.00	7.20	nc	6.30	6.70	-0.150
Compliance period 22	8.80	9.00	0.200	7.90	8.50	nc
Compliance period 23	8.60	8.90	0.050	7.80	8.40	nc

UK Rego current compliance period spot indexes	€/MWh
Non-biomass	5.106
Biomass	4.321

2022 decreases

Prices for guarantees of origin (GOOs) for 2022 generation decreased this week as liquidity remained low following the holiday period.

Nordic hydro 2022 GOOs closed the week at €6.03/MWh, down by €0.45/MWh on the week. This was the most traded product over the week, at 42pc of total traded volume and higher liquidity than in any week in December. While trading focused on 2022 Nordic Hydro, the total traded volume of GOOs remained below the levels seen in week 50 and 51 of 2022.

Nordic hydro 2023 GOOs decreased by €0.14/MWh to €6.50/MWh, increasing to a €0.47/MWh premium to the 2022 vintage from €0.16/MWh at the end of the previous week.

The 2026 vintage was assessed for the first time this week, at a €0.13/MWh discount to the 2025 vintage over the week.

Nordic hydropower reserves continued to decline at the end of 2022 but at the slowest rate in seven weeks, as power demand fell further while imports increased. Reserves ended the year 5.55 percentage points below the 10-year average of 67.45pc of capacity for the time of year, although above week 52 levels in four of the past six years,

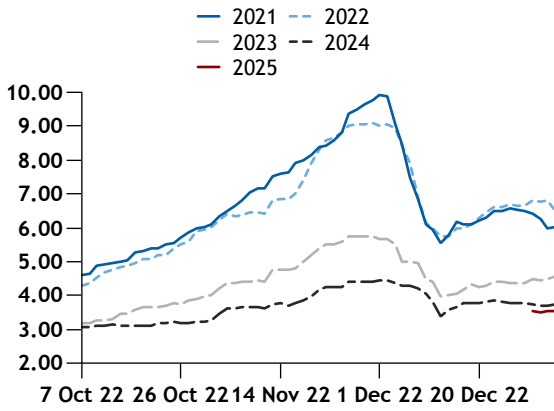
Guarantee of origin deals				
Day of trade	Product	Generation period	Volume MWh	Price €/MWh
6 Jan 23	GOO Nordic hydro certificates	calendar year 2022	50,000	5.9700
6 Jan 23	GOO Nordic wind certificates	calendar year 2022	25,000	6.0000
6 Jan 23	GOO Nordic hydro certificates	quarter 4 2022	50,000	6.0500
6 Jan 23	GOO Nordic hydro certificates	calendar year 2022	25,000	6.0100
6 Jan 23	GOO Nordic hydro certificates	calendar year 2022	50,000	5.9550
5 Jan 23	GOO Europe hydro certificates	Jul-Dec 2022	25,000	5.9500
5 Jan 23	GOO Nordic hydro certificates	calendar year 2025	50,000	3.7050
5 Jan 23	GOO Norwegian hydro certificates	calendar year 2024	25,000	4.5500
5 Jan 23	GOO French hydro certificates	calendar year 2022	25,000	6.5200
5 Jan 23	GOO Europe renewable certificates	calendar year 2022	50,000	5.8450
5 Jan 23	GOO Europe hydro certificates	calendar year 2022	125,000	6.0000
5 Jan 23	GOO Nordic hydro certificates	calendar year 2022	25,000	6.0100
5 Jan 23	GOO Nordic hydro certificates	calendar year 2022	100,000	5.9700
5 Jan 23	GOO Nordic hydro certificates	calendar year 2022	100,000	6.0000
4 Jan 23	GOO Nordic hydro certificates	calendar year 2023	50,000	6.7575
4 Jan 23	GOO European wind/solar/hydro certificates	Other delivery period 2022	50,000	6.3300
4 Jan 23	GOO Europe renewable certificates	calendar year 2022	25,000	6.0000
4 Jan 23	GOO Nordic hydro certificates	calendar year 2022	50,000	6.1450

European GOO current -year spot indexes	€/MWh
Nordic hydro	6.718
European wind	6.718
European solar	6.718
European biomass	6.516

GUARANTEES OF ORIGIN

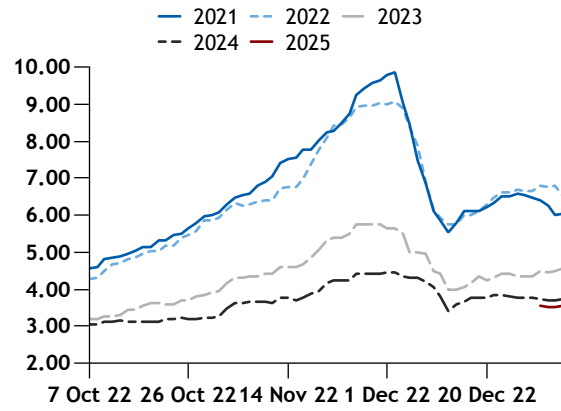
Nordic hydro GOOs

€/MWh



European wind GOOs

€/MWh



as the medium-term average is influenced by strong reserves in 2020 and 2015

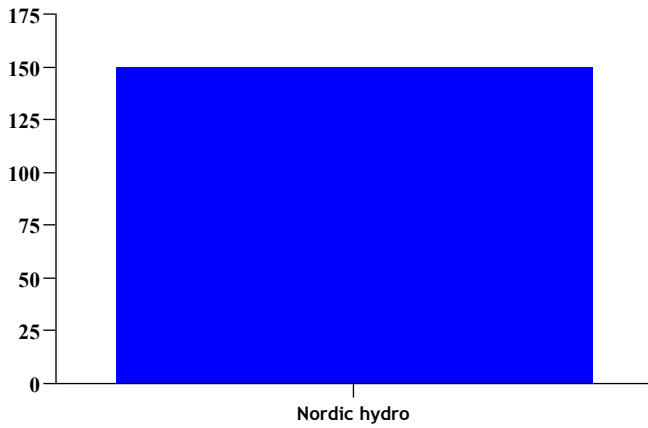
In Italy traded volumes in 2022 for Italian GOOs were their lowest for at least the past four years on energy market operator GME's bilateral and continuous platforms

as well as in Italian energy service agency GSE's primary auction. Traded volumes decreased the most on the bilateral platform and were down by 33pc in 2022.

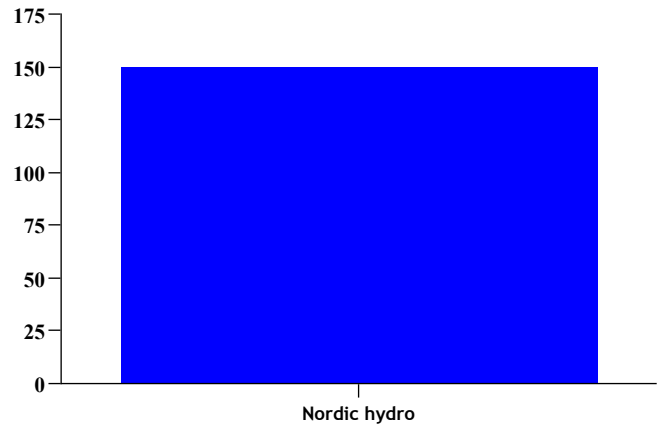
In the UK, compliance period (CP) 21 biomass Rego prices increased by £0.15/MWh to £6.50/MWh, while later vintages

GUARANTEES OF ORIGIN

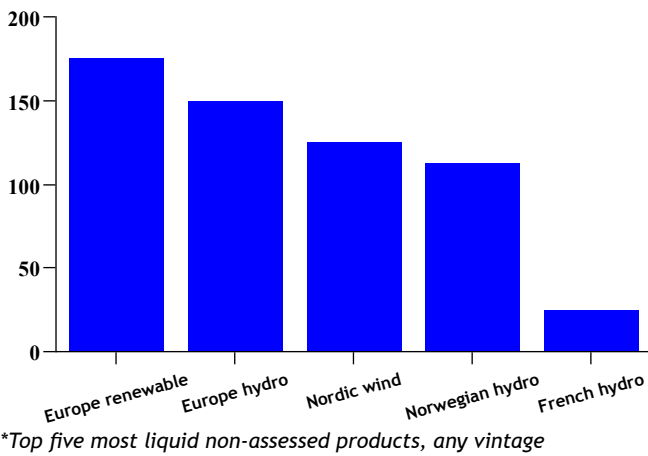
Current-year vintage monthly cumulative volume



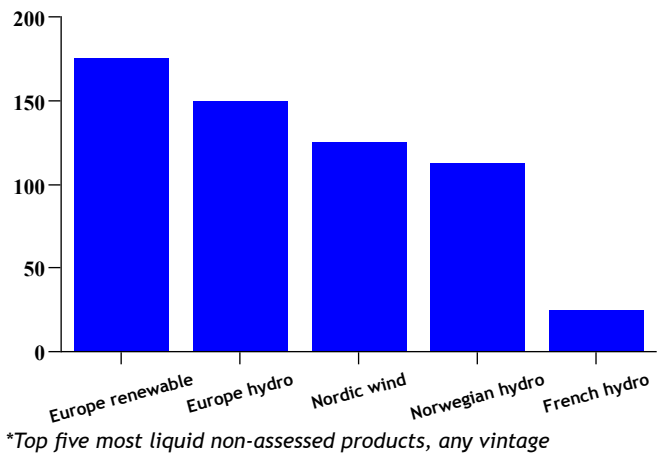
Current-year vintage annual cumulative volume



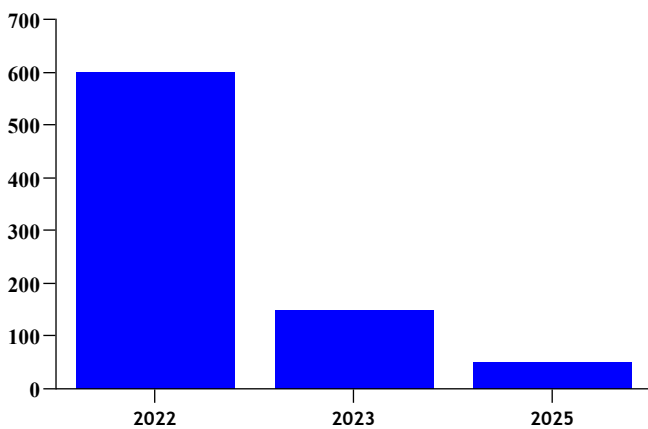
Monthly cumulative volume



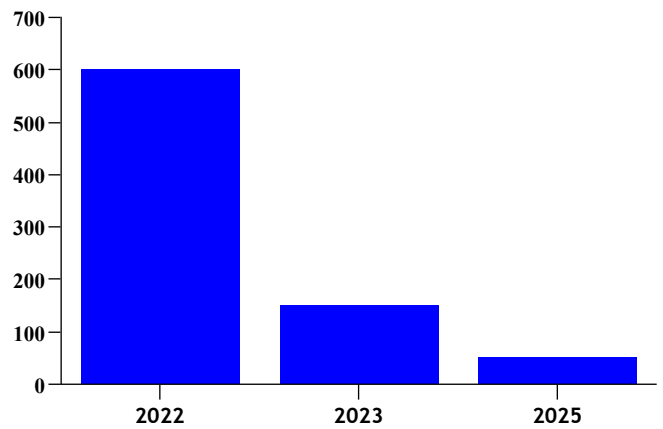
Annual cumulative volume



Nordic hydro monthly cumulative volume



Nordic hydro annual cumulative volume



All volumes in GWh. Individual deal specifications available through the [Argus Direct platform](#)

FRENCH, DUTCH AND BELGIAN MARKETS

French week ahead extends losses

The French front week fell on expiry, pressured by forecasts for stronger wind output and higher nuclear availability.

In the French market, the week-ahead contract accelerated losses from the previous session, falling by €2/MWh to expire at €117/MWh. It ended assessed at a €28/MWh discount to the week 3 contract, which fell faster.

The product changed hands around 105 times on EEX and in the over-the-counter (OTC) market, starting the session at €112/MWh before gaining €5/MWh intraday.

Nuclear unavailability is scheduled to fall by 2.5GW on the week to average 9GW. In addition, the 580MW Cordemais 4 coal-fired plant is scheduled to return to the grid on 13 January.

Wind output is due to average 10.2GW between Monday-Thursday next week, with load factors ranging between 46-62pc, up by 1.5GW compared with forecasts for the end of this week.

But power demand is due to increase by 2.8GW on the week to average 56.9GW. Minimum temperatures in Paris were partly revised down on the day, although still forecast to remain above the seasonal norm for the period.

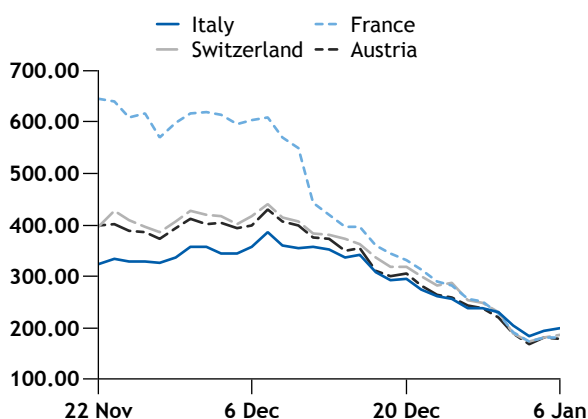
In the Belgian market, the front-year product moved down by €3.50/MWh to €161.50/MWh. It narrowed its discount to France by €2.50/MWh to €57.50/MWh - the lowest so far this month. In comparison, Belgian 2024 started the month assessed at a €66.25/MWh discount to France.

