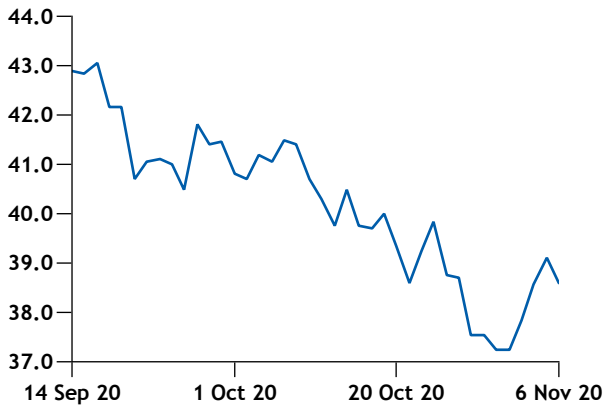


MARKET HEADLINES

- UK: December clean spark spread at contract low
- Germany: Front week rises as curve falls
- Spain plans 20GW renewables auctions by 2025
- German demand fall limited despite restrictions
- Italian hydro reserves rise
- Serbia progresses plans for 599MW wind farm
- Baltics disagree on Russian-Latvian power trade
- Turkish OTC market recovery could halt
- Ukraine plans higher power generation in 2021

German year ahead base load

€/MWh



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- UK and Irish markets
- German and Alpine markets
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- Czech, Slovak and Polish markets
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- Southeast European and Turkish markets
- Market news
- Renewable power (wind and solar) forecasts
- Spark spreads

PRICES

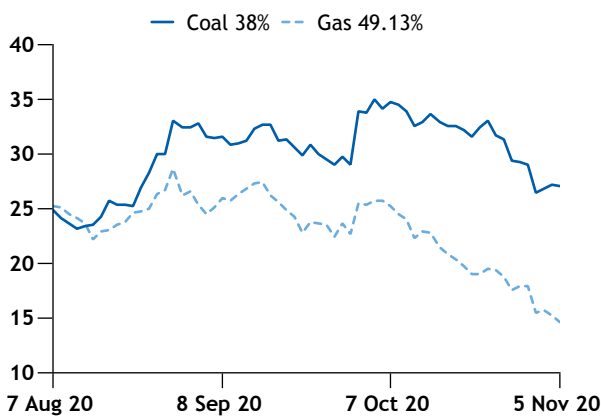
Argus European OTC assessments					€/MWh
	Day ahead	Week ahead	Month ahead	Quarter ahead	Year ahead
UK					
Base load	49.36 ▼	48.20 ◀▶	51.83 ▼	54.21 ▼	50.55 ▼
Peak load	54.85 ▼	54.51 ◀▶	58.87 ▼	62.34 ▼	57.01 ▼
Germany					
Base load	43.00 ▲	39.00 ▲	32.70 ▼	38.35 ▼	38.60 ▼
Peak load	48.50 ▲	47.75 ▲	42.85 ▼	47.50 ▼	46.80 ▼
Netherlands					
Base load	41.25 ◀▶	39.75 ▲	38.90 ▼	41.65 ▲	40.20 ▼
Peak load	45.96 ◀▶	47.00 ▲	45.25 ▼	47.10 ▼	45.30 ▼
France					
Base load	41.00 ▲	37.50 ▲	41.40 ▼	46.85 ▼	42.40 ▼
Peak load	46.75 ▲	45.75 ▲	51.90 ▼	62.05 ▲	54.90 ▼
Switzerland					
Base load	43.00 ▲	-	40.85 ▼	45.15 ▼	42.15 ▼
Peak load	48.50 ▲	-	51.15 ▼	51.97 ▼	48.85 ▼
Spain					
Base load	41.55 ▲	40.50 ▲	40.50 ▼	42.85 ▼	43.45 ▼
Peak load	-	-	-	-	-
Italy					
Base load	-	43.50 ▲	42.90 ▼	46.25 ▼	46.40 ▼
Peak load	-	51.50 ▲	51.20 ▼	53.25 ▼	52.30 ▼
Czech Republic					
Base load	42.25 ▲	39.25 ▲	35.15 ▼	41.65 ▼	41.05 ▼
Slovakia					
Base load	42.25 ▲	39.40 ▲	35.30 ▼	42.65 ▼	43.10 ▼
Peak load	-	-	-	-	-
Hungary					
Base load	45.50 ▲	41.85 ▼	41.05 ▼	46.65 ▼	46.75 ▼
Peak load	55.55 ▲	- ▼	51.75 ▼	56.30 ▼	55.45 ▼
Serbia					
Base load	45.55 ▲	41.85 ▼	40.35 ▼	-	46.75 ▼
Peak load	-	-	-	-	-
Romania					
Base load	-	-	41.72 ▼	47.26 ▼	46.85 ▼
Peak load	-	-	-	-	-
Turkey					
Base load	-	29.16 ▼	30.14 ▼	31.95 ▼	33.30 ▼
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	+9.20 ▼	+19.13 ▼	+15.86 ▼	-	
France	-1.50 ▼	+8.70 ▼	+8.50 ▼	+3.80 ▼	
Switzerland	-	+8.15 ▼	+6.80 ▼	+3.55 ▼	
Netherlands	+0.75 ◀ ▶	+6.20 ▲	+3.30 ▲	+1.60 ▲	
Spain	+1.50 ▼	+7.80 ▲	+4.50 ▲	+4.85 ▲	
Italy	+4.50 ▼	+10.20 ▼	+7.90 ▼	+7.80 ▼	
Czech Republic	+0.25 ▼	+2.45 ▼	+3.30 ▼	+2.45 ▼	
Slovakia	+0.40 ▼	+2.60 ▲	+4.30 ▲	+4.50 ▲	
Hungary	+2.85 ▼	+8.35 ▼	+8.30 ▼	+8.15 ▼	
Serbia	+2.85 ▼	+7.65 ▲		+8.15 ▲	
Turkey	-9.85 ▼	-2.56 ▼	-6.40 ▼	-5.30 ▼	

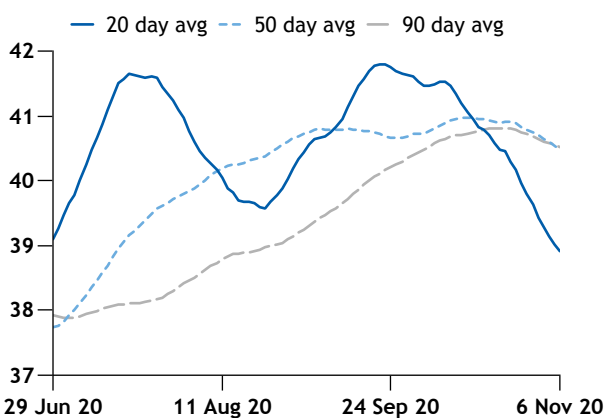
Spark spread German month-ahead peak load €/MWh



Argus European OTC indexes					
		Day ahead	Month ahead	Season ahead	Total volume GWh
UK	£/MWh	44.40	46.91	43.01	2,890
Germany	€/MWh	43.00	33.04	-	14,108
France	€/MWh	41.13	41.86	-	2,437
Netherlands	€/MWh	41.25	38.74	-	882
Czech Republic	€/MWh	42.28	35.50	-	149

European exchange summary		€/MWh
		Base load
French Epex		35.21
Dutch APX		37.79
Belgian Belpex		36.26
German Epex/Phelix		36.23
Austria Epex		36.22
GB Hub		48.59
Irish isem		47.03
Nord Pool		4.00
Austrian Exaa		34.98
Polish Polpx		56.07
Czech OTE		34.19
Slovak ISOT		34.19
Slovenian BSP Southpool		36.22
Spanish Omel		33.53
Portuguese Omel		33.53
Greek SMP		37.78
Romanian Opcom		37.22
Italian PUN index		39.80
Turkish Exist		26.99
Cropex (Croatia) day ahead		36.22
Ibex Bulgaria day ahead		38.15
HUPX Hungary day ahead		37.22

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



UK AND IRISH MARKETS

December clean spark spread at contract low

The curve fell off sharply on Friday, tracking losses in emissions and gas prices. Despite some strong day-ahead prices this week, front month clean spark spreads have declined to contract lows.

December fell by £1.20/MWh on the day to £46.80/MWh. It took direction from losses of 1.475p/th (£0.48/MWh) on the front month NBP gas contract and €0.57/t CO₂e in front-year EU ETS allowances.

The December clean spark spread for 49.13pc efficiency was largely unchanged from Thursday's level of around at £3.70/MWh, which is the lowest since Argus began assessing the contract. It is down from an average of £5.41/MWh during October and £4.40/MWh last Friday.

Despite some price spikes this week, day-ahead clean spark spreads for 49.13pc efficiency have been just £1.60/MWh so far in November using N2EX prices, because of low settlements last weekend. Front month clean spark spreads were £5.23/MWh at the end of October.

And an outlook of strong imports is weighing on the front of the curve.