Losses in the EU ETS market weighed on the product, as allowances for December 2024 fell by €1.38/t CO₂e to €81.29/t CO₂e.

Belgian nuclear generation in 2022 fell by about 13pc on the year to 41.8TWh, or 47.3pc of the country's power mix, and could plunge further in the next years amid the expected closure of several nuclear plants (see separate story).

Alpine markets front quarter

€/MWh



Argus French OTC assessments							€/MWh
	Base load			Peak load			±
	Buy	Sell	±	Buy	Sell	±	
Working day ahead	113.50	114.50	-6.00	148.60	152.60	14.60	
Weekend	73.00	74.00	-3.50				
Week ahead	116.50	117.50	-2.00	157.90	159.90	-1.30	
Week 3	144.75	145.25	-10.00	176.30	178.30	-21.25	
February	210.75	211.25	-4.00	269.00	271.00	-10.00	
March	193.75	194.25	-0.50	223.50	224.50	-8.30	
April	180.70	184.70	1.70	212.40	216.40	-0.65	
Q2 2023	179.75	180.25	-1.50	211.00	212.00	-0.65	
Q3 2023	195.75	196.25	-1.00	247.50	251.50	-1.00	
Q4 2023	287.75	288.25	-1.50	463.25	467.25	-37.25	
Q1 2024	337.50	338.50	-3.95	606.60	610.60	-17.70	
2024	218.75	219.25	-6.00	366.00	370.00	-6.00	
2025	167.20	171.20	-2.05	300.10	304.10	0.20	
2026	136.45	140.45	4.45	222.45	226.45	-2.55	

French day-ahead exchange				
	Hours	€/MWh	±	
Base load	01-24	85.46	-36.02	
Peak load	09-20	94.37	-42.66	
Off peak I	01-08	83.67	-9.88	
Off peak II	21-24	62.35	-68.33	
Off peaks	01-08, 21-24	76.56	-29.37	

Argus Dutch OTC assessments							€/MWh
	Base load			Peak load			±
	Buy	Sell	±	Buy	Sell	±	
Working day ahead	108.70	112.70	-8.30	141.00	145.00	1.85	
Weekend	79.00	81.00	57.20				
Week ahead	120.00	121.00	-5.30	144.65	148.65	-11.00	
Week 3	146.45	150.45	-2.20	180.30	184.30	-13.00	
February	177.50	178.50	-5.00	203.75	205.75	-7.85	
March	179.00	180.00	-1.50	192.05	196.05	-2.45	
April	177.75	178.25	6.50	191.70	195.70	0.15	
Q2 2023	174.25	174.75	-1.00	191.30	193.30	4.80	
Q3 2023	185.00	186.00	4.40	200.40	204.40	-0.85	
Q4 2023	214.50	215.50	7.25	271.05	275.05	-4.90	
Q1 2024	216.25	220.25	-1.40	313.85	317.85	1.95	
2024	171.50	172.50	nc	219.90	223.90	-3.80	
2025	140.80	144.80	-1.25	172.00	176.00	-1.85	
2026	115.35	119.35	-0.50	144.05	148.05	1.10	

Argus Belgium OTC assessments				€/MWh
	Base load			±
	Buy	Sell	±	
Working day ahead	114.65	118.65	-6.00	
February	185.75	186.75	-2.75	
Q2 2023	179.05	183.05	1.05	
2024	161.00	162.00	-3.50	

FRENCH, DUTCH AND BELGIAN MARKETS

In the Dutch market, the March contract declined by €1.50/MWh to close at €179.50/MWh. The TTF gas contract for March delivery also fell, by €1.25/MWh to €69.96/MWh. But the 360MW Eems 6 gas-fired plant got the end of its outage extended to 1 April on Friday, from 13 March previously planned.

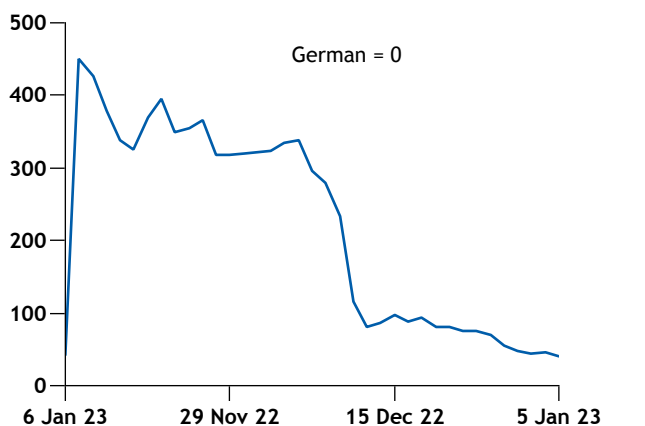
In the day-ahead market, all central western European (CWE) spot indexes cleared below €100/MWh, with the Belgian spot index turning to a regional discount.

Argus French OTC indexes				
	Daily		Cumulative	
	€/MWh	Vol GWh	€/MWh	Vol GWh
Working day ahead	112.72	2	112.50	11
Week ahead	115.67	13	120.32	72
February	211.00	0	213.88	146
Q2 2023	184.00	11	187.54	85
2024	228.39	79	231.00	211
Total reported traded (all contracts):			176.70	
Average prices weighted by volume of trades				

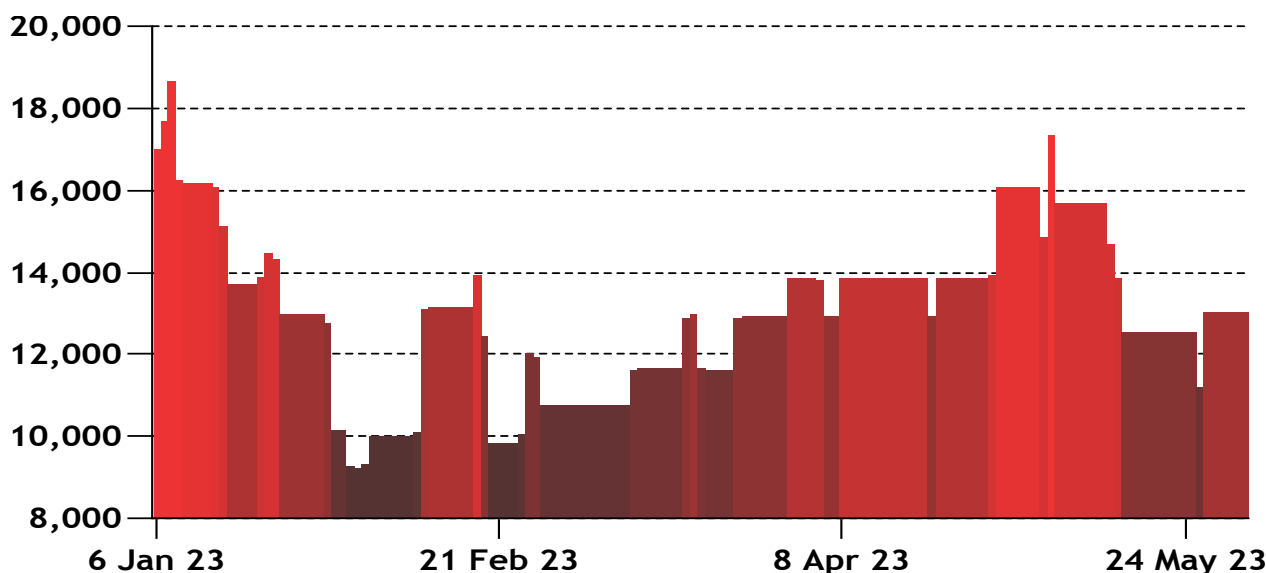
Argus Dutch OTC indexes				
	Daily		Cumulative	
	€/MWh	Vol GWh	€/MWh	Vol GWh
Working day ahead	110.70	0	117.40	3
Week ahead	121.67	13	126.25	17
February	186.53	13	178.87	52
Q2 2023	180.41	59	179.62	135
2024	173.00	176	172.48	202
Total reported traded (all contracts):			511	

CWE market spreads				€/MWh
	Belgium	± Netherlands	± France	
Base load	85.20	-1.15	-0.26	
Peak load	93.80	0.50	-0.57	
Off-peak	76.61	-2.79	0.05	

French month-ahead differential to Germany €/MWh



French nuclear power plant unavailability MW



For extended granular data on French nuclear power plant unavailability, [download the Argus Direct dataset](#), which is updated on a daily basis.

SPANISH MARKET

3Q24 leads gains

The Spanish week-ahead contract led gains on the near curve on expiry amid downward revisions to wind output forecasts, though liquidity was very limited as Spain celebrated a public holiday on Friday.

The week-ahead contract gained €4/MWh to expire at €92/MWh, having traded 11 times during the session.

Contracts delivering over the first quarter of 2023 rose, with February increasing by €0.30/MWh to €131/MWh.

There were over 20 trades during a session of low liquidity due to Friday's national public holiday in Spain.

PVB gas prices for delivery in the second quarter of 2023 were down by €2.08/MWh to €65.175/MWh, while prices for February delivery fell by €2.10/MWh to €63.70/MWh.

Power contracts also increased further out along the curve, with the third quarter of 2023 moving up by €4.25/MWh after trading just once. PVB gas prices for delivery in the third quarter of 2023 fell by €1.06/MWh to €67.585/MWh.

On the prompt, the Omie day-ahead pool settled at €23.77/MWh for Saturday, down from €104.14/MWh for Friday, amid expectations of much higher wind output and lower weekend demand.

Wind generation is forecast at 11.3GW, or a load factor of 41pc, EuroWind data show. And hydropower generation is scheduled at 3.7GW for Saturday, down from 5.4GW on Friday, power grid operator REE data show.

Wind generation load factors are forecast to be above 24pc throughout week 2, with a 47pc load factor forecast for Monday, a downward revision from Thursday.

The day-ahead reference gas price on the Mibgas exchange closed at €63.90/MWh, up from €59.30/MWh on the previous day. A total of just 5MW of gas-fired generation entered the day-ahead market, down from 0.3GW on Thursday.

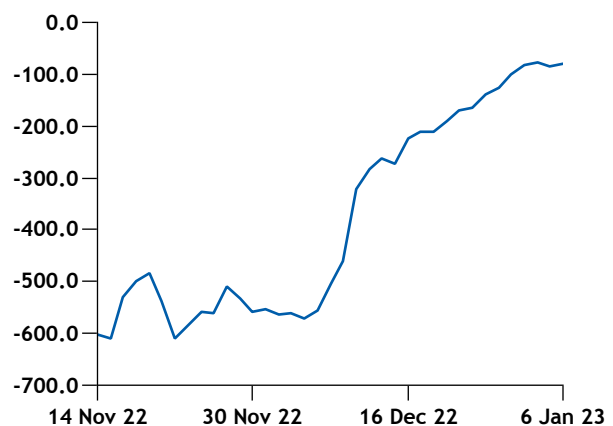
Minimum temperatures in Madrid are forecast at 9.6°C on Monday, 9°C above seasonal norms, an upward revision from Thursday.

Argus Spanish OTC base load assessments			€/MWh
	Buy	Sell	±
Working day ahead	90.20	94.20	4.70
Week ahead	90.00	94.00	4.00
February	129.00	133.00	0.30
March	133.55	137.55	0.55
April	139.70	143.70	3.80
Q2 2023	153.45	157.45	4.45
Q3 2023	172.50	176.50	4.25
Q4 2023	172.40	176.40	4.40
Q1 2024	157.15	161.15	0.85
2024	128.20	132.20	0.80
2025	83.10	87.10	2.10

Iberian Pool day ahead				€/MWh
Spain		±	Portugal	
23.77	-80.37		23.77	-80.37

Iberian Omip exchange				€/MWh
	Closing bid	Closing ask	Settlement	±
Week-ahead	na	na	92.00	+4.00
Week 03	na	0	127	4
Week 04	na	na	132.00	+4.00
February 2023	129.71	134.50	129.96	-0.71
March 2023	132.95	137.75	135.35	+0.35
Q3 2023	na	na	175.00	+4.67
Q4 2023	na	na	175.00	+4.83
Q1 2024	na	na	159.15	+0.82
2024	na	na	130.00	+0.67

Spanish month-ahead differential to France €/MWh



ITALIAN MARKET

2Q23 widens premium to Hungary

The Italian curve moved in mixed directions, with April widening its premium to France and the second-quarter 2023 premium to Hungary widening to a six-month high.

Italy April led gains across the curve, rising by €9/MWh to be assessed at €203/MWh. Its premium to France widened to €20.30/MWh from an €11.68/MWh average since the two contracts were first assessed. And it flipped to a €3/MWh premium to Italy March from a €6/MWh discount on Thursday as the latter product remained flat on the day.

Further out, the second-quarter 2023 premium to Hungary widened to its largest since mid-June 2022 at €8.50/MWh as the latter product was assessed down by €2.50/MWh on the day.

Week 2 edged down by just €0.50/MWh to expire at €162.50/MWh, as minimum temperatures in Rome and Milan next week are forecast to fall to 5-8°C and 0-1°C, respectively, 3-4°C above seasonal norms in both cities. And week 3 led losses across the curve, falling by €7/MWh on the day to €174/MWh after trading 12 times in clips of 2-25MW.

The 367MW unit 2 at Enel's La Casella gas-fired plant in the north zone went off line on Thursday and is due to return to the grid on 14 January. And the 267MW unit 4 at EP Produzione's Fiume Santo coal-fired plant in the Sardinian zone will go off line on 8-12 January for maintenance.

In the day-ahead market, the Italian spot index rose by €18.54/MWh to close at €192.76/MWh – the highest price since Monday. The Pun has averaged €183.03/MWh on 2-7 January, down from €188.27/MWh on 26-30 December.

Power demand is scheduled to rise by 1.3GW to 25.6GW on Saturday, bringing the average for 2-7 January to 27GW, up from 25.7GW last week. And domestic generation is set to climb by 2GW to 15.2GW on Saturday. It has averaged 17.7GW on 2-7 January, down from 18.1GW in the previous week.

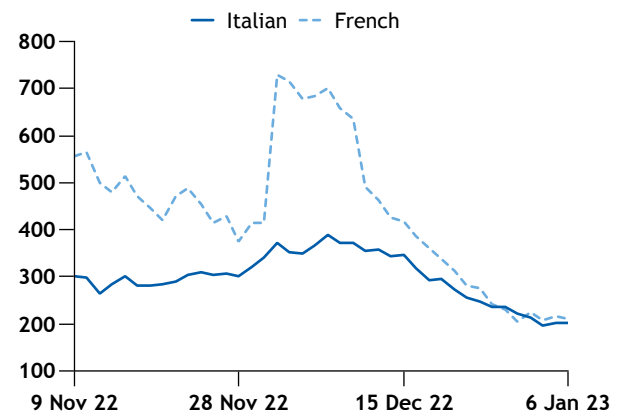
The north zone moved to a discount to the Pun for the first time since late November at €4.15/MWh, widening its premium to the French spot by €50.41/MWh to €103.15/MWh as the latter fell sharply on the day. The premium has averaged €65.37/MWh on 2-7 January, down from €143.89/MWh across 26-31 December.

Net imports from France are scheduled to rise by 87MW to 3.3GW on Saturday. They have averaged 3.1GW on 2-7 January, up from 2.4GW on 26-31 December amid capacity curtailments along the Italy-France border on 24 December-7 January.

Argus Italian OTC assessments						€/MWh
	Base load			Peak load		
	Bid	Ask	±	Bid	Ask	±
Day ahead	159.50	163.50	2.50	174.50	178.50	3.00
Week ahead	162.00	163.00	-0.50	176.25	180.25	-0.65
Week 3	173.75	174.25	-7.00	191.75	195.75	-10.20
February	202.75	203.25	nc	242.20	246.20	3.65
March	199.75	200.25	nc	235.10	239.10	1.90
April	201.00	205.00	9.00	223.95	227.95	12.55
Q2 2023	198.50	199.50	4.60	221.20	225.20	6.80
Q3 2023	208.00	210.00	7.00	234.75	238.75	5.05
Q4 2023	223.50	224.50	2.00	259.35	263.35	0.65
Q1 2024	214.40	218.40	-1.10	240.25	244.25	-0.25
2024	176.50	177.50	-3.00	199.15	203.15	-6.30
2025	144.35	148.35	-2.65	164.30	168.30	-5.40

Italy GME day ahead		
	€/MWh	±
Base load	192.76	+18.54

Italy/France month-ahead base load €/MWh



Italian OTC year-ahead base load €/MWh



CZECH, SLOVAK AND POLISH MARKETS

March premium narrows

The Czech March premium to Germany narrowed as price falls in European coal weighed on the contract, while no deals were done in both the Slovak and Polish markets as a result of a public holiday.

The Czech second-month ahead fell by €6.25/MWh and reversed its upward trend to be assessed at €177.75/MWh on Friday, after trading for only 1MW. The contract closed slightly above the all-time low of €168/MWh on 4 January 2023 but is still well below its high of €385/MWh on 7 December 2022. Its premium to Germany narrowed slightly to €6.75/MWh from €7/MWh on Thursday.

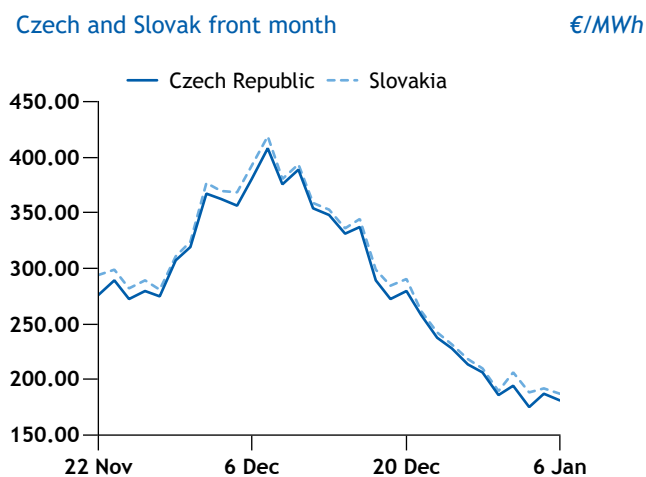
In comparison, the February premium to Germany remained unchanged from the previous session at €12/MWh after trading for a combined 15MW. It fell by €5.50/MWh on the day as European API coal prices for delivery in February and March fell by \$7.30/t and \$7.55/t, respectively. It was assessed at a record low of €181.50/MWh.

Czech power demand has been steadily declining since December, averaging around 7.3GW so far in January, from 7.9GW in the previous month and down compared with the same month in 2022, which averaged around 8.5GW.

Temperatures in Prague have increased to an average of around 7.9°C so far this month, from 0.74°C in December. But temperatures are forecast to fall over 7-31 January to an average of 3.2°C.

Average Czech day-ahead power prices have moved

Czech and Slovak front month



Czech and Slovak day-ahead exchanges		€/MWh	
	Base load	Peak load	
Czech €/MWh	106.57	118.34	
Slovak €/MWh	134.08	158.08	

Argus Czech OTC base load assessments		€/MWh	
	Buy	Sell	±
Working day ahead	117.80	119.80	-4.70
Week ahead	114.50	116.50	-5.25
Week 3	140.00	144.00	-12.00
February	180.50	182.50	-5.50
March	176.75	178.75	-6.25
April	169.00	173.00	-1.00
Q2 2023	172.75	174.75	-2.00
Q3 2023	198.00	202.00	1.90
Q4 2023	240.75	243.75	-0.75
Q1 2024	232.30	236.30	-6.20
2024	192.00	194.00	-4.00
2025	159.70	163.70	-3.25
2026	133.25	138.75	-0.50

Argus Slovak OTC base load assessments		€/MWh	
	Buy	Sell	±
Working day ahead	119.60	121.60	-4.70
Week ahead	125.75	129.75	-5.25
February	186.00	188.00	-5.50
Q2 2023	184.75	188.75	-2.00
2024	197.50	198.50	-4.00

Argus Polish OTC base load assessments		Zloty/MWh	
	Buy	Sell	±
Zloty/MWh			
Week ahead	570.85	572.85	-29.35
February	729.90	731.90	-25.85
March	708.50	710.50	-28.15
Q2 2023	762.40	764.40	-9.40
Q3 2023	829.30	831.30	8.90
2024	908.10	910.10	-21.15
2025	1,083.75	1,085.75	-15.25
€/MWh			
Week ahead	121.39	121.82	-6.68
February	154.63	155.05	-6.00
March	149.51	149.94	-6.45
Q2 2023	159.59	160.01	-2.48
Q3 2023	172.31	172.73	1.31
2024	184.94	185.35	-4.84
2025	213.82	214.21	-3.50

Polish Polpx day ahead		Zloty/MWh	€/MWh
Base load (IRDN24 average)		601.02	127.81

CZECH, SLOVAK AND POLISH MARKETS

down to €113.50/MWh over 1-6 January from €253.88/MWh in December, with the premium to Germany widening to €18.74/MWh from €2.26/MWh over the same period, owing to stronger wind generation in Germany.

The Czech Republic has only exported around 159MW to Germany so far in January, while Germany has exported 670MW, with the Czech Republic now flipping back to a net importer of German power after its unusual net export position in the previous month.

On the prompt, the Czech OTE day ahead traded at a €17.76/MWh premium to the German day ahead, up compared with its premium on Thursday, as wind generation in Germany is anticipated at a 34pc load factor on Saturday. Slovakia's Okte settled at €134.08/MWh, up by around 7pc on the day, with Poland's TGE increasing to a three-day high of PLN601.02/MWh.

Argus Czech OTC indexes

	Daily		Cumulative	
	€/MWh	Vol GWh	€/MWh	Vol GWh
Working day ahead	118.80	0	123.00	0
Week ahead	115.50	0	115.50	0
February	190.29	5	190.45	26
Q2 2023	181.20	33	179.68	41
2024	193.00	0	198.67	53

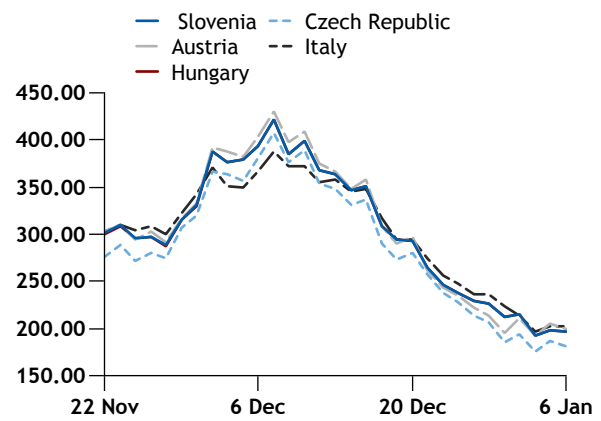
Total reported traded (all contracts):

50.90

Average prices weighted by volume of trades

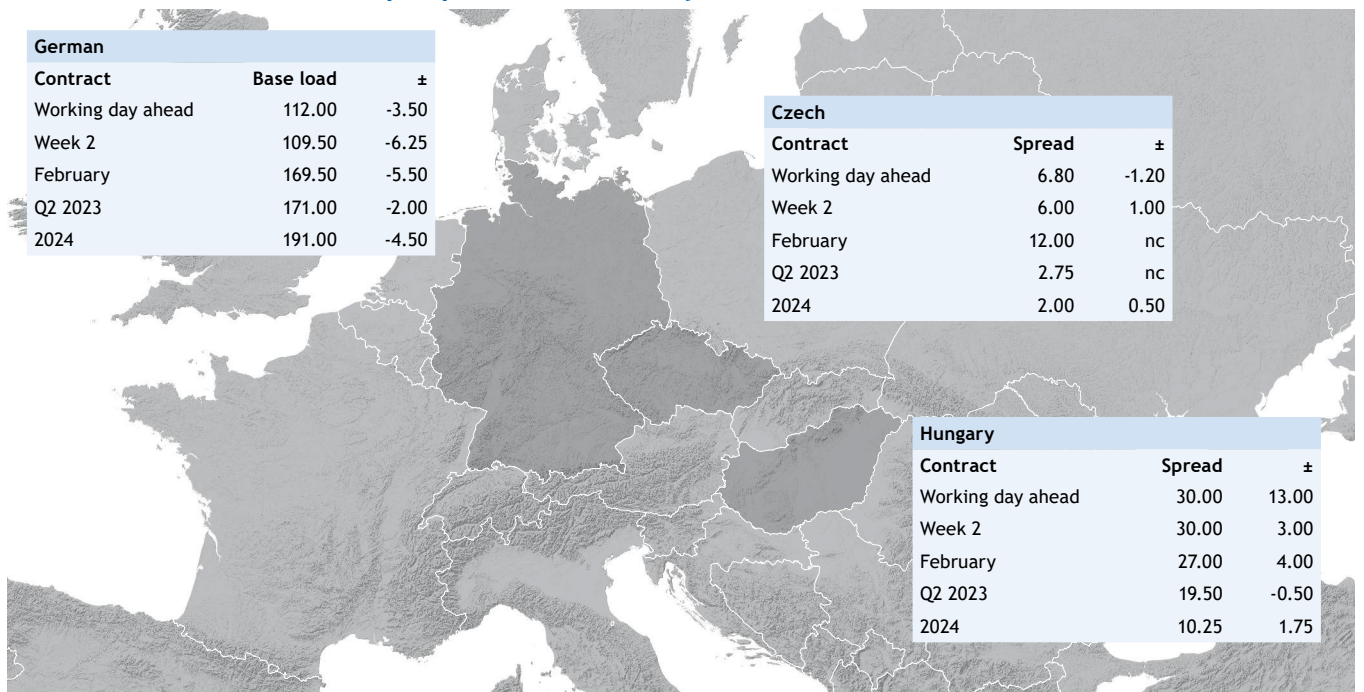
Central Europe front month

€/MWh



Central east/southeast Europe spreads to Germany

€/MWh



HUNGARIAN, SERBIAN AND SLOVENIAN MARKETS

Week ahead expires below average

The Hungarian week ahead expired below its average assessment this week on Friday, widening its premium to Germany with forecasts for high wind output in the latter nation in week 2.

The Hungarian week 2 led losses on the near curve, declining by €3.25/MWh to expire €8.67/MWh below its average assessment as the front week, which stood at €148.17/MWh. Power demand in Hungary is forecast to average 5.5GW in the working days of week 2, up from 5.36GW in week 1. Minimum temperatures in Budapest will remain above the seasonal average of minus 2°C, peaking at 3.5°C on 9 January before dropping as the week progresses to a low of minus 1°C on 11 January. Temperatures are forecast to remain above the average every day until at least 20 January.

The contract's premium to Germany rose to €30/MWh despite downward revisions to German wind output on 11 and 12 January by 5.5GW and 4.5GW, respectively. But generation will still remain strong into week 2 at 25.3-31.6GW, or a 41-52pc load factor, likely supporting a continued Hungarian premium to Germany in the day-ahead market. Output on 9 and 10 January was revised up by 3.6GW and 1.9GW from Thursday, respectively.

Hungary's lignite-fired generation capacity was curtailed on Friday as the 85MW unit 2 at the Matra plant went off line in an unplanned outage. It is due to return to the grid on Sunday evening. It also went off line on Thursday, before returning later in the day. This unit joins the 224MW unit 4 and 224MW unit 5 in being off line at the plant. Unit 4 had its outage extended to Saturday evening, after it had been due to return on line on Friday evening. And unit 5 will now be reconnected on 21 February at 23:00 local time, more than a month later than it had previously been due to return.