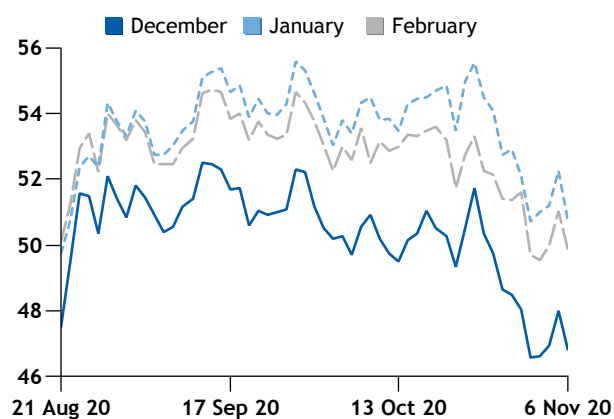
The December base-load premium to the French market was at a contract high of €10.45/MWh, up from an average of just €5.68/MWh last month.

The front quarter contract similarly fell by £1.20/MWh on the day to £49/MWh, amid a loss of 1.375p/th on the equivalent NBP contract. Front quarter clean spark spreads edged up to £5.58/MWh, from Thursday's five-month low of £5.52/MWh. This is down from an average of £7.03/MWh last month.

The front quarter premium to the French market fell to €7.44/MWh, but this was still above the average level of €5.95/MWh during October.

And an auction for quarterly capacity on Britned was

UK front-three months base load £/MWh



Argus UK OTC assessments	£/MWh					
	Base load			Peak load		
	Buy	Sell	±	Buy	Sell	±
Working day ahead	44.10	45.00	-2.70	49.25	49.75	-4.50
Saturday	44.00	46.00	-1.50	48.75	52.75	-2.50
Sunday	44.00	44.50	-0.25	48.00	52.00	-1.25
Monday	44.10	45.00		49.25	49.75	
Weekend	44.40	44.90	-0.85			
Week ahead	43.25	43.75	nc	47.20	51.20	nc
Week 47	44.75	45.25	-0.05	50.75	54.75	-0.05
Week 48	42.50	46.50	-0.55	50.25	54.25	-0.55
Week 49	44.15	48.15	-1.20	51.30	55.30	-1.10
December	46.70	46.90	-1.20	52.65	53.65	-1.10
January	50.65	50.85	-1.50	59.00	60.00	-1.50
February	49.55	50.15	-1.20	57.60	58.60	-1.20
March	46.15	46.35	-1.10	50.95	51.95	-1.10
April	44.15	45.15	-0.65	48.75	49.75	-0.65
May	40.90	44.90	-0.75	45.85	49.85	-0.60
Q1 2021	48.90	49.10	-1.20	55.85	56.85	-1.25
Q2 2021	42.60	43.60	-0.75	47.35	48.35	-0.60
Q3 2021	41.85	42.85	-0.75	46.05	47.05	-0.70
Q4 2021	47.30	47.50	-0.45	54.25	55.25	-0.30
Annual April 2021	45.30	46.30	-0.70	51.15	52.15	-0.45
Summer 2021	42.65	42.85	-0.75	46.70	47.70	-0.65
Winter 2021/22	48.75	48.95	-0.65	55.55	56.55	-0.25
Summer 2022	41.25	41.75	-0.60	46.30	47.30	-0.40
Winter 2022/23	48.25	49.25	-0.45	56.35	57.35	-0.40
Summer 2023	41.15	42.15	-0.65	46.75	47.75	-0.65
Winter 2023/24	50.75	51.25	-0.80	58.80	59.80	-0.65
Summer 2024	43.35	43.85	-0.50	48.20	50.20	-0.50

Argus UK OTC indexes				
	Daily		Cumulative	
	£/MWh	Vol GWh	£/MWh	Vol GWh
Working day ahead	44.40	21	46.75	161
Weekend ahead	45.07	69	44.86	147
Week ahead	43.53	14	43.36	297
Month ahead	46.91	251	47.01	1,296
Cumulative month-ahead November			49.30	5,505
Season ahead	43.010	795	43.180	19,009
Total reported trade (all contracts)				2,890

Average prices weighted by volume of trades

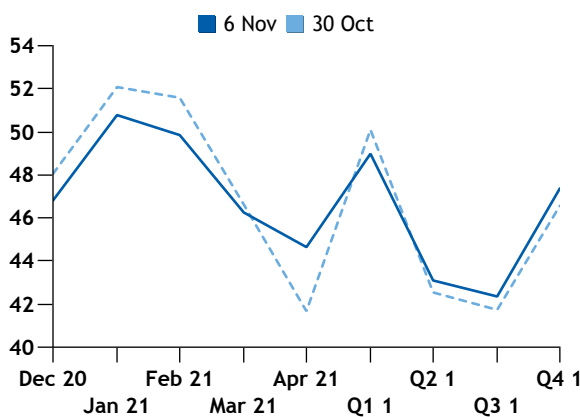
UK AND IRISH MARKETS

completed, pointing to strong net imports from the Netherlands. A total of 77MW of NL-GB capacity in 1Q21 was auctioned for €11.98/MWh, while capacity in the reverse direction went for just €0.27/MWh.

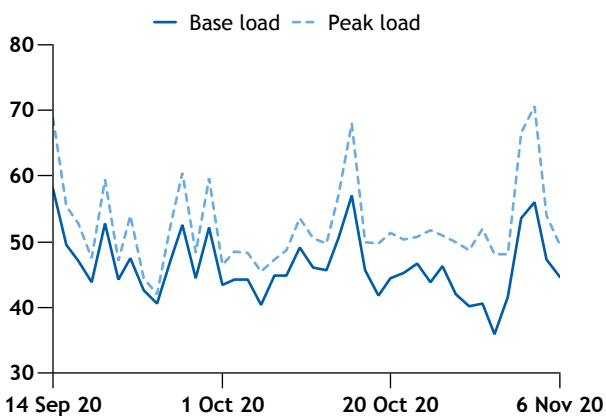
But this was well below the current market spreads. The front quarter premium to the Dutch market fell to €12.64/MWh, from €14.08/MWh on Thursday.

Further out, high-volume trades were seen on the constituent quarters of winter 2021-22. The fourth quarter 2021 traded at £47.40/MWh in a 120MW deal, while the first quarter 2022 traded at £50.25/MWh, also in a 120MW deal.

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 2021	42.45	42.65
Summer 2021	40.18	40.38
Winter 2021/22	44.75	44.95
Summer 2022	38.46	38.66
Winter 2022/23	44.15	44.35
Summer 2023	38.44	38.64
Winter 2023/24	46.29	46.49
Summer 2024	40.39	40.59

N2Ex UK day ahead auction		
	£/MWh	±
Base load	43.84	-6.76

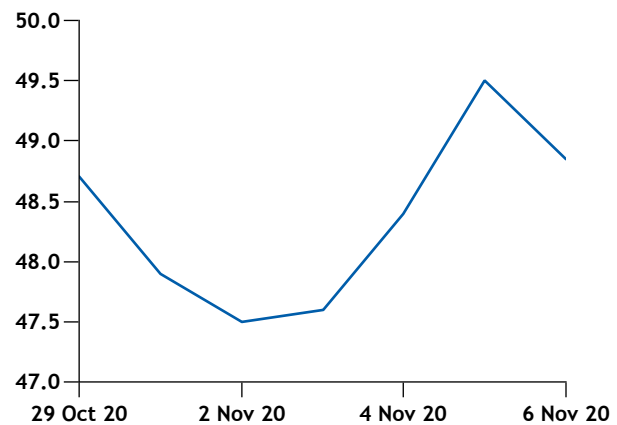
APX UK day ahead auction			
	Hours	£/MWh	Vol GWh
Base load	01-24	na	na
Peak load	09-20	na	na
Off peak	21-08	na	na

Argus UK day ahead block contracts	£/MWh		
	Bid	Offer	±
Blocks 1 + 2	37.25	37.75	-1.80
Blocks 3 + 4	44.00	44.50	-3.30
Block 5	59.75	60.25	-6.80
Block 6	43.50	44.00	0.70

Argus Irish (ISEM) OTC assessments 04 Nov 2020	€/MWh		
	Buy	Sell	±
December	53.75	54.75	nc
Q1 2021	55.65	57.65	-1.55
Q2 2021	46.50	54.50	nc
Q3 2021	45.00	53.00	nc
Q4 2021	51.00	59.80	-0.20

Irish isem day ahead		
	£/MWh	€/MWh
Base load	42.44	47.03

UK winter-ahead base load £/MWh



GERMAN AND ALPINE MARKETS

Front week rises as curve declines

The German front-month base-load contract fell, tracking losses in API 2 coal swaps. Generating margins for a coal-fired plant with the highest efficiency narrowed to a new low due to slower losses in EU ETS allowances. Closer in, the front-week contract rose sharply as forecasts for wind output were revised down.