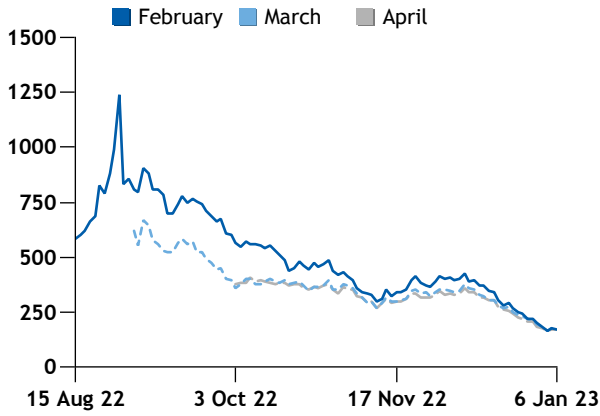
Outages at the Matra plant have caused Hungarian lignite-fired generation to fall to an average of 245MW in January so far, the lowest since May 2017. Despite a rise in nuclear generation from the 2GW Paks plant to 1.9GW – the highest since January 2022, total Hungarian generation has fallen to 3.16GW, down by 400MW on the month and 857MW on the year.

And in Serbia, the 650MW unit 1 at the Tent B plant returned to the grid on Friday after it went off line in an unplanned outage on 1 January. But the 650MW unit 2 and 210MW unit 1 at Tent A went off line on the same day in unplanned outages and will not return until 15 January. This has depressed Serbian lignite-fired output to just 2.1GW and caused net imports to rise from just 5MW in December to 177MW in January (see separate story).

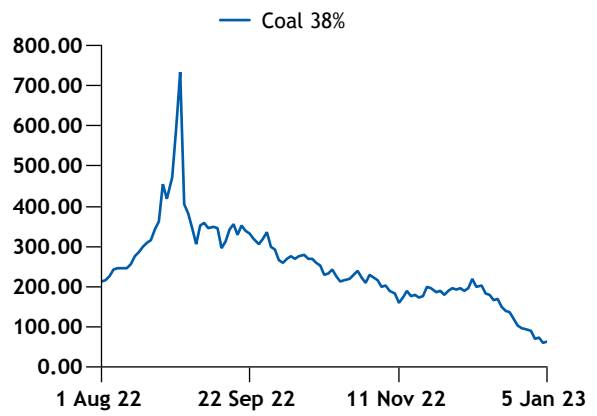
Argus Hungarian OTC assessments							€/MWh
	Base load			Peak load			
	Buy	Sell	±	Buy	Sell	±	
€/MWh							
Working day ahead	141.00	143.00	9.50	172.65	176.65	25.35	
Week ahead	138.50	140.50	-3.25	174.80	178.80	-3.25	
February	195.50	197.50	-1.50	236.40	240.40	-7.95	
March	190.50	192.50	-2.50	217.90	221.90	-3.00	
April	190.00	194.00	-1.00	212.85	216.85	1.50	
Q2 2023	189.50	191.50	-2.50	214.10	218.10	2.00	
Q3 2023	220.00	222.00	1.90	252.15	256.15	1.40	
Q4 2023	262.00	264.00	3.25	346.90	350.90	-1.75	
Q1 2024	242.30	246.30	-6.20	340.90	344.90	-3.25	
2024	200.75	201.75	-2.75	266.60	270.60	-4.50	
2025	164.50	168.50	-3.25	221.10	227.10	-3.25	
Ft/MWh conversion from €/MWh							
Working day ahead	55,794	56,585	3,720.50	68,318	69,900	9,988.00	
Week ahead	54,804	55,596	-1,328.00	69,168	70,751	-1,338.50	
February	78,137	78,937	-682.00	94,484	96,083	-3,280.50	
March	76,873	77,680	-1,089.50	87,930	89,544	-1,303.50	
April	77,466	79,097	-501.50	86,782	88,413	507.50	
Q2 2023	77,968	78,791	-1,127.50	88,090	89,736	714.00	
Q3 2023	92,777	93,620	533.50	106,335	108,021	281.00	
Q4 2023	112,808	113,669	1,019.50	149,363	151,085	-1,266.00	
Q1 2024	105,654	107,398	-3,241.50	148,648	150,392	-2,160.50	
2024	87,558	87,995	-1,635.00	116,279	118,024	-2,546.00	
2025	71,748	73,492	-1,779.50	96,434	99,051	-1,903.00	
Argus Serbian OTC base load assessments							€/MWh
	Buy	Sell	±				
Working day ahead	128.35	132.35	-3.25				
Week ahead	137.00	141.00	-3.25				
February	194.00	198.00	-1.50				
2024	198.75	202.75	-2.75				
Argus Slovenia OTC base load assessments							€/MWh
	Buy	Sell	±				
Working day ahead	125.40	129.40	-3.25				
Week ahead	137.50	141.50	-3.25				
February	194.50	198.50	-1.50				
2024	199.25	203.25	-2.75				
Slovenian BSP Southpool day ahead							
	€/MWh	±	Vol MWh				
Base load	141.59	+15.21	36,669				
Peak load	163.94	+22.73	na				
Hungarian Hupx day ahead							
	€/MWh	±					
Base load	175.22	+46.76					
Croatian Cropex day ahead							
	€/MWh	±					
Base load	149.18	+22.00					

CENTRAL EASTERN EUROPEAN MARKETS

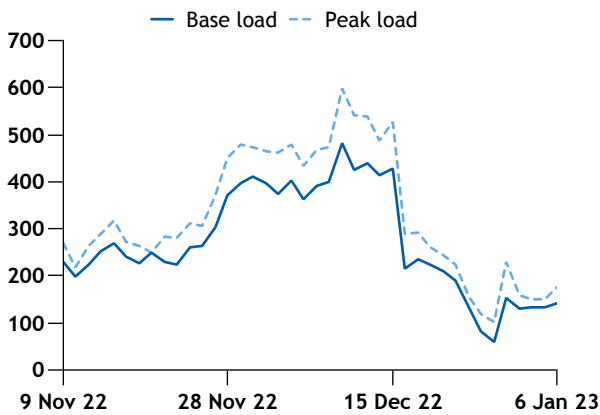
German front three months base load €/MWh



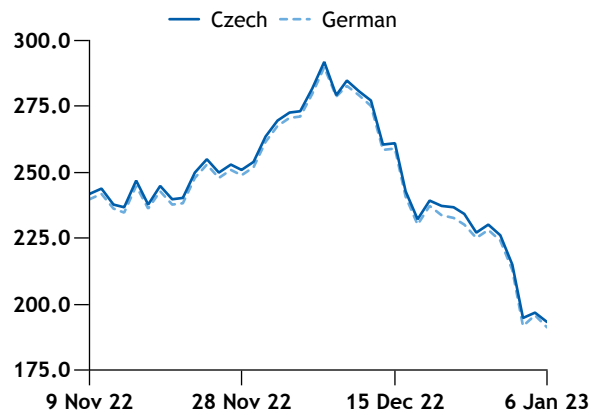
German year-ahead base-load clean dark spread €/MWh



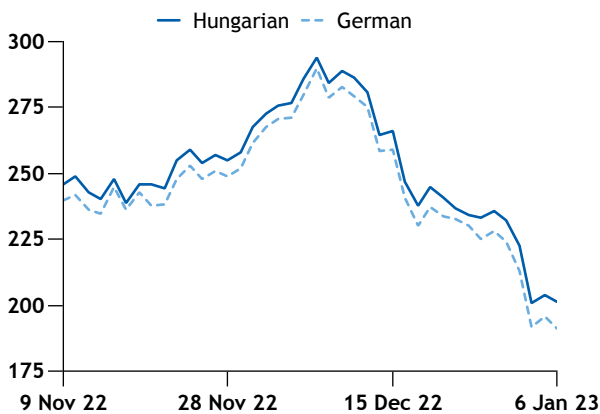
Hungary day-ahead base and peak load €/MWh



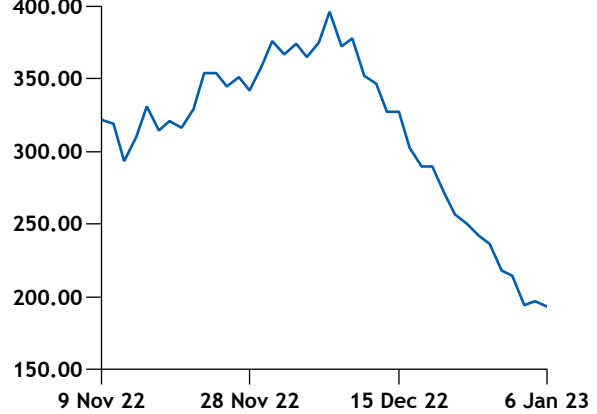
Czech and Germany year ahead €/MWh



Hungary and Germany year-ahead base load €/MWh



Czech year-ahead base load €/MWh



SOUTHEAST EUROPEAN AND TURKISH MARKETS

Romanian 3Q23 resists losses

The Romanian third quarter of 2023 was the only contract that resisted losses on the curve on Friday, widening its premium to the second quarter to its highest this week. The Greek month ahead decreased its premium to Hungary.

The third quarter of 2023 was assessed at RON1,055.90/MWh (€209.50/MWh), moving up by RON9.40/MWh (€1.91/MWh), diverging from the rest of the Romanian curve. This brought its premium to the front quarter to RON160.85/MWh (€30.50/MWh), at its highest since the beginning of the third quarter's assessment and €2.06/MWh above its average spread this week.

On the Opcom flexible auction platform, Veolia Energie sold 2MW of February-March base load at RON1,298/MWh, some RON2/MWh below its offer. February was assessed at RON958.80/MWh (€194/MWh) and March at RON910.20/MWh (€183.50/MWh).

Electro Energy Sud was also aiming to sell 4.3MW of 14 January-31 March base load at RON1,690/MWh but failed to attract any bids.

Power demand in Romania is forecast at nearly 6.4GW in week 2, up by 320MW compared with the week prior. Minimum temperatures in Bucharest are forecast at minus 1.5°C on Monday, some 3°C above the seasonal norm, rising above 0°C by 11 January. Romanian wind is forecast to average 1.3GW, or a 43pc load factor in week 2, revised up by nearly 200MW from Thursday's forecast.

A 170MW unit at the 510MW Lotru hydropower plant will go off line from 10:00 until 17:00 each day on Monday-Wednesday.

The Greek month ahead changed hands three times on Friday for financial settlement between €205.00-206.50/MWh. The contract traded at a €2/MWh premium to Hungary from a €6/MWh premium a day earlier. It was also seen at near parity with Italy.

In See-Cao auctions, the 452MW of daily capacity from Montenegro to Italy sold at an average price of €48.82/MWh for Saturday, at a €21.07/MWh premium to the average price the last five days, for nearly the same capacity.

In Albania, the government will tax by 50pc the revenues of power producers between the selling price of electricity and an 8,500 lek/MWh (€72.23/MWh) regulated price, excluding power sales of state-owned utility Kesh (see separate story).

Argus Romanian OTC base load assessments			Lei/MWh
	Buy	Sell	±
<i>Lei/MWh</i>			
February	948.80	968.80	-7.35
March	900.20	920.20	-12.30
April	889.00	909.00	-4.95
Q2 2023	885.05	905.05	-12.35
Q3 2023	1,045.90	1,065.90	9.40
2024	989.90	1,009.90	-13.50
<i>€/MWh</i>			
February	191.97	196.02	-1.50
March	181.48	185.51	-2.50
April	178.49	182.50	-1.00
Q2 2023	177.00	181.00	-2.50
Q3 2023	207.52	211.48	1.91
2024	192.30	196.19	-2.76

Argus Bulgarian OTC assessments 05 Jan 2023			€/MWh
	Buy	Sell	±
February	170.50	180.50	nc

Argus Greek OTC assessments 05 Jan 2023			€/MWh
	Buy	Sell	±
February	199.00	209.00	nc

Argus Albanian OTC assessments 05 Jan 2023			€/MWh
	Buy	Sell	±
February	179.00	189.00	nc

Greek Henex day ahead			
		€/MWh	±
	Base load	236.61	+29.69

Romanian Opcom day ahead			
	Lei/MWh	€/MWh	Vol MWh
Base load	838.90	170.22	na

Bulgarian Ibox day ahead				
	€/MWh	±	lev/MWh	±
Base load	170.22	+42.91	333.23	+84.00
Peak load	210.20	+65.02	411.50	+127.29

SOUTHEAST EUROPEAN AND TURKISH MARKETS

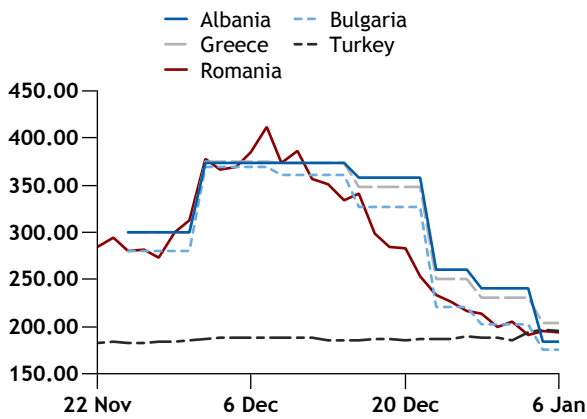
Turkish base load index		
	TL/MWh	€/MWh
February	3,924.30	192.77

Turkish Exist day ahead		
	TL/MWh	€/MWh
Base load	3583.24	179.97

Argus Turkish OTC assessments			
	Buy	Sell	±
TL/MWh			
February	3,964.40	3,984.40	nc
Q2 2023	3,590.30	3,610.30	nc
2024	3,773.35	3,793.35	nc
€/MWh conversions from TL/MWh			
February	195.02	196.00	-0.75
Q2 2023	164.38	165.30	-0.08
2024	139.34	140.08	0.36

SEE front month baseload

€/MWh



Increasing frequency of Bulgarian, Greek power prices

Following consultation, Argus will increase the frequency of its Bulgarian and Greek month-ahead power assessments to daily from weekly, with effect from 9 January.

SPOT PRICES - SEVEN-DAY BASE-LOAD MOVING AVERAGES



NEWS

German EV registrations at record high in Dec

Registrations for German electric vehicles (EVs) and plug-in hybrids rose to record highs in December, with those for EVs climbing by almost 80pc from the previous high.

New EV registrations rose to a record high of 104,325 in December, up by more than 46,000 from the previous high of 57,980 in November and by more than 115pc on the year. EVs accounted for 33.2pc of total new car registrations in December, up from 22.3pc in November. A total of 470,559 new EVs were registered throughout the course of last year – up by more than 100,000 from 2021 – meaning registrations in December accounted for more than one-fifth of the year's registrations.

Plug-in hybrid car registrations also set records, increasing by more than 113pc on the year and 50pc on the month – and from the previous high – to 69,801 in December. Plug-in hybrid vehicles accounted for 22.2pc of total new registrations, up from 17.1pc in November. A total of 362,093 new plug-in hybrid cars were registered last year, of which registrations in December accounted for almost one-fifth.

In October, the German government [announced a plan](#) to boost charging infrastructure in order to prepare the nation's transport sector for the 105.5TWh of electricity demand expected from EVs in 2030. The country expects to have 10.8mn battery-electric and 3.2mn hybrid battery-electric vehicles on the road by that year.

New gasoline and diesel-fuelled car registrations in December fell to their lowest in more than a year, with gasoline-fuelled car registrations falling by 11.1pc on the year to 64,525, the lowest since January 2021. The share of gasoline-fuelled cars in total new registrations fell by more than seven percentage points on the month to 20.5pc. A total of 863,445 gasoline-fuelled cars were registered last year, down by more than 100,000 from 2021.

Diesel-fuelled car registrations in December fell by 4.8pc on the year to 33,925, the lowest since November 2021. And the share of diesel-fuelled cars in total new car registrations in November fell to 10.8pc from 15.3pc. A total of 472,274 new diesel-fuelled cars were registered throughout last year, down from 524,446 in 2021.

A total of 2.65mn new cars were registered last year – 1.1pc more than in 2021 – of which 314,318 were registered in December. Average CO₂ emissions fell in December by 27.2pc on the year to 74.4g/km, from 96.6g/km in November.

By Helen Senior

German tax system curbs transition: study

Germany's energy transition may be hampered by detrimental tax incentives for small- and medium-sized enterprises (SMEs), a study conducted by NGO Green Budget Germany (FOS) and the Bertelsmann Foundation reveals.

FOS argues that taxes on electricity and other forms of energy are designed incoherently, providing incentives against the adoption of low-emissions technologies or inhibiting innovation in energy efficiency. And SMEs often face unequal competitive costs against large companies when applying for tax exemptions or funding, given the high bureaucratic burden.

The study looks mainly at the electricity and energy taxes applied on consumption, which serve to internalise the environmental costs and spur efficiency and innovation. But there are exemptions in place to mitigate the risk of unfair competition from abroad and avoid the relocation of energy-intensive companies, although their criteria to determine those firms at risk of competition is too wide, ending up also benefiting those that are not at risk.

Germany has a standard electricity tax of €20.50/MWh, but manufacturing companies can apply for relief of 25pc if their electricity tax burden exceeds €1,000. There is additional tax relief for companies whose consumption is particularly high, based on the contributions made to the employees' pension insurance. Taxes from other energies vary from the €5.50/MWh tax on natural gas consumption for heating to €61.35/1,000 litres for heating oil and €470.40/1,000l for diesel. Such taxes can also be exempted in the manufacturing sector and to firms reporting high consumption levels.

Germany taxes emissions with a carbon-allowance market system, but companies in the manufacturing sector can receive compensation ranging from €55-65 for each carbon certificate acquired. In addition, there is an available deductible of 150/t of CO₂ equivalent (CO₂e), which declines to 50-130/t of CO₂e for companies consuming less than 10 GWh/yr.

FOS said the considerations to apply for the general tax reliefs for electricity and other sources of energy are vague and not sufficiently aligned with real consumption. In the case of electricity, they do not differentiate for the generating source and reduced the incentives for companies to invest in self-sufficiency. The relief also makes the consumption of polluting diesel more convenient than natural gas under certain circumstances, while the financial aid for carbon certificates distorts further incentives to reduce CO₂ emissions with greener energies.

By Gabriel Lorca Aicardi

NEWS

Nasdaq to reduce number of Epad contracts

The Nasdaq Nordic power exchange will reduce the number of quarterly and monthly contracts offered in the Swedish and Finnish electricity price area differential (Epad) markets as a result of limited liquidity.

The reduction of products will be gradual, as of 1 February, the exchange is still expected to offer four Finnish and Swedish quarterly Epad contracts – second-quarter 2023, third-quarter 2023, fourth-quarter 2023 and first-quarter 2024 – although monthly contracts will be limited to four – February, March, April and May – from the five currently offered. The exchange is also anticipated to delay the first trading day for Epad contracts for June to 31 March from 1 February.

The number of quarterly contracts will then be reduced to three – third-quarter 2023, fourth-quarter 2023 and first-quarter 2024 – with the quantity of monthly Epad products further cut to three as well – April, May and June – from 3 April.

Nasdaq is expected to update its trading and clearing rules, as well as the product calendar, at a later date.

By Makani Joinville

Sweden approves Lithuania-Poland power cable

The Swedish government has approved the construction of the 700MW Harmony power link between Lithuania and Poland in Sweden's economic zone, bringing the project closer to completion.

The permit for the construction of the power cable in Sweden's economic zone is required under the country's continental shelf law as it will stretch 15km into Sweden's territorial sea.

"The Swedish government's approval of the construction of the Harmony Link is another step forward in the implementation of this important project that will strengthen the integration of the markets," Lithuanian transmission system operator Litgrid said.

The power link is estimated to cost about €680mn and will be the second interconnector with Poland once completed in 2025, as the Baltic country expects to be fully connected to the EU power grid in the same year.

Lithuania exported about 214MW of power to Poland in 2022 through the 500MW LitPol Link, with about 125MW heading in the other direction during the same period.

By Makani Joinville

French EV sales hit all-time high in December

Registrations of new electric vehicles (EVs) in France last

month rose to their highest since 2011, when the energy ministry started collecting data on EVs.

New EV sales stood at 25,445 in December, up by 23.5pc on the month and by 7pc on the year. This brought their share of overall vehicle registrations to 15.5pc, an increase of 0.6 points on the month. EV sales had also hit their highest level since 2021 in December.

In addition, plug-in hybrid registrations reached a 2022 high in December, standing at 14,605 and rising by about 17pc on the month. But they declined by 5.7pc from December 2021. Their market share remained stable on the month at 8.9pc.

The French government in November launched a consultation on electric retrofitting internal combustion vehicles. It estimates that 20mn fossil fuel vehicles will still be on the roads by 2035, when the EU plans to ban new sales of these vehicles. In addition, a "social leasing scheme" aimed at helping households buy electric or hybrid vehicles is expected to be implemented from the second quarter of 2023.

Diesel car registrations rose to 21,977 in December from 18,777 a month earlier, but were down on the year.

France aims to install 7mn public and private charging points by 2030. And the government wants 2mn EVs and hybrid vehicles on the road by 2030, and expects to have phased out new fossil fuel-powered vehicle sales by 2040.
By Tatiana Serova

Belgian nuclear generation falls in 2022: TSO

Nuclear power generation in Belgium declined on the year, contrasting with a rise in gas-fired and renewable output, data from transmission system operator (TSO) Elia show.

Nuclear output in Belgium fell by about 13pc on the year to 41.8TWh, or 47.3pc of the country's power mix, after hitting in 2021 its highest level since at least 2014. And output hit a yearly low of 43pc of the power mix in July last year. The permanent shutdown of the 1GW Doel 3 nuclear unit at the end of September further weighed on nuclear generation.

But a rise in renewable and gas output helped offset losses in nuclear generation and placed Belgium in a net power exporter position over the past year. Combined wind and solar generation accounted for 19.8pc of the country's power mix – up by 3.1 percentage points on the year – and broke an all-time record of 7.1GW on 11 May.

Gas-fired generation rose by 4pc to total 23.8TWh, equivalent to 26.9pc of the country's power mix.

Power demand declined by 3.3pc on the year to 81.7TWh, mainly as a result of high energy prices, Elia said.

NEWS

Between October-December, demand stood 8pc below the five-year average.

Looking ahead, nuclear generation could extend its decline this year following the planned closure of the 1GW Tihange 2 nuclear plant in February, whose extension was denied by domestic nuclear safety authority AFCN.

The Belgian government and French utility Engie, operating the nuclear plants, were expected to sign an agreement on two power plants' lifetime extension to 2035 by the end of last year.

By Tatiana Serova

Spain's Enagas lowers Feb gas demand forecast

Spanish grid operator Enagas has revised down its gas demand outlook for next month, citing expectations of weaker consumption by industries and power plants.

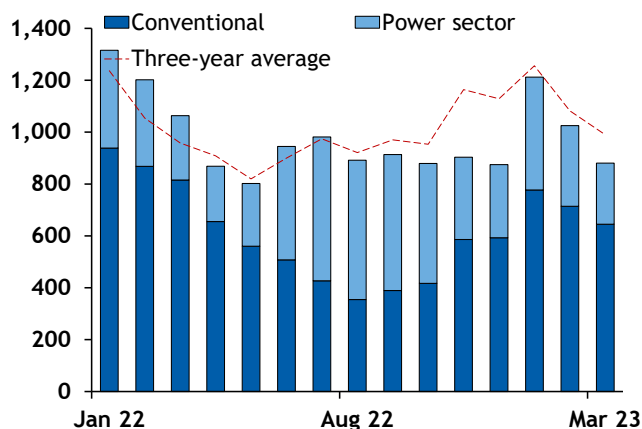
Enagas' latest mid-range scenario for February projects combined Spanish consumption at 1.02 TWh/d, down from the 1.17 TWh/d forecast about four weeks ago and just below the three-year average for that month of 1.08 TWh/d.

In the updated forecast, conventional demand from homes, businesses and industry is 714 GWh/d, adjusted down from 789 GWh/d about a month ago. This would be even further below the three-year average for that month of 866 GWh/d and the lowest for any February in more than 17 years.

Spanish industrial gas demand in November – the latest available data – rose for a third consecutive month, but was still 28pc lower than a year earlier, with consumption having fallen across all sectors.

Enagas expects February power-sector demand of 311 GWh/d, down from about 380 GWh/d previously but still well above the three-year average of 214 GWh/d. Despite the

Spanish consumption and forecasts for Jan-Mar '23 GWh/d



downwards revision, forecast power-sector gas burn would be the second-highest for that month since 2011 after February 2022, when consumption by power plants had hit 334 GWh/d.

Combined-cycle gas turbines (CCGTs) have led the Spanish power mix in each month since June, when the government's gas price cap came into force. But heavy rainfall in recent weeks has boosted hydropower output, limiting output from CCGTs.

March demand

The Enagas mid-range outlook for March envisions 881 GWh/d of combined consumption, lower than the three-year average of 990 GWh/d, which the system operator attributes to weaker activity across the country's industrial base and rising renewable generation.

Conventional consumption eases on the month to 645 GWh/d, which would mark the slowest gas use by this segment of the economy since at least 2006. Enagas foresees CCGT gas burn of 235 GWh/d, lower than its projection for February but the second-highest for that month since 2011.

By Jeff Kuntz

PGE to build 50MW Polish PV farm

PGE Energia Odnawialna, a subsidiary of Polish utility group PGE, will build its 50MW Kleszczow photovoltaic (PV) farm in 2024, after having received a building permit for the project.

The PV farm will be located in the province of Lodz, southwest of Warsaw, on land owned by the municipality of Kleszczow. The project will be a 50:50 joint venture between PGE and the city of Kleszczow, with the farm expected to be built by the end of 2024.

The PV farm will be backed by auction rights or long-term power purchase agreements, PGE said.

PGE Energia Odnawialna plans to build an additional 24 solar farms this year in Poland, with a combined capacity of about 180MW.

Poland last year produced about 1.07GW of solar power, sharply up from 528MW a year earlier.

By Makani Joinville

Firm gets funding for Romanian, Polish solar

Israeli developer Econergy has secured a €150mn loan to support the development of its solar portfolio in Romania and Poland.

The loan from the Israeli insurance company Phoenix Insurance will be used to support the development of Eco-

NEWS

nergy’s 1.7GW renewable portfolio in Romania and its 1.6GW portfolio in Poland, Econergy said today. The company will allocate €100mn to its Romanian projects where it has 300MW of projects currently under construction, including two solar photovoltaic (PV) plants of 172MW combined capacity, scheduled to come on line in the third quarter of this year.

The remaining funds will finance its projects in Poland. A 51MW PV plant is under construction in the country, expected to begin commercial operations by July 2023.

Phoenix will have the option to convert €110mn of its loan to shareholders’ capital in the projects.

Romania wants renewables to meet 30.7pc of power demand by 2030, while Poland aims to cover at least 23pc of its demand from renewables by then.