Clean dark spreads for a 46pc-efficient plant – the highest efficiency in the German coal-fired fleet – declined by €0.08/MWh to €0.34/MWh and the lowest level since the start of the API 2 coal assessment for December delivery on 1 September. This means that around 34pc of the German coal-fired fleet could run with positive margins during base-load hours next month.

Up to 4GW of coal-fired capacity will leave the German wholesale power market by the end of this year. Results of the first coal phase-out tender – held in September – are due by 1 December.

API 2 coal swaps for December delivery fell by around 3pc to €6.21/MWh. The EU ETS December 2020 allowance declined by around 2pc to €25.43/t CO₂e.

The German December base-load contract fell by €0.85/MWh to €32.70/MWh.

At the back of the curve, calendar contracts also declined, with the fastest losses seen in the front year. The 2021 base-load contract fell by €0.50/MWh to €38.60/MWh, after rising to a two-week high in the previous session. The second year-ahead base-load contract fell by €0.40/MWh to €42.10/MWh. And 2023 base load shed €0.30/MWh to €44.30/MWh.

Closer in, the front-week contract rose sharply as forecasts for wind were revised down. The week 46 base-load contract rose by €1.25/MWh to €39/MWh.

Wind was forecast at 3-6.9GW during base-load hours, revised down by up to 5.5GW from Thursday's forecast.

The German weekend contract declined by €0.25/MWh to €33.75/MWh, as wind output was revised up slightly to 2.8-4.6GW during base-load hours.

In the day-ahead market, the German spot index de-

Argus Swiss OTC assessments							€/MWh
	Base load			Peak load			±
	Buy	Sell	±	Buy	Sell	±	
	Working day ahead	42.90	43.10	1.60	48.00	49.00	
December	40.75	40.95	-0.95	50.65	51.65	-0.90	
Q1 2021	45.05	45.25	-0.50	51.47	52.47	-0.50	
Q2 2021	34.20	35.20	-1.05	39.70	40.70	-0.30	
2021	42.05	42.25	-0.50	48.75	48.95	-0.30	

Argus German OTC assessments							€/MWh
	Base load			Peak load			±
	Buy	Sell	±	Buy	Sell	±	
	Working day ahead	42.95	43.05	1.75	48.45	48.55	
Saturday	34.45	34.55	-2.76	36.95	37.05	-5.43	
Sunday	33.70	33.80		32.55	33.55	nc	
Weekend	33.70	33.80	-0.25				
Week ahead	38.95	39.05	1.25	47.70	47.80	1.00	
Week 47	37.20	37.30	0.45	45.95	46.05	-0.05	
Week 48	35.95	36.05	-0.75	47.70	48.70	-0.75	
Week 49	35.70	35.80	-1.75	44.70	45.70	-1.75	
December	32.65	32.75	-0.85	42.80	42.90	-0.90	
January	37.20	37.30	-0.20	47.65	47.75	-0.60	
February	40.95	41.05	-0.45	51.05	51.15	-0.40	
March	36.90	37.00	-0.25	43.30	43.80	-0.50	
April	35.05	35.55	-1.05	39.85	40.35	-0.30	
May	33.20	33.70	-1.05	38.20	38.70	-0.30	
Q1 2021	38.30	38.40	-0.30	47.45	47.55	-0.50	
Q2 2021	34.65	34.75	-1.05	40.45	40.55	-0.30	
Q3 2021	38.55	38.65	-0.40	44.95	45.05	-0.10	
Q4 2021	42.55	42.65	-0.40	53.95	54.05	-0.30	
Q1 2022	44.80	44.90	-0.65	56.75	57.25	-0.70	
Q2 2022	38.65	39.15	-0.40	43.80	44.30	-0.70	
2021	38.55	38.65	-0.50	46.75	46.85	-0.30	
2022	42.05	42.15	-0.40	51.60	51.70	-0.70	
2023	44.25	44.35	-0.30	55.15	55.35	-0.15	
2024	46.25	46.35	-0.25	57.83	59.83	-0.15	

Argus German OTC indexes				
	Daily		Cumulative	
	€/MWh	Vol GWh	€/MWh	Vol GWh
Working day ahead	43.00	14	39.15	434
Week ahead	38.64	454	38.07	1,882
Month ahead	33.04	1,534	33.07	6,268
Quarter ahead	38.37	1,268	39.19	26,657
Year ahead	38.72	4,827	39.59	1,565,605
Total reported traded (all contracts):				14,108.04
<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	45.56	46.56	4.56	50.30	51.30	
December	36.50	36.60	-0.85	46.18	47.18	-0.90	
Q1 2021	43.00	43.20	-0.30	51.40	52.40	-0.50	
Q2 2021	35.10	35.30	-1.05	41.35	42.35	-0.30	
2021	41.05	41.25	-0.50	50.10	51.10	-0.30	
2022	43.80	44.80	-0.40	52.91	53.91	-0.70	

GERMAN AND ALPINE MARKETS

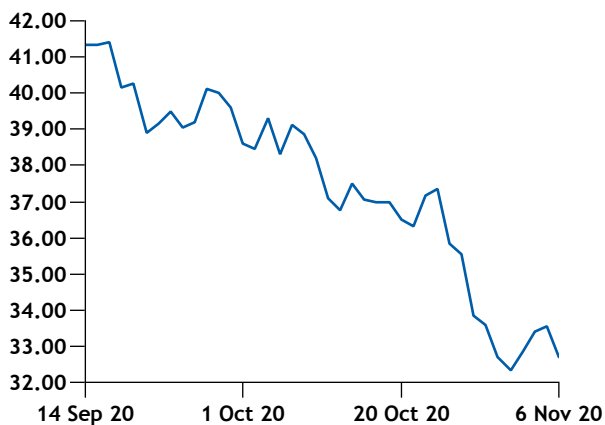
clined on expectations of lower demand, despite forecasts for lower wind day on day. It settled at €36.23/MWh, from €40.54/MWh in the previous session.

German electricity consumption has fallen this week since the introduction of a new partial lockdown on Monday (see separate story).

German power demand averaged 59.83GW from Monday until Friday midday. This was the lowest level in three weeks, down from 60.99GW, or by 2pc, during the same period last week. But consumption this week so far has been above the levels seen during the same time last year, when it averaged 58.98GW. Lower than average temperatures this week have offered some support to national power demand year on year.

Separately, the German lower house of parliament – the Bundestag – today agreed on the new offshore wind target of 40GW of installed offshore wind by 2040 and 20GW by 2030. On Monday, the ruling parties of the German coalition government had agreed on the new targets.

German month-ahead base load €/MWh



Epex Phelix day ahead auction			
	Hours	€/MWh	±
Base load	01-24	36.23	na
Peak load	09-20	38.93	na
Off peak 1	21-24	30.84	na
Off peak 2	01-08,21-24	38.89	na

Energy Exchange Austria (Exaa) day ahead			
	Hours	€/MWh	±
Base load	01-24	34.98	-6.11
Peak load	09-20	37.62	-7.86

Epex Austria day ahead		
	€/MWh	±
Base load	36.22	-4.29

Swissix day ahead			
	hours	€/MWh	±
Base load	01-24	na	na
Peak load	09-20	na	na
Off peak I	01-08, 21-24	na	na

NORDIC MARKET

Nasdaq OMX Nordic futures		€/MWh
	Base load	Closing Price ±
Day ahead	6.75	-0.50
Week 46	10.90	-0.60
Week 47	11.08	-1.02
December 2020	16.15	-0.68
January 2021	20.70	-0.70
February 2021	21.60	-0.90
Q1 2021	19.70	-0.70
Q2 2021	14.60	-0.40
Q3 2021	14.95	-0.32
Q4 2021	24.20	-0.06
2021	18.35	-0.40
2022	23.40	-0.05

Nord Pool physical spot day ahead			
	€/MWh	±	NKr/MWh
Systemwide	4.00	-0.38	36.62

GUARANTEES OF ORIGIN

Guarantee of origin certificates	€/MWh											
	Nordic hydro			European wind			European solar			European biomass		
	Bid	Ask	±	Bid	Ask	±	Bid	Ask	±	Bid	Ask	±
2019	0.07	0.09	nc	0.08	0.11	nc	0.09	0.12	nc	0.06	0.09	nc
2020	0.10	0.12	nc	0.12	0.15	-0.005	0.14	0.17	0.005	0.09	0.11	nc
2021	0.18	0.20	-0.005	0.21	0.24	-0.005	0.22	0.26	-0.010	0.17	0.19	0.005
2022	0.27	0.30	-0.005	0.28	0.32	-0.010	0.35	0.40	nc	0.25	0.29	nc
2023	0.31	0.34	-0.005	0.33	0.37	-0.005	0.40	0.45	-0.005	0.29	0.33	-0.005

Liquidity drops further

Trading activity for European GOOs slowed for a second week, with November starting with the lowest recorded volume since early October. Prices for most products continued to fall amid strong supply and limited buying interest.