By Apostolos Tsarikas

Slovenia to install 66MW wind farm

The government of Slovenia has adopted a decision to implement a special plan to build the Dolenja vas wind farm with a capacity of up to 66MW, the energy directorate has announced.

The Dolenja vas wind farm will consist of 11 turbines with a capacity of up to 6MW each and be built near the existing 2.3MW Dolenja vas turbine in the municipality of Divaca, close to the Italian border. The Slovenian energy directorate did not respond to a request for more information on the plant.

Slovenia at present has limited wind capacity, partially because it possesses only 47km of coastline and cannot set up offshore wind units. The country also has a dispersed population, meaning few locations with adequate wind speeds meet the noise protection requirements for nearby settlements, according to the country’s National Energy and Climate Plan (NECP).

At present, there are no operational utility-scale wind farms, but state-owned hydropower producer DEM expects to commission three farms with a combined capacity of 45MW from 2023-25 and the country expects to reach 150MW of installed capacity by 2030, according to its NECP.

By Matt Bowen

Serbian net imports at 18-month low in December

Serbian net power imports in December fell to their lowest in more than 18 months on higher hydropower output. Outages at major lignite-fired plants in January have caused imports to rise again, particularly from Hungary, where they have climbed to a five-year high.

Serbia’s position as a net importer shrunk to an average

of just 5MW in December, down from 93MW in November, to reach the lowest monthly average since May 2021, when it exported 18MW. Imports in December were well below the 323MW average for 2022. Power flows to Serbia fell as the year progressed, with the fourth quarter of 2022 seeing imports at 51MW, the lowest quarterly average since the first quarter of 2021.

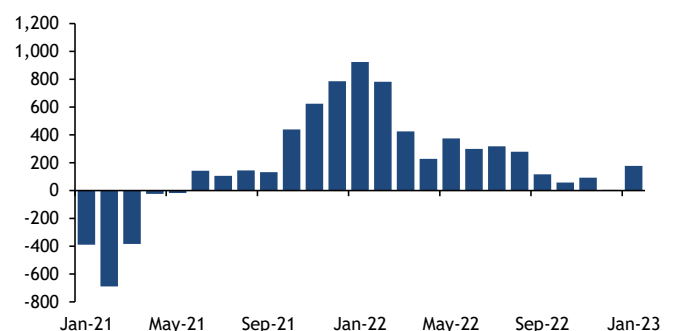
Despite closing the month as a net importer, Serbia was an exporter of power for 20 days of the month, averaging 2.2GW – up from 1.9GW in November, to reach the highest since February 2021. Serbian state-owned utility EPS announced this week that it exported €16.4mn of power in December, a marked change from the same month in 2021 when cold weather and heavy snowfall, coupled with outages at the utility’s 1.7GW Tent A lignite-fired plant, caused net imports to skyrocket to 768MW.

This increase in overall exports was driven by higher flows to Hungary, which climbed to 833MW from 613MW in November to reach their highest since February 2021. Exports to Hungary represented 37pc of all Serbian flows, the highest share since August. And exports to Bulgaria rose to an average of 237MW, up from 162MW on the month, to reach their largest since May 2020.

Serbia was able to increase its exports because of a sharp rise in domestic output, which climbed to 4.4GW. This was up by 500MW on the month and the highest since March 2021, largely as a result of hydro generation climbing to an average of almost 1.4GW, up from 823MW the month before. This is the highest output at Serbian hydro plants since May 2021 and followed several days of extremely heavy rainfall in the middle of the month, which pushed up the monthly average to 2.4mm/d, considerably above the long-term average of 1.66mm/d. Danube river levels at Bezdan averaged 44cm in December, up from minus 1.2cm in November.

Alongside this, gas-fired generation in Serbia rose to an all-time high of 230MW after the 189MW Pancevo combined-cycle gas-fired plant entered operation in mid-November.

Serbian net flows MW



NEWS

Gas-fired output in December represented more than 5pc of Serbia's generation mix for only the second time ever, more than double its share in 2022 as a whole.

January flows

But so far in January, Serbia has imported power every day, with flows averaging 177MW.

Lignite generation in the country has fallen to just 2.1GW, down by more than 500MW on the month and below the average of almost 2.5GW in 2022. The country's generation capacity has been curtailed by the 650MW unit 1 at the Tent B plant going off line in an unplanned outage from 1-6 January and the 650MW unit 2 being disconnected on the same day that the first unit returned. This second unit is expected to remain off line until 15 January.

Alongside this, the 210MW unit 1 at the Tent A lignite-fired plant also went off line on 30 December and is set to return on 15 January. These plant outages are probably continuing to support the higher Serbian imports seen in January so far, at least until the middle of this month.

Serbia so far has flipped to importing power from Hungary for the first time since October in January, with net imports averaging 593MW – the highest since March 2017. And with a combined 760MW of lignite-fired units and 190MW of hydropower units off line until 15 January, imports may be set to continue.

But looking further ahead, Hungary's export capacity may fall in February as the 486MW unit 2 at the 2GW Paks nuclear plant will be off line for maintenance from 16 February-20 March. The over-the-counter Serbian February contract has been assessed at a €0.50/MWh discount to Hungary every day by Argus since the assessments of both began on 3 January.

By Matt Bowen

Albania taxes power producers' windfall profits

The Albanian government has regulated a 50pc windfall tax on power producers' revenues to help households and small businesses cope with the energy crisis.

The mechanism will tax by 50pc the revenues of power producers between the selling price of electricity and a 8,500 lek/MWh (€72.23/MWh) regulated price, excluding power sales of state-owned utility Kesh. The country depends massively on hydropower generation, but other generators are also affected by the legislation.

The Albanian parliament voted in favour of the tax at the end of 2022, but the legislation has not been published yet

in the official gazette. The tax will be in place until 31 December 2024, unless in September 2023 the Hungarian 2024 calendar contract trades below €180/MWh. It will also apply retroactively to revenues received in 2022. The government will collect the first installment of additional revenues in April, the country's prime minister, Edi Rama, said earlier this week.

The legislation can discourage foreign market players from investing in Albania's power market as it creates regulatory uncertainty by changing the rules under which foreign companies signed their agreements with the Albanian government. The regulated price is also way below the €180/MWh level that most EU countries have used for similar windfall taxes.

By Apostolos Tsarikas

Work on Bosnian hydro plant may begin in March

Building work at the 160MW Dabar hydropower plant in the Republika Srpska autonomous region of Bosnia and Herzegovina may be set to commence in March, according to Chinese developer Gezhouba Group.

"The works on the construction of the hydroelectric power plant could start at the beginning of March this year," Gezhouba Group were quoted as saying by the Republika Srpska energy ministry. The two parties, alongside state-owned utility ERS who are developing the plant, met this week in Banja Luka to discuss the topic of "accelerating activities on the implementation" of the project, the energy ministry said.

The ministry has submitted a series of documents to the Export-Import Bank of China, which have resolved an issue between the two and will allow for the withdrawal of credit funds for building work on the project. The final step in the process will see the bank provide ERS and the energy ministry with dates for the signing of official documents, which will then allow for the release of the approved funding.

The Dabar plant is [expected to come on line by 2027](#), energy minister Petar Dokic said in March, and will be the first new hydropower plant built in the region in 30 years. The project forms part of a wider hydropower system development on the Trebisnjica River, which will also include the 60MW Nevesinje and 32MW Bileca units.

ERS currently operates a fleet of hydropower and lignite-fired plants with an installed capacity of about 1.3GW. These units produce an average of 6 TWh/yr, of which 44pc is generated by hydro and 56pc by lignite-fired plants.

By Matt Bowen

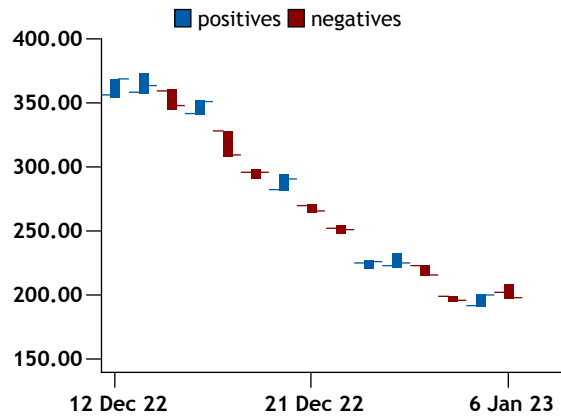
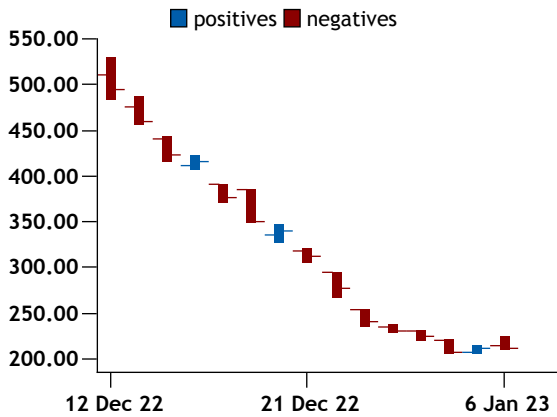
TECHNICAL INDICATORS

French front month base load

€/MWh

Hungarian front month base load

€/MWh

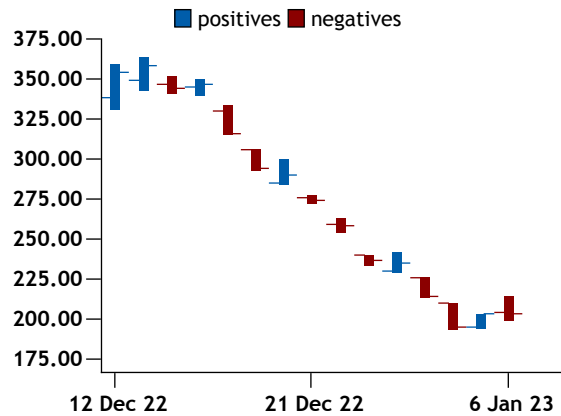
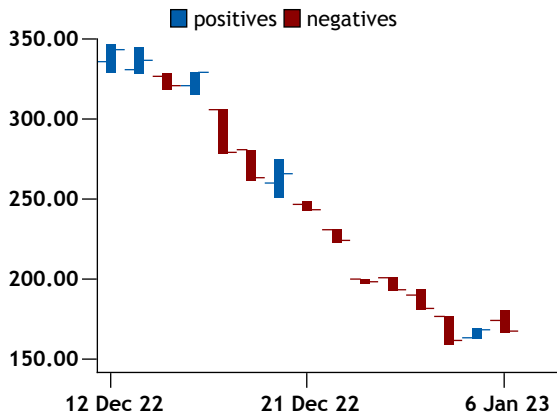


German front month base load

€/MWh

Italian front month base load

€/MWh

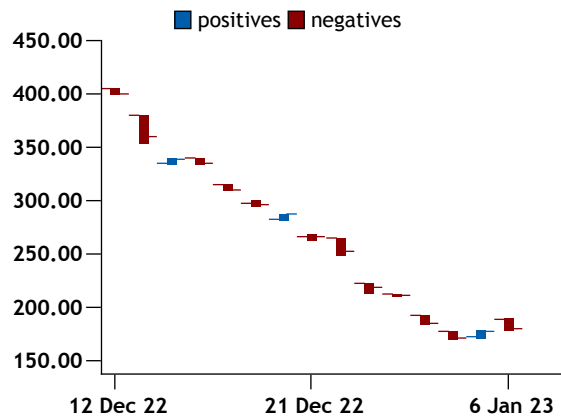
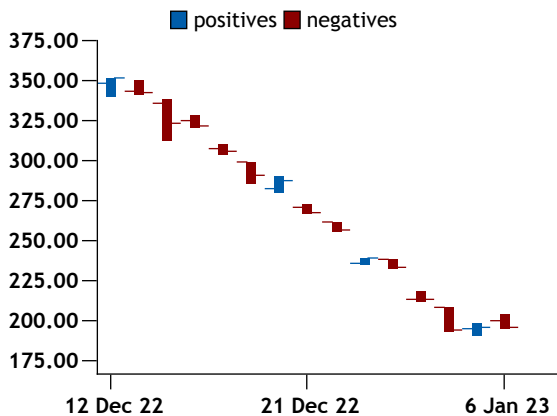


German year ahead base load

€/MWh

UK front month base load

€/MWh



Argus successfully completes annual Iosco assurance review

Argus has completed the 11th external assurance review of its price benchmarks covering crude oil, oil products, LPG, chemicals, thermal and coking coal, natural gas, biofuels, biomass, metals, fertilizers and agricultural markets. The review was carried out by professional services firm PwC. Annual independent, external reviews of oil benchmarks are required by international regulatory group Iosco's Principles for Oil Price Reporting Agencies, and Iosco encourages extension of the reviews to non-oil benchmarks. For more information and to download the review visit our website <https://www.argusmedia.com/en/about-us/governance-compliance>

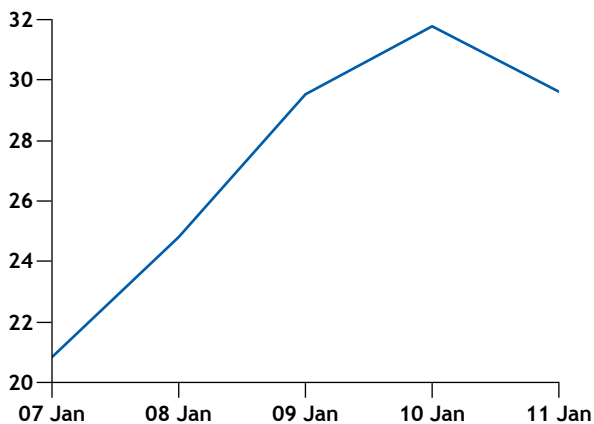
RENEWABLE POWER FORECASTS

Wind power forecast (06 January 18:00 UTC)										
Area	07 Jan		08 Jan		09 Jan		10 Jan		11 Jan	
	Base	Peak	Base	Peak	Base	Peak	Base	Peak	Base	Peak
Europe	89,044	90,513	104,845	102,834	104,456	101,513	98,983	96,806	105,907	96,284
Germany	20,855	21,247	24,820	22,469	29,545	27,972	31,776	30,971	29,631	23,650
DE-Grid 50Hertz	4,703	4,339	6,466	5,791	8,276	7,647	8,821	9,448	8,743	7,245
DE-Grid Amprion	3,801	4,056	4,619	4,125	5,931	5,515	6,353	5,781	5,556	3,978
DE-Grid EnBW	251	261	619	544	1,173	1,135	1,139	1,049	1,275	1,220
DE-Grid Transpower	12,099	12,591	13,116	12,008	14,166	13,676	15,463	14,693	14,057	11,207
Austria	438	450	469	355	1,194	811	2,139	2,278	686	892
Belgium	3,550	3,774	3,397	3,465	3,313	3,281	3,434	3,368	3,163	2,735
Denmark	3,155	3,518	3,503	3,260	3,241	3,145	2,434	2,134	3,332	2,446
Finland	1,525	1,544	3,202	3,415	3,267	3,249	1,786	1,545	2,463	2,750
France	10,535	11,759	10,785	11,041	12,034	12,232	10,698	11,238	12,105	10,943
Greece	203	223	210	272	243	202	1,551	1,578	1,739	1,816
Ireland	2,415	2,735	2,530	2,451	2,555	2,757	2,566	2,772	2,342	2,124
Italy	404	452	2,614	3,035	5,792	5,964	5,869	6,043	2,069	1,657
Netherlands	6,088	6,422	5,826	5,653	5,908	5,616	6,353	5,920	5,778	5,021
Norway	2,726	2,470	2,378	2,343	2,357	2,477	1,033	1,024	2,015	2,045
Poland	2,621	1,740	3,743	4,076	3,230	3,228	3,347	3,259	5,883	6,042
Portugal	3,530	3,507	3,557	3,454	1,362	837	1,595	1,801	2,305	2,173
Romania	78	91	874	929	1,787	1,951	2,073	2,208	2,146	2,456
Spain	11,574	12,337	15,724	15,982	12,778	11,805	7,519	6,294	11,645	10,894
Sweden	5,791	5,387	6,452	6,335	2,305	2,149	2,022	1,841	5,383	6,075
UK	13,134	12,623	13,411	12,679	12,434	13,050	12,228	12,591	11,752	10,859

Wind power forecasts for countries with >400MW installed capacity

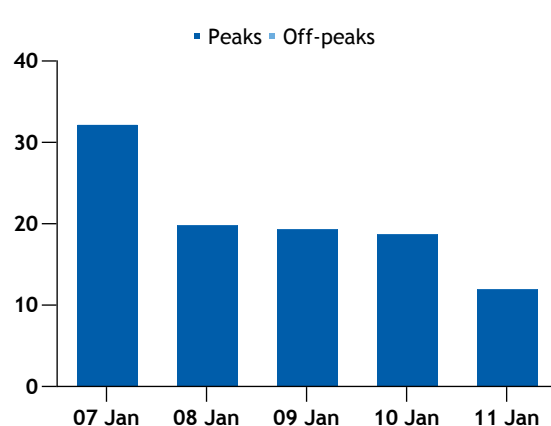
Solar power forecast (06 January 18:00 UTC)										
Area	07 Jan		08 Jan		09 Jan		10 Jan		11 Jan	
	Base	Peak	Base	Peak	Base	Peak	Base	Peak	Base	Peak
Germany	1,337	2,675	824	1,648	803	1,606	782	1,564	502	1,004
DE-Grid 50Hertz	277	554	181	361	221	442	175	350	94	188
DE-Grid Amprion	302	605	203	406	173	345	169	338	114	228
DE-Grid EnBW	271	543	74	149	136	272	108	216	66	132
DE-Grid Transpower	490	980	352	705	272	543	326	652	215	429
Czech Republic	93	186	30	60	25	50	41	83	15	29
France	907	1,814	500	999	619	1,238	526	1,051	732	1,464
Italy	977	1,894	744	1,432	574	1,130	993	1,940	1,027	2,006
Spain	1,351	2,702	383	766	882	1,764	1,478	2,955	1,282	2,565

German wind power forecast



GWh

German solar power forecast



GWh



Selected wind and solar power forecasts from spotrenewables (a product of EuroWind GmbH). Visit www.spotrenewables.com for complete forecasts for 29 European countries.

SPARK SPREADS

Spark spread calculations

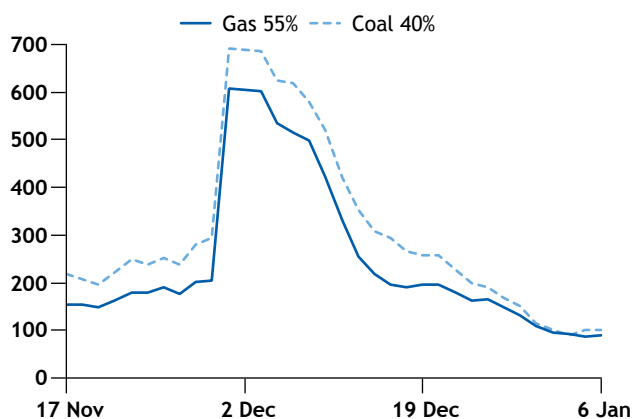
Spark spreads for various thermal efficiencies are calculated from Argus outright fuel, CO₂ emissions and electricity prices, and are not assessments based on actual spark-spread trades. Fuel, emissions and electricity prices are taken from the Argus European Electricity, Argus European Natural Gas, 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.

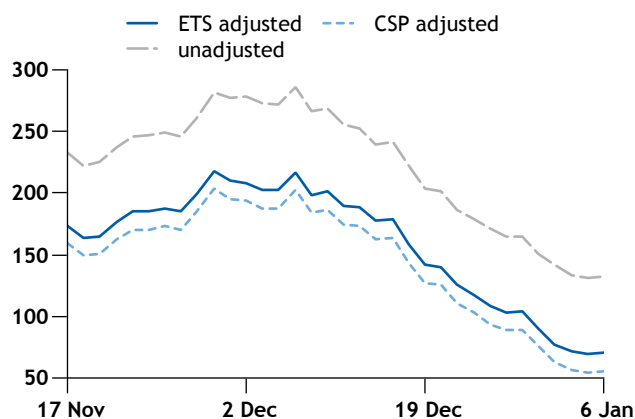
UK ETS and CSP adjusted spark and dark spreads					£/MWh
Contract	NBP 55%		ARA Coal 40%		
	base load	peak load	base load	peak load	
Working day ahead	9.054	29.054	15.028	35.028	
February	45.716	89.866	56.087	100.237	
March	34.378	58.528	45.622	69.772	
April	39.467	73.967	57.893	92.393	
May	39.393	73.793	-	-	
June	39.148	73.598	-	-	
July	38.823	75.323	-	-	
2Q23	39.301	73.801	59.425	93.925	
3Q23	30.516	63.966	51.053	84.503	
4Q23	67.216	170.116	97.905	200.805	
1Q24	41.925	109.025	75.247	142.347	
Summer 2023	34.909	68.909	55.237	89.237	
Winter 2023	54.570	139.570	-	-	
Summer 2024	23.018	60.018	-	-	
Winter 2024	52.698	137.698	-	-	
2024	35.496	92.026	55.599	112.129	

UK unadjusted spark spreads				£/MWh
Contract	NBP 49.13%			
	base load	peak load		
Working day ahead	24.572	44.572		
February	61.870	106.020		
March	50.433	74.583		
April	54.995	89.495		
May	54.613	89.013		
June	54.386	88.836		
July	54.154	90.654		
2Q23	54.630	89.130		
3Q23	45.715	79.165		
4Q23	81.812	184.712		
1Q24	57.479	124.579		
Summer 2023	50.172	84.172		
Winter 2023	69.646	154.646		
Summer 2024	41.051	78.051		
Winter 2024	71.515	156.515		
2024	52.926	109.456		

UK front-month peak-load spark vs dark €/MWh



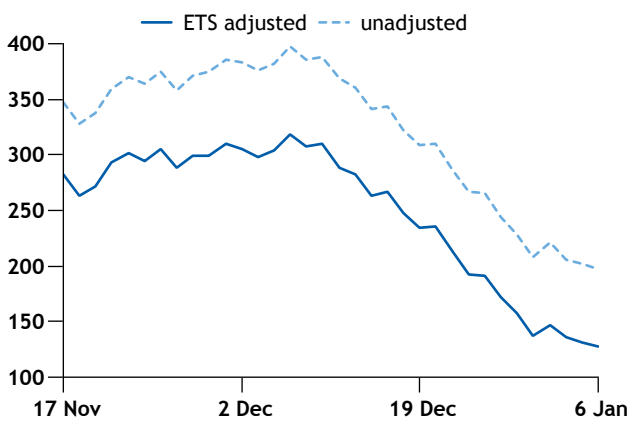
UK calendar-year base-load dark £/MWh



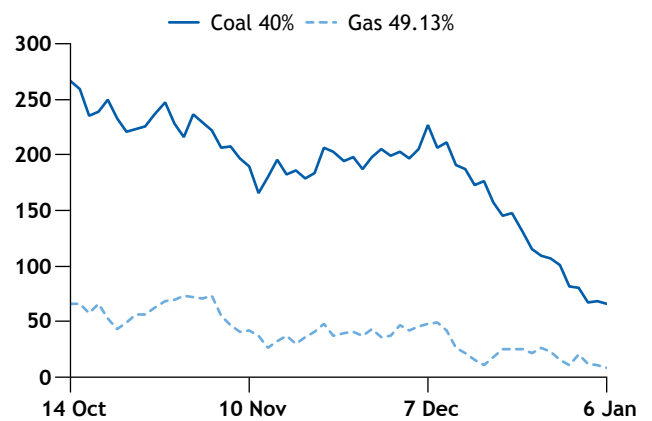
SPARK SPREADS

German ETS adjusted spark and dark spreads €/MWh					German unadjusted dark spreads €/MWh		
Contract	Germany VTP 55%		ARA Coal 40%		Contract	ARA Coal 40%	
	base load	peak load	base load	peak load		base load	peak load
Working day ahead	-34.894	-8.294	-11.573	15.027	Working day ahead	52.117	78.717
February	15.922	50.272	45.612	79.962	February	109.729	144.079
March	15.313	36.813	47.223	68.723	March	111.340	132.840
April	9.041	34.541	47.432	72.932	April	111.549	137.049
May	2.609	26.159	-	-	2Q23	114.651	135.151
June	23.195	35.695	-	-	3Q23	141.077	169.577
July	30.686	63.836	-	-	4Q23	183.155	264.155
2Q23	11.632	32.132	50.534	71.034	1Q24	175.882	270.782
3Q23	36.250	64.750	76.960	105.460	2Q24	-	-
4Q23	68.715	149.715	117.310	198.310	2024	136.027	197.777
1Q24	58.217	153.117	106.582	201.482	2025	108.585	165.335
2Q24	4.071	32.471	na	na	2026	86.576	136.576
3Q24	3.799	38.599	-	-			
2024	27.963	89.713	66.391	128.141			
2025	19.258	76.008	34.908	91.658			
2026	20.663	70.663	9.195	59.195			

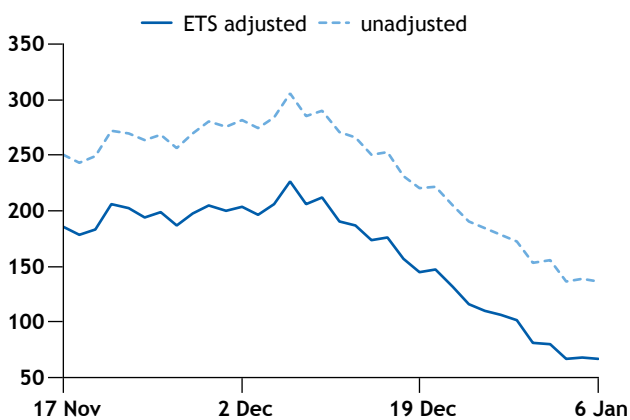
German calendar-year peak-load dark €/MWh



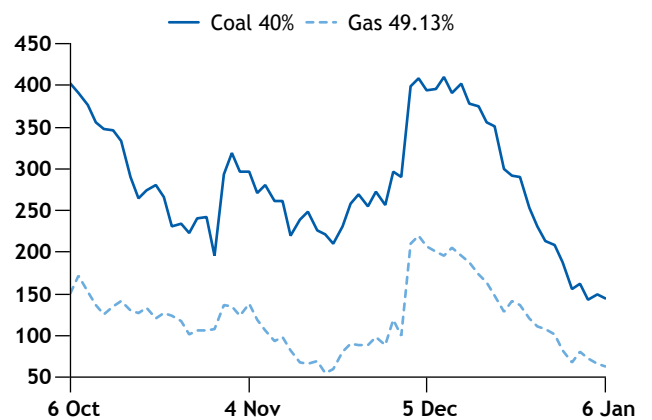
German year-ahead adjusted spark and dark €/MWh