A total of 17 deals were seen during the week for a combined 855GWh, down from 18 deals totalling 1.24TWh in the previous week and 34 transactions for 3.30TWh over 19-23 October.

This week's activity was the slowest since 5-9 October, when 20 clips were recorded for a combined 781GWh.

Buying interest was limited during the week, with hydro products again dominating activity. Of the total traded volume, 629GWh was for Nordic and European hydro GOOs.

Prices for all Nordic hydro GOOs except for the current year product continued to decline. The 2020 vintage last traded at €0.1125/MWh, with the product being assessed at €0.11/MWh on Friday – unchanged week on week.

Nordic and European hydro 2021 were seen trading within a range of €0.185-0.1975/MWh. Nordic hydro 2021 was assessed at €0.19/MWh at the end of the week, down slightly from €0.195/MWh in the previous week.

The 2022 and 2023 products also traded, ending the week €0.02-0.025/MWh lower at €0.285/MWh and €0.325/MWh respectively.

Nordic hydropower stocks rose on the week amid lower demand and continued wet weather, while the surplus to the long-term average hit its highest since early August.

Regional stocks inched up by 0.2 percentage points to 90.2pc of capacity at the end of week 44, which compared with a 0.4 point decline a week earlier. Reserves were 8.4 percentage points above the long-term average, up from a 7.2-point surplus in the previous week.

Trading activity for wind GOOs was again limited to Nordic products, with the 2020 vintage changing hands at €0.145/MWh earlier in the week and €0.1325/MWh afterwards. European wind GOOs were assessed at €0.135/MWh for 2020 and €0.225/MWh for 2021, down from €0.14/MWh

and €0.24/MWh respectively week on week.

One deal was seen for European solar GOOs for the first time since mid-September. A 75GWh clip for 2020 vintage sold at €0.15/MWh in the middle of the week, but the product was assessed slightly higher at €0.155/MWh on Friday – unchanged on the week.

Guarantee of origin deals				
Day of trade	Product	Generation period	Volume MWh	Price €/MWh
6 Nov 20	GOO Europe biomass certificates	calendar year 2021	na	0.1875
6 Nov 20	GOO Nordic wind certificates	calendar year 2020	na	0.1325
5 Nov 20	GOO Nordic hydro certificates	calendar year 2020	100,000	0.1125
5 Nov 20	GOO Europe hydro certificates	calendar year 2021	40,000	0.1900
4 Nov 20	GOO Europe solar certificates	calendar year 2020	75,000	0.1500
4 Nov 20	GOO Europe renewable certificates	calendar year 2021	50,000	0.1900
3 Nov 20	GOO Nordic hydro certificates	calendar year 2023	100,000	0.3400
3 Nov 20	GOO Nordic wind certificates	calendar year 2020	20,000	0.1450
3 Nov 20	GOO Dutch wind certificates	calendar year 2020	31,000	0.9000
3 Nov 20	GOO Europe hydro certificates	calendar year 2021	30,000	0.1850
3 Nov 20	GOO Europe hydro certificates	calendar year 2022	50,000	0.2850
3 Nov 20	GOO Nordic hydro certificates	calendar year 2022	100,000	0.3025
3 Nov 20	GOO Nordic hydro certificates	calendar year 2021	100,000	0.1950
3 Nov 20	GOO Nordic hydro certificates	calendar year 2022	50,000	0.3025
3 Nov 20	GOO Nordic hydro certificates	calendar year 2021	50,000	0.1975
2 Nov 20	GOO Italian biomass certificates	calendar year 2021	200,000	0.1650
2 Nov 20	GOO Europe hydro certificates	calendar year 2021	9,000	0.2250
2 Nov 20	GOO Europe renewable certificates	calendar year 2020	50,000	0.1090

FRENCH, DUTCH AND BELGIAN MARKETS

France at discount to Germany next week

The week 46 product rose across central western European (CWE) markets as forecasts for wind power generation were revised down, widening the French front-week discount to the German market. But most forward contracts in the region fell amid lower European fuels and EU ETS allowances.

Forecasts for wind power generation next week were revised down in the CWE region. Levels are now estimated to range between 1.06-3GW, equivalent to load factors of 7-20pc, from 9-13 November in France, up to 2.12GW lower than previous expectations. In addition, weather forecasts suggest minimum temperatures in Paris up to 2.9°C above the norm.

French day-ahead prices next week could trade below Germany as the week 46 base-load product expired at €37.50/MWh, up by €0.60/MWh on the day, but the discount to the German market widened to €1.50/MWh. For peak load, the front week closed at €45.75/MWh and at a discount of €2/MWh to German power. Wind output in Germany was forecast at 3-6.85GW, which is equivalent to load factors of 5-11pc for the same period.

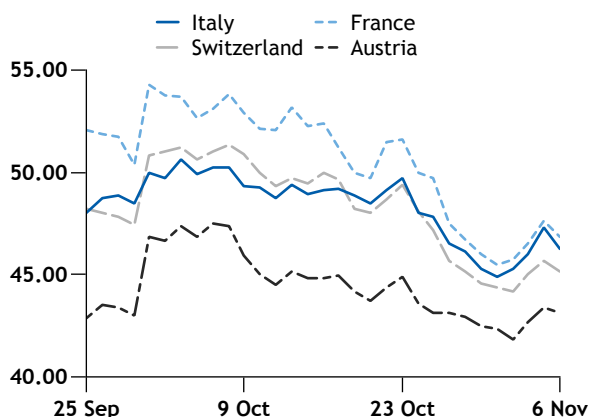
In the Netherlands, the front week gained €1.25/MWh on the day to close at €39.75/MWh. The contract rose to parity with the German market, which kept the premium to the latter at €0.75/MWh. But for peak load, the Dutch product traded last at €47/MWh and at a discount of €0.75/MWh to Germany. Dutch wind power output was forecast to range between 0.29-1.06GW, equivalent to load factors of 7-24pc, during the same period.

Further out, contracts gave up the gains seen in the previous session as weaker European fuels and carbon allowances weighed.

In Belgium, the second and third quarter contracts traded for 5MW each at €35.25/MWh and €35.80/MWh, respec-

Alpine markets front quarter

€/MWh



Argus French OTC assessments							€/MWh
	Base load			Peak load			
	Buy	Sell	±	Buy	Sell	±	
Working day ahead	40.95	41.05	0.25	46.70	46.80	2.00	
Weekend	32.70	32.80	-8.00				
Week ahead	37.45	37.55	0.60	45.65	45.85	0.05	
Week 47	38.45	38.55	-0.50	46.40	46.60	-1.25	
December	41.35	41.45	-1.85	51.80	52.00	-3.35	
January	47.45	47.55	-1.50	61.85	62.35	0.30	
February	51.65	51.75	-0.80	65.80	66.30	0.30	
Q1 2021	46.80	46.90	-0.75	61.95	62.15	0.30	
Q2 2021	35.05	35.15	-0.45	42.50	43.00	-0.10	
Q3 2021	37.05	37.15	-0.50	44.50	45.00	-0.10	
Q4 2021	50.70	50.80	-0.45	70.00	70.50	-0.10	
2021	42.35	42.45	-0.60	54.80	55.00	-0.10	
2022	44.35	44.45	-0.15	58.40	59.40	-0.15	
2023	46.45	46.55	nc	61.95	62.95	nc	

Epex France day ahead auction			
	Hours	€/MWh	±
Base load	01-24	35.21	-5.12
Peak load	09-20	36.45	-8.42
Off peak I	01-08	31.50	-3.73
Off peak II	21-24	38.89	+1.97
Off peaks	01-08, 21-24	33.96	-1.83

Argus Dutch OTC assessments							€/MWh
	Base load			Peak load			
	Buy	Sell	±	Buy	Sell	±	
Working day ahead	41.20	41.30	nc	45.46	46.46	nc	
Weekend	34.90	35.10	3.25				
Week ahead	39.70	39.80	1.25	46.90	47.10	5.25	
Week 47	38.32	38.42	0.57	47.35	48.35	-0.05	
December	38.85	38.95	-0.65	45.15	45.35	-0.05	
January	41.55	42.05	0.10	48.60	49.10	-0.30	
February	43.20	43.30	0.75	52.50	53.00	-0.30	
Q1 2021	41.60	41.70	0.10	47.00	47.20	-0.30	
Q2 2021	37.50	38.00	-0.30	40.55	41.55	-0.30	
Q3 2021	38.50	39.00	-0.30	41.55	42.55	-0.30	
Q4 2021	42.80	42.90	-0.70	50.70	51.70	-0.30	
2021	40.15	40.25	-0.30	44.80	45.80	-0.30	
2022	41.05	41.15	-0.25	47.65	47.85	-0.45	
2023	42.55	42.65	-0.05	49.65	51.65	-0.15	

Argus Belgium OTC assessments				€/MWh
	Base load			
	Buy	Sell	±	
Working day ahead	40.61	41.61	0.25	
December	41.90	42.00	-0.50	
Q1 2021	42.55	43.55	-0.75	
2021	38.80	39.80	-0.60	

FRENCH, DUTCH AND BELGIAN MARKETS

tively. The former product moved to a premium of €0.55/MWh to German power, but the latter was at a discount of €2.80/MWh, suggesting stronger power flows into Germany during the summer period through the 1GW Alegro interconnector, which is expected to launch commercial operations in less than two weeks.

Belgium 2022 also traded in two deals for a combined 3MW. The last trade went through at €41.6/MWh, €0.50/MWh below Germany.

In France, losses were faster on December and January products, which declined by €1.85/MWh and €47.50/MWh to close at €41.40/MWh and €47.50/MWh, respectively, after posting sharp gains in the previous session given another maintenance extension at the 1.3GW Flamanville 2 plant.

The outage at the 910MW Dampierre nuclear unit in France was extended to 8 November, from 6 November previously.

Argus French OTC indexes

	Daily		Cumulative	
	€/MWh	Vol GWh	€/MWh	Vol GWh
Working day ahead	41.13	6	39.14	194
Week ahead	37.36	277	37.61	1,000
December	41.86	506	42.19	1,127
Q1 2021	47.28	65	49.43	2,573
2021	42.65	298	43.32	77,526

Total reported traded (all contracts): 2,437.00

Average prices weighted by volume of trades

Argus Dutch OTC indexes

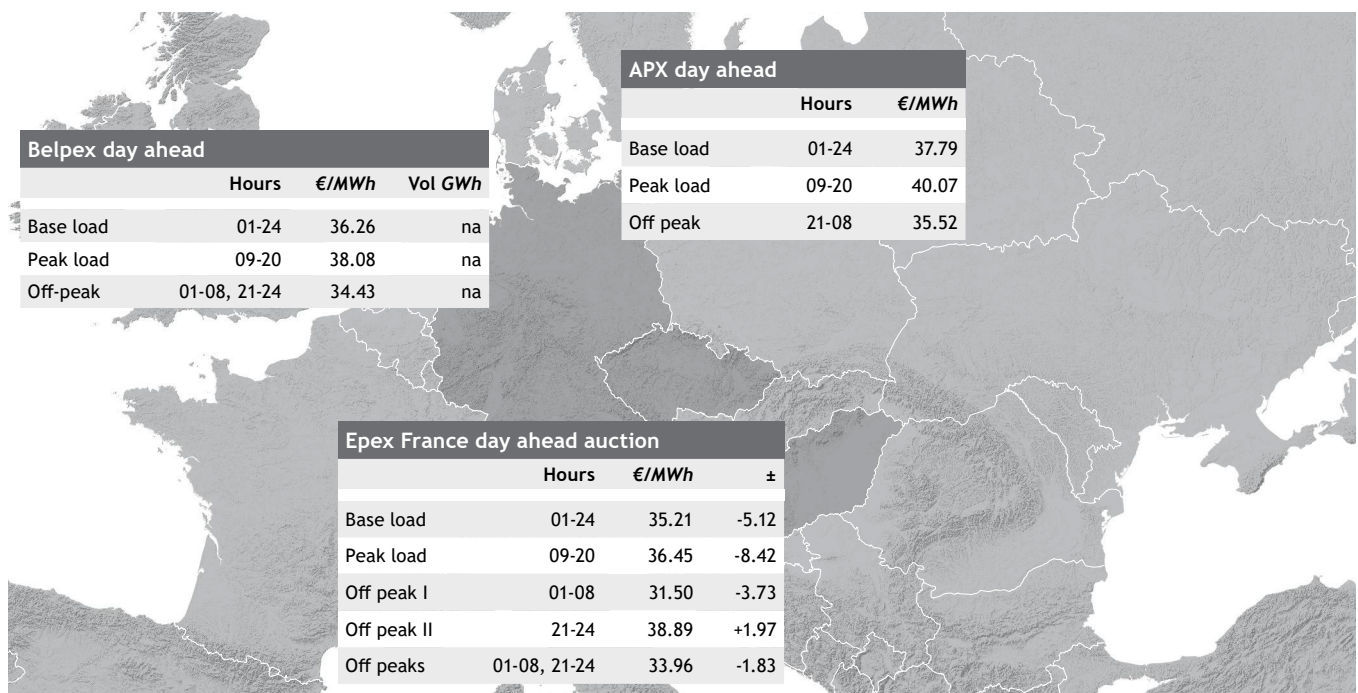
	Daily		Cumulative	
	€/MWh	Vol GWh	€/MWh	Vol GWh
Working day ahead	41.25	0	39.73	51
Week ahead	39.47	50	39.07	96
December	38.74	26	38.53	194
Q1 2021	41.51	298	41.82	1,791
2021	40.11	377	39.71	43,616

Total reported traded (all contracts): 882

Tri market day ahead coupling

	€/MWh		
	Belpex	Spread to APX	Spread to Epex, France
Base load	36.26	-1.54	1.05
Peak load	38.08	-1.99	1.63
Off-peak	34.43	-1.08	0.47

French, Dutch, and Belgium spot prices



SPANISH MARKET

December discount to France narrows

Losses in the Spanish December contract were outpaced by those in the French market, with Spain ending the week at the tightest discount to France since the beginning of the assessment. Liquidity was very thin on the day as only near-curve contracts traded.

December changed hands 18 times on Friday, more than half of just 35 deals seen across the curve in the over-the-counter (OTC) market. It last traded at €40.50/MWh, down by €0.75/MWh from Thursday's close.

This is the second lowest close for December since its assessment began on 1 September, only above €40.10/MWh on 2 November.

But losses for the equivalent French base-load contract were steeper. The French December product shed €1.85/MWh to close at a fresh low of €41.40/MWh. Its premium to Spain narrowed to just €0.90/MWh, a new low.

The Spanish discount to France for the last month of the year surpassed €17/MWh in early September but narrowed consistently since then amid expectations of higher French nuclear availability and mild weather.

The first-quarter contract last traded at €42.70/MWh early in the afternoon in Spain but was assessed slightly higher at €42.85/MWh on higher bids and offers. This was down by €0.15/MWh day on day.

But the French front-quarter base load rose on the day, widening its premium to Spain by €0.25/MWh to a seven-session high of €4.60/MWh.

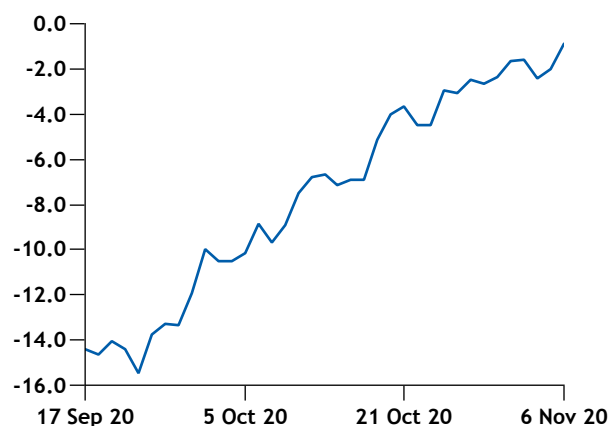
Closer in, both the week ahead and week 47 contracts traded in Spain. The week ahead last traded at €40.50/MWh, down by €0.75/MWh, while week 47 last changed hands at €40/MWh.

Argus Spanish OTC base load assessments			€/MWh
	Buy	Sell	±
Working day ahead	40.55	42.55	8.70
Week ahead	40.25	40.75	0.75
December	40.30	40.70	-0.75
January	42.85	43.85	-0.15
February	44.05	45.05	-0.10
Q1 2021	42.65	43.05	-0.15
Q2 2021	38.30	39.30	-0.05
Q3 2021	43.55	44.55	-0.35
Q4 2021	47.50	48.50	-0.40
2021	42.95	43.95	-0.25
2022	42.95	43.95	-0.25

Iberian Pool day ahead		€/MWh	
Spanish settlement	±	Portuguese settlement	±
33.53	-1.45	33.53	-1.45

Iberian Omp exchange			€/MWh	
	Closing bid	Closing ask	Settlement	±
Week-ahead	na	na	40.50	+0.75
Week 47	na	0	40	0
Week 48	na	na	40.00	na
December 2020	39.90	41.05	40.55	-0.45
January 2021	42.90	43.50	43.20	-0.30
Q2 2021	38.30	39.30	38.80	+0.10
Q3 2021	na	na	44.04	-0.21
Q4 2021	na	na	48.15	-0.23
2021	43.25	43.65	43.45	-0.15

Spanish month-ahead differential to France €/MWh



ITALIAN MARKET

January premium to December falls

Monthly contracts recorded losses on Friday with January narrowing its premium over the front month.

December ended the session at €42.90/MWh, down by €0.50/MWh day on day. But January outpaced the front month, falling by €1.10/MWh and narrowing its premium to December to €4/MWh. This was around €4.50/MWh lower than the equivalent spread this time last year.

Concerns over the Covid-19 pandemic are pressuring winter contracts, although the effect on power demand should be lower than in March and April as industries are allowed to remain open.

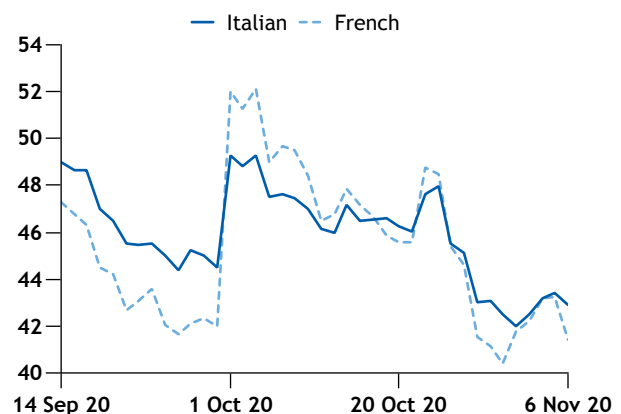
The first quarter 2021 also recorded losses, falling by €1.05/MWh to €46.25/MWh and returning to a discount to the calendar 2021 contract. The front year dropped by €0.70/MWh day on day, closing €0.15/MWh higher than the front quarter.

The Pun settled at €39.80/MWh, down by €2.91/MWh day on day and the lowest value for a Saturday since 10 October. It was close to the last trade on the day-ahead contract, which was done at €40/MWh. Lower demand helped to put pressure on the price, at about 697GWh compared with 819GWh on Friday. Consumption could fall on stricter restrictions introduced by the government starting from today in an attempt to contain the pandemic. Piedmont, Lombardy, Valle d'Aosta and Calabria will be in lockdown over at least the next 15 days, according to the government decree. Demand in the north power bidding zone, where three out of the four regions are located, totalled about 15TWh in October, equal to about 58pc of national demand, according to provisional data from Terna.

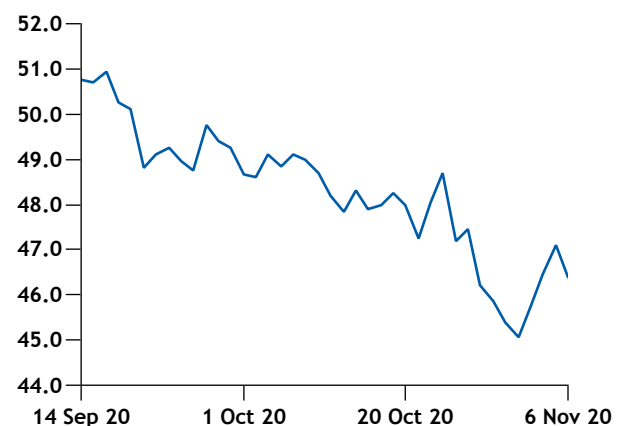
Argus Italian OTC assessments							€/MWh
	Base load			Peak load			
	Bid	Ask	±	Bid	Ask	±	
Day ahead	43.30	45.30	1.05	48.70	50.70	0.50	
Week ahead	43.40	43.60	1.00	50.50	52.50	1.00	
Week 47	43.25	43.75	nc	50.60	52.60	nc	
December	42.80	43.00	-0.50	50.20	52.20	-0.50	
January	45.90	47.90	-1.10	55.15	57.15	-1.10	
February	47.65	49.65	-1.05	54.65	56.65	-1.05	
Q1 2021	46.15	46.35	-1.05	52.25	54.25	-1.05	
Q2 2021	42.20	42.40	-0.45	44.50	46.50	-0.45	
Q3 2021	47.60	47.80	-0.50	50.90	52.90	-0.50	
Q4 2021	48.55	50.55	-0.75	57.45	59.45	-0.70	
2021	46.30	46.50	-0.70	51.30	53.30	-0.70	
2022	47.95	48.15	-0.80	53.40	55.40	-0.80	

Italy GME day ahead		
Average weighted	€/MWh	±
Base load	39.80	-2.91

Italy/France month-ahead base load €/MWh



Italian OTC year-ahead base load €/MWh



CZECH, SLOVAK AND POLISH MARKETS

Week 46 premium narrows

The Czech front-week base load's premium to Germany narrowed as the latter power market's gains outpaced the Czech Republic.

The Czech week 46 base load traded and expired at €39.25/MWh, up by €0.65/MWh on the day.

It was at a €0.25/MWh premium to Germany, from €0.85/MWh a day earlier. This compares with a €0.37/MWh average premium so far this month based on Czech OTE and German Epex day-ahead base load settlements.

Average temperatures in Prague were forecast at 4.4°C on average over the next fortnight – around 0.2°C below seasonal norms over the period.

Available cross-border capacity in the Slovakia-Czech Republic direction was scheduled at 1.2GW next week, unchanged on the week, and 1.9-2.1GW in the opposite direction, from 2.1GW this week, according to the Slovak grid operator's schedule.

Available capacity in the Slovakia-Hungary direction was scheduled at 1.1-1.3GW next week, from 1.3GW throughout this week, while 1GW was scheduled in the opposite direction, unchanged on the week.

Available cross-border capacity in the Slovakia-Poland direction was scheduled at 500MW next week and 550MW in the reverse direction, both unchanged on the week.

In Slovakia, 2021 base load traded and closed at €43.10/MWh, down by €0.30/MWh on the day. Its premium to the Czech Republic rose to €2.05/MWh on Friday from €2/MWh a day earlier.

In Poland, the Tge day-ahead base load has risen to PLN242.73/MWh on average this month, from PLN240.79/MWh throughout October, supported by stronger power demand. Consumption has averaged 20GW this month so far, from 19.7GW throughout October and compared with 19.8GW throughout November 2019.

Minimum temperatures in Warsaw were revised up by up to 4°C on some days over the next fortnight, with levels expected to remain above seasonal norms until 14 November, which could ease heating demand expectations.

Stronger domestic power generation has limited the call on imports this month. Polish net power imports have fallen to 2.2GW so far this month from 2.5GW last month.

The Polish government will implement further restrictions from this weekend to limit the spread of Covid-19. The new measures include the closure of non-essential stores, while only business travellers will be able to use hotels. All students will be required to conduct distance learning on 9-29 November, while cultural institutions, including cinemas and museums, will temporarily close.

Argus Czech OTC base load assessments		€/MWh	
	Buy	Sell	±
Working day ahead	42.15	42.35	1.40
Week ahead	39.15	39.35	0.65
Week 47	37.50	39.50	0.45
December	35.05	35.25	-0.55
January	41.65	41.85	-0.20
February	43.15	45.15	-0.45
Q1 2021	41.55	41.75	-0.15
Q2 2021	35.50	36.50	-1.05
Q3 2021	40.60	41.60	-0.40
Q4 2021	44.80	45.80	-0.40
2021	40.95	41.15	-0.35
2022	44.35	44.55	-0.35
2023	45.90	46.90	-0.30

Argus Slovak OTC base load assessments		€/MWh	
	Buy	Sell	±
Working day ahead	41.25	43.25	1.40
Week ahead	38.40	40.40	0.65
December	34.30	36.30	-0.55
Q1 2021	41.65	43.65	-0.15
2021	43.05	43.15	-0.30

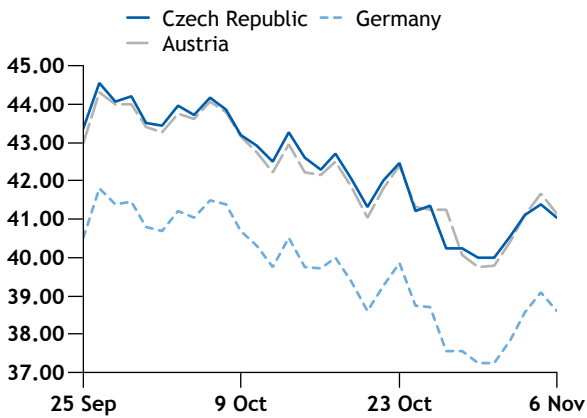
Argus Czech OTC indexes				
	Daily		Cumulative	
	€/MWh	Vol GWh	€/MWh	Vol GWh
Working day ahead	42.28	2	40.63	16
Week ahead	39.23	9	39.17	10
December	35.50	7	35.50	7
Q1 2021	41.65	0	42.33	505
2021	41.11	105	43.61	25,798
Total reported traded (all contracts):				149.04
<i>Average prices weighted by volume of trades</i>				

OTE/ISOT Czech-Slovak coupled market day ahead			€/MWh	
	Base load	Peak load		
Czech €/MWh			34.19	36.43
Slovak €/MWh			34.19	35.87

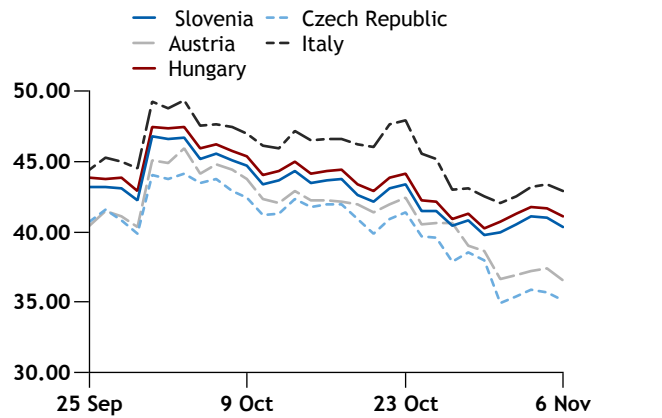
Polish Polpx day ahead				
	Zloty/MWh	€/MWh		
Base load (IRDN24 average)			252.57	56.07

CZECH, SLOVAK AND POLISH MARKETS

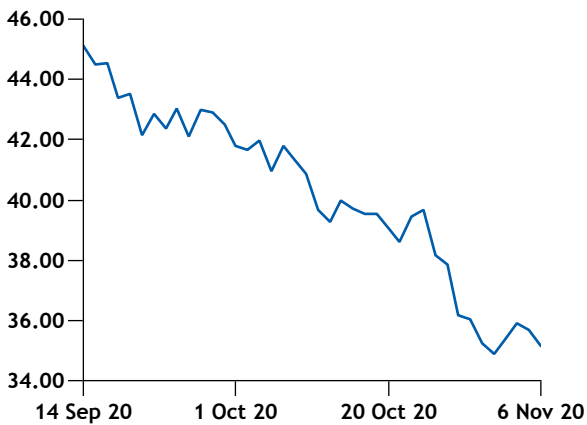
Czech, German, Austrian year ahead €/MWh



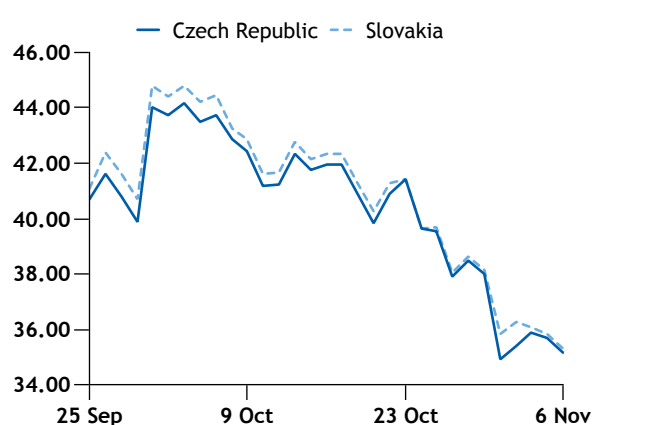
Central Europe front month €/MWh



Czech month-ahead base load €/MWh

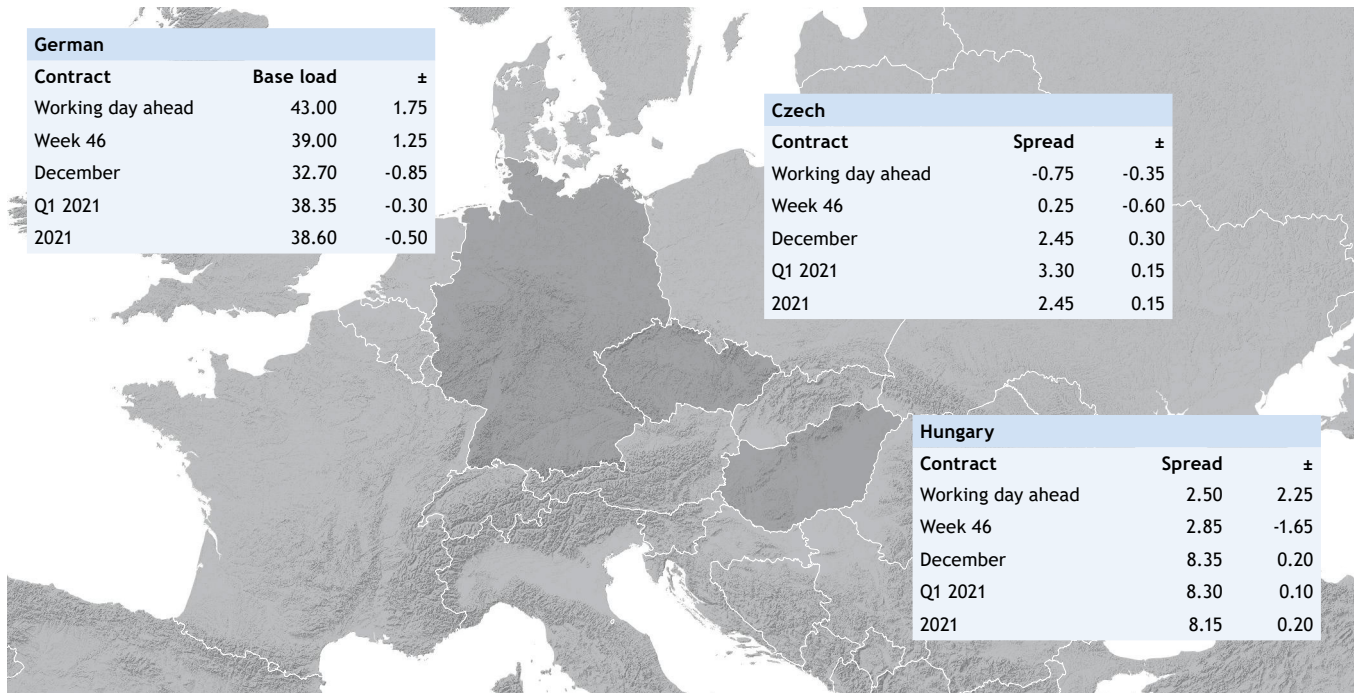


Czech and Slovak front month €/MWh



Central east/southeast Europe spreads to Germany

€/MWh



HUNGARIAN, SERBIAN AND SLOVENIAN MARKETS

Milder weather weighs on week 46

Hungary week 46 fell and narrowed its premium to Germany amid forecasts for milder weather, while the Hungarian 2021 contract fell back on weaker emissions and fuels markets.

Hungary week 46 fell by €0.40/MWh and expired at €41.85/MWh on Friday as temperature forecasts were revised up across much of central and southeastern Europe – from previous predictions suggesting temperatures well below the long-term average.

Minimum temperatures in Budapest are forecast at around 4-5°C on most days in week 46, slightly below the long-term average of 5.5°C for the period. But daily minimums had been predicted to drop to as low as 1°C during week 46 in the previous day's forecast, and to an average of around 2°C across the week.

The introduction of some additional Covid-19 restrictions in the region this week, including in Hungary and Romania, may also add downside to demand next week.

And the Hungarian week 46 contract sharply narrowed its premium to the German market to €2.85/MWh, down by €1.65/MWh on the day as forecasts for lower wind output in Germany supported the latter.

Available capacity in the Slovakia-Hungary direction was scheduled at 1.1-1.3GW next week, from 1.3GW throughout this week, while 1GW was scheduled in the opposite direction, unchanged on the week.

Further out, Hungary 2021 base load fell by €0.30/MWh and closed at €46.75/MWh. The contract had risen in each of the previous four sessions, and still gained a total of €1.35/MWh over the course of week 45.

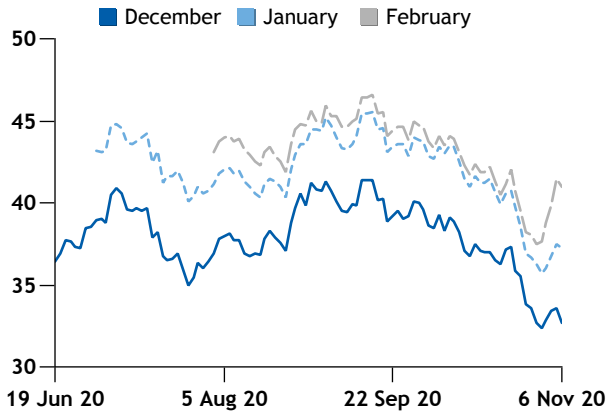
Croatia's Hrote will offer 110MW of 2021 base-load renewable power from its Eco balancing group in an auction on 19 November and will offer 20MW of first quarter 2021 base load from the group on 23 November (see separate story).

In Serbia, the 307MW unit 2 at the Bajina Basta pumped storage hydro plant went off line in an unplanned outage on Friday morning and had not returned to the grid by the evening.

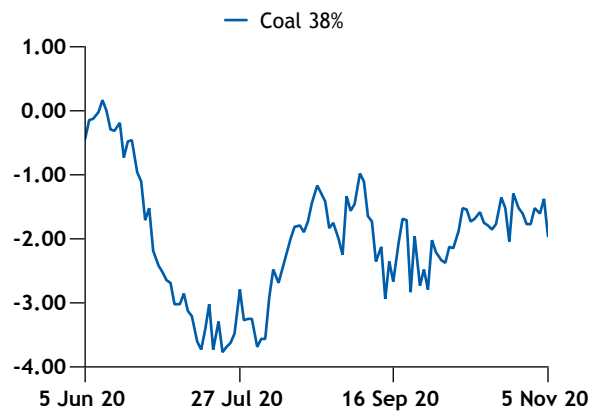
Argus Hungarian OTC assessments							€/MWh
	Base load			Peak load			
	Buy	Sell	±	Buy	Sell	±	
€/MWh							
Working day ahead	45.40	45.60	4.00	54.55	56.55	7.30	
Week ahead	41.75	41.95	-0.40	51.80	52.80	-0.65	
December	40.95	41.15	-0.65	51.25	52.25	-0.70	
January	48.50	49.00	-0.20	57.70	58.70	-0.60	
February	47.25	49.25	-0.35	57.80	59.80	-0.30	
Q1 2021	46.55	46.75	-0.20	55.80	56.80	-0.40	
Q2 2021	40.00	40.20	-1.55	47.65	48.65	-0.80	
Q3 2021	49.10	49.30	nc	57.95	59.95	0.30	
Q4 2021	50.40	51.40	0.20	57.10	59.10	0.05	
2021	46.65	46.85	-0.30	54.95	55.95	-0.10	
2022	48.50	48.70	-0.40	59.25	60.25	-0.70	
Ft/MWh conversion from €/MWh							
Working day ahead	16,278	16,349	1,404.50	19,558	20,275	2,583.00	
Week ahead	14,969	15,041	-173.00	18,572	18,931	-271.00	
December	14,682	14,754	-263.00	18,375	18,734	-288.00	
January	17,389	17,568	-106.50	20,688	21,046	-257.00	
February	16,941	17,658	-160.00	20,724	21,441	-149.00	
Q1 2021	16,690	16,762	-105.00	20,007	20,365	-183.50	
Q2 2021	14,342	14,413	-585.00	17,084	17,443	-322.00	
Q3 2021	17,604	17,676	-35.00	20,777	21,494	65.50	
Q4 2021	18,070	18,429	35.50	20,473	21,190	-23.00	
2021	16,726	16,798	-141.00	19,702	20,060	-75.50	
2022	17,389	17,461	-178.00	21,243	21,602	-294.00	
Argus Serbian OTC base load assessments							€/MWh
	Buy	Sell	±				
Working day ahead	45.05	46.05	4.00				
Week ahead	41.35	42.35	-0.40				
December	39.35	41.35	-0.65				
2021	46.25	47.25	-0.30				
Argus Slovenia OTC base load assessments							€/MWh
	Buy	Sell	±				
Working day ahead	43.80	45.80	4.00				
Week ahead	40.15	42.15	-0.40				
December	39.35	41.35	-0.65				
2021	45.70	46.70	-0.30				
BSP Southpool Slovenian day ahead							
	€/MWh	±	Vol MWh				
Base load	36.22	-4.81	19,425				
Peak load	38.69	-7.58	na				
Hungarian HUPX day ahead							
	€/MWh	±					
Base load	37.22	-3.88					
Croatian Cropex day ahead							
	€/MWh	±					
Base load	36.22	-4.81					

CENTRAL EASTERN EUROPEAN MARKETS

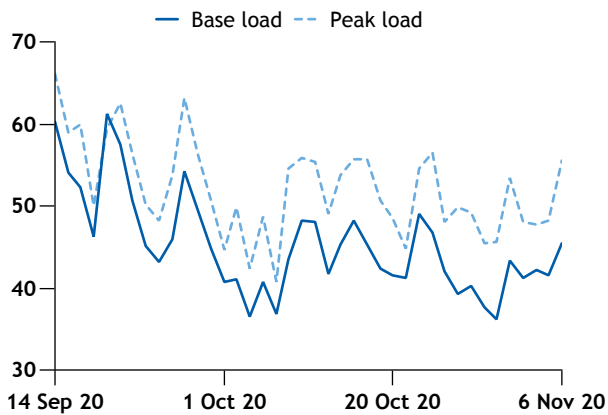
German front three months base load €/MWh



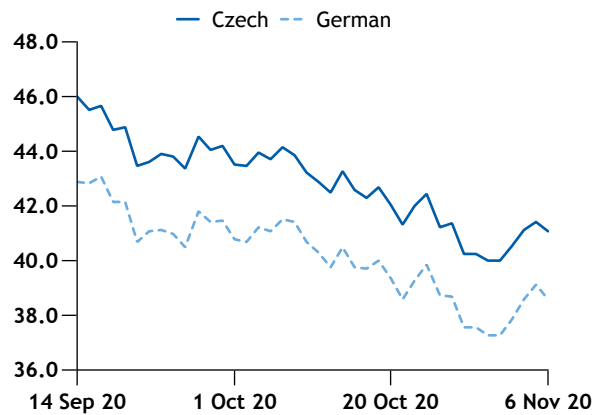
German year-ahead base-load clean dark spread €/MWh



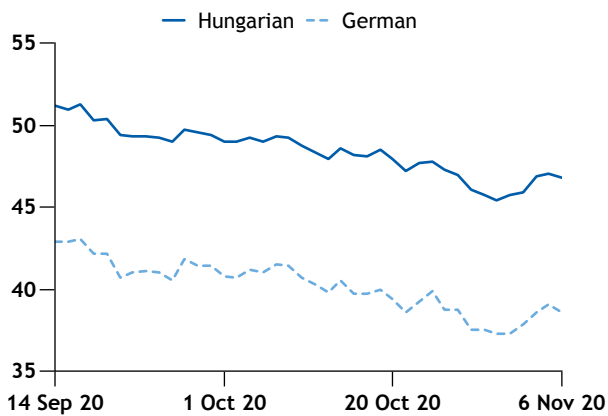
Hungary day-ahead base and peak load €/MWh



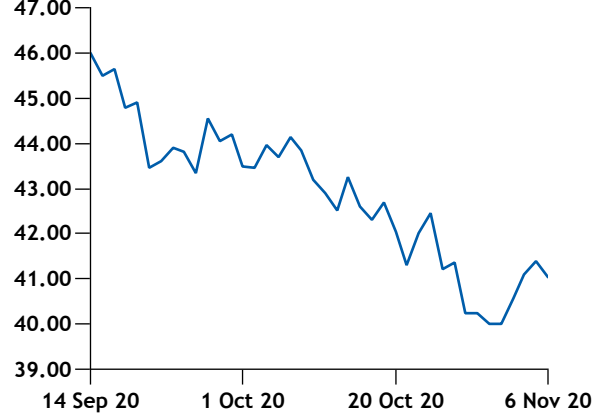
Czech and Germany year ahead €/MWh



Hungary and Germany year-ahead base load €/MWh



Czech year-ahead base load €/MWh



SOUTHEAST EUROPEAN AND TURKISH MARKETS

Week-ahead rises on wind

The Romanian week-ahead contract closed considerably higher than earlier in the week as downward revisions to already weak wind output expectations provided support.

The week-ahead contract traded nine times in the Opcom over-the-counter (OTC) market on Friday, with the latest deal clearing at 209.5 lei/MWh (€43.05/MWh), compared with a settlement of RON202/MWh on the platform a day earlier.

Romanian wind output was anticipated to peak at just 527MW on Tuesday next week, or a load factor of 17pc. And output expectations for Wednesday and Thursday were revised down by around 900MW, providing further support to the week-ahead contract.

Minimum temperatures in Bucharest were forecast to fall 1-3°C below seasonal norms in the second half of next week, compared with a previous estimate putting them 2-8°C lower than long-term averages during the period.

The Romanian week-ahead contract also saw some trading interest in the EEX derivatives market, with the last deal at €42.20/MWh. While this was €0.05/MWh below the Hungarian equivalent at the time, the latter posted slight declines at the end of the day, moving with the German market, and was assessed at €41.85/MWh.

Further out, the 2021 contract posted slight losses from a day earlier but reversed to a premium to the Hungarian equivalent. The Romanian contract was assessed at RON228/MWh (€46.85/MWh) at Friday's close, €0.10/MWh above the Hungarian market.

In Albania, state-owned distribution firm Oshee bought 100MW of base load for 8-15 November delivery at a weighted average of €48.74/MWh, half of the volumes it was originally seeking to purchase. The firm also cancelled its first extended peak-load tender for the same delivery period amid higher prices and later held another auction with a ceiling price of €54/MWh. The firm accepted offers at a range of €52.71/MWh-€54/MWh for a total of 200MW.

In Bulgaria, Energy Market failed to sell 18MW of base load for delivery in the first half of 2021 at a starting price of 91.60 lev/MWh (€46.89/MWh). By comparison, the Hungarian contracts for delivery in the first and second quarter of 2021 settled at an average of €43.38/MWh.

Import capacity on Greek borders were expected to remain low in December, with North Macedonia and Albania offering 150MW, See-Cao auction platform data show. At the same time, Turkey