German calendar-year base-load dark €/MWh



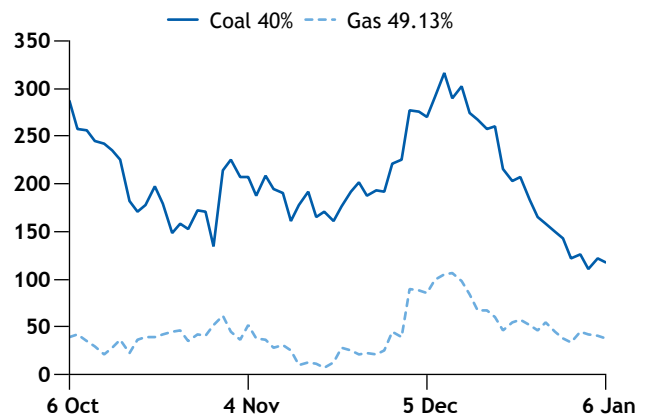
German month-ahead peak-load sparks €/MWh



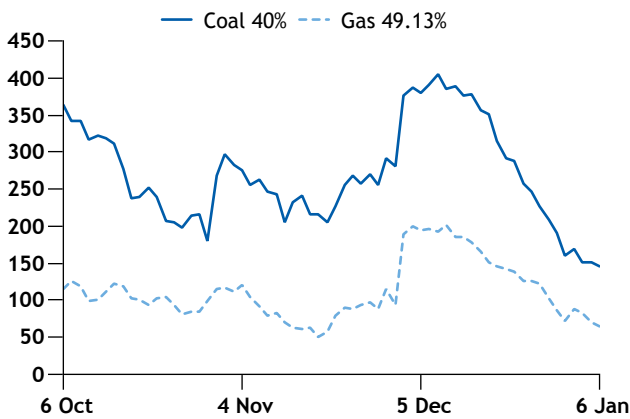
SPARK SPREADS

Dutch ETS adjusted spark and dark spreads					€/MWh
Contract	TTF 55%		ARA Coal 40%		
	base load	peak load	base load	peak load	
Working day ahead	-35.557	-3.257	-12.873	19.427	
February	25.468	52.218	54.112	80.862	
March	24.677	39.227	55.723	70.273	
April	21.041	36.741	57.432	73.132	
2Q23	16.313	34.113	54.034	71.834	
3Q23	24.932	41.832	64.460	81.360	
4Q23	46.442	104.492	92.310	150.360	
1Q24	45.985	143.585	92.532	190.132	
2024	12.781	62.681	47.391	97.291	
2025	7.331	38.531	17.708	48.908	
2026	9.468	38.168	-7.955	20.745	

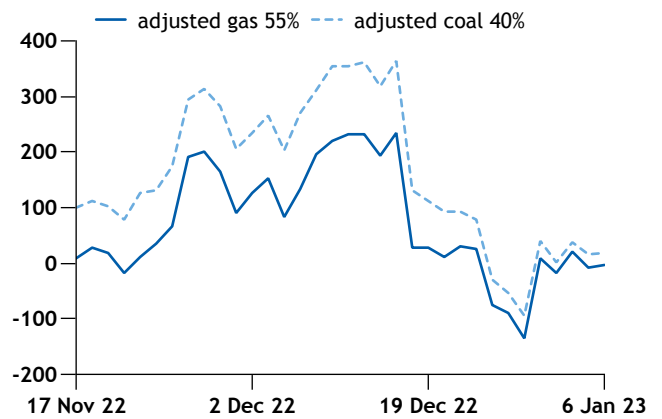
Dutch front-month base-load spreads €/MWh



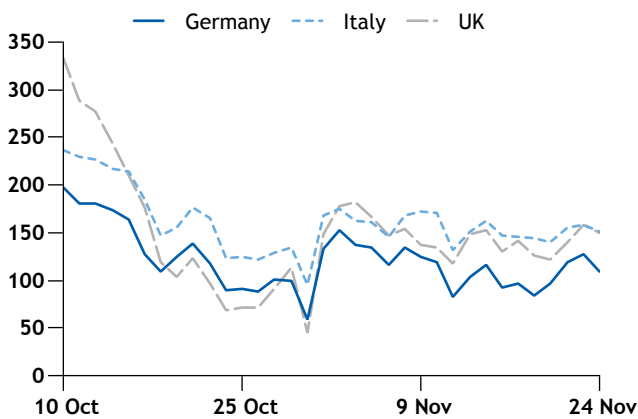
Dutch front-month peak-load spreads €/MWh



Dutch day-ahead peak-load spark vs dark €/MWh



European front-month base-load dark €/MWh



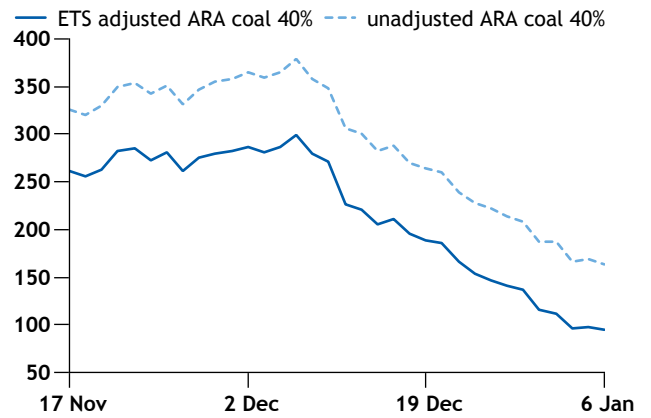
Italian ETS adjusted spark and dark spreads €/MWh

Contract	PSV 55%		ARA Coal 40%		ARA Coal 40% (incl. fuel tax)	
	base load	peak load	base load	peak load	base load	peak load
Day ahead	2.970	17.970	37.927	52.927	33.699	48.699
February	53.195	94.395	79.112	120.312	74.885	116.085
March	44.450	81.550	76.223	113.323	71.996	109.096
April	44.768	67.718	82.432	105.382	78.205	101.155
2Q23	39.541	63.741	78.534	102.734	74.307	98.507
3Q23	48.613	76.363	87.960	115.710	83.733	111.483
4Q23	52.260	89.610	101.310	138.660	97.083	134.433
1Q24	46.408	72.258	90.682	116.532	86.455	112.305
2024	19.126	43.276	52.391	76.541	48.163	72.313
2025	11.790	31.740	21.258	41.208	17.030	36.980

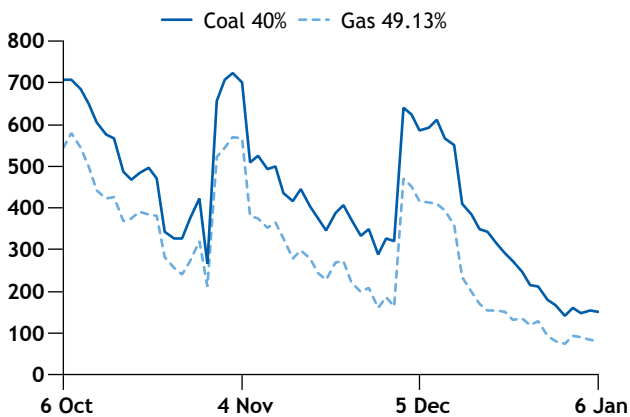
SPARK SPREADS

French ETS adjusted spark and dark spreads					€/MWh
Contract	ARA Coal 40%		Peg 55%		
	base load	peak load	base load	peak load	
Working day ahead	-9.573	27.027	-25.257	11.343	
February	87.112	146.112	67.559	126.559	
March	70.223	100.223	50.995	80.995	
April	62.132	93.832	36.650	68.350	
2Q23	59.534	91.034	32.722	64.222	
3Q23	74.960	128.460	46.341	99.841	
4Q23	165.310	342.560	133.078	310.328	
1Q24	212.282	482.882	-	-	
2024	94.391	243.391	70.690	219.690	
2025	44.108	177.008	-	-	
2026	13.145	99.145	-	-	

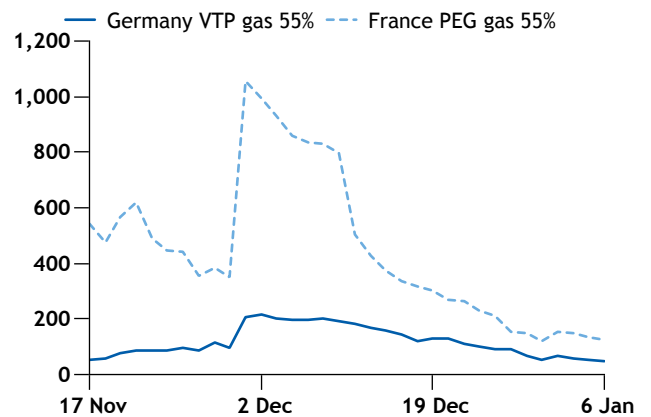
French calendar-year base-load dark €/MWh



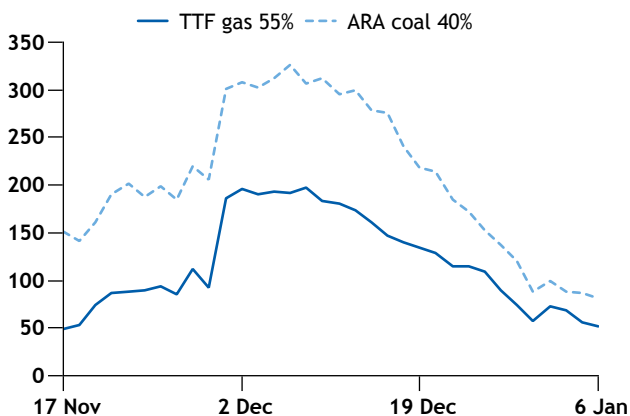
French front-month base-load spreads €/MWh



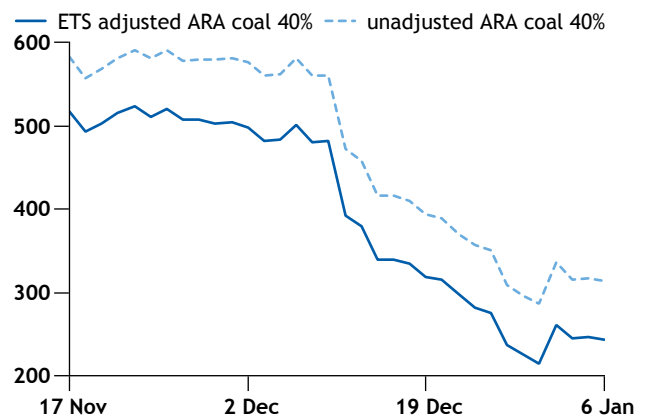
German vs French front-month peak-load spark €/MWh



Dutch front-month peak-load spreads €/MWh



French calendar-year peak-load dark €/MWh



WEATHER DATA

European weather - Departure from normal temperatures													°C
Location	7 Jan		8 Jan		9 Jan		10 Jan		11 Jan		Precipitation		
	Avg	± normal*	Avg	± normal*	Avg	± normal*	Avg	± normal*	Avg	± normal*	5-day	15-day	
UK – London Heathrow	9.1	3.4	6.5	0.8	6.5	0.8	9.3	3.6	8.8	3.1	21.6	49.0	
Norway – Bergen Florida	6.0	3.7	6.2	3.9	5.4	3.1	5.0	2.7	5.4	3.1	51.3	144.7	
Norway – Oslo Blindern	1.3	3.5	4.1	6.3	3.3	5.5	1.7	3.9	1.0	3.2	43.5	92.3	
France – Paris Orly	8.5	3.9	8.3	3.6	7.3	2.6	9.6	4.9	11.0	6.3	19.4	45.4	
The Netherlands – Amsterdam Schiphol	9.2	5.4	7.5	3.7	6.2	2.4	8.2	4.4	9.1	5.3	27.6	60.1	
Germany – Essen	9.9	6.9	8.8	5.8	6.2	3.2	8.0	5.0	10.1	7.2	23.9	52.7	
Germany – Berlin Tempelhof	8.0	6.7	7.6	6.4	6.1	4.9	5.7	4.6	8.2	7.1	12.3	26.7	
Italy – Milano Malpensa	6.9	3.5	7.4	4.0	6.8	3.4	5.6	2.1	5.8	2.3	20.3	47.0	
Italy – Rome Fiumicino	12.4	3.4	12.6	3.2	12.6	3.0	10.8	2.2	10.8	2.0	16.5	43.3	
Poland – Warsaw Okęcie	4.3	5.5	5.0	6.3	7.5	8.9	5.1	6.5	5.2	6.7	8.0	25.0	
Czech Republic – Prague Ruzyne	6.3	6.8	4.1	4.7	4.5	5.1	3.9	4.5	6.9	7.6	6.9	16.8	
Hungary – Budapest Lorinc	4.6	4.1	5.7	5.1	5.2	4.6	3.6	3.0	2.9	2.3	17.4	30.4	
Serbia – Belgrade Surcin	9.0	7.4	7.5	5.9	7.8	6.2	6.9	5.2	6.1	4.4	10.9	25.2	
Romania – Bucharest Imh	3.6	4.2	4.0	4.6	5.9	6.5	5.7	6.3	5.0	5.6	8.8	19.4	
Spain – Madrid Barajas	6.0	0.4	11.6	6.0	10.2	4.6	9.2	3.6	9.8	4.1	18.9	35.7	
Greece – Athens Airport	13.2	2.8	12.5	2.2	11.9	1.6	14.4	4.1	12.1	1.8	8.2	24.8	
Bulgaria – Sofia Observatory	3.1	3.1	3.6	3.5	3.0	2.9	1.9	1.8	1.1	1.0	10.9	22.4	
Turkey – Istanbul Ataturk	8.8	2.1	8.7	2.0	8.4	1.8	10.6	4.0	10.0	3.4	11.2	30.8	

*normal means cleaned 10-year average (2004-2013 inclusive)

– Ensemble forecasts (12.00 GMT) provided by Speedwell Weather



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



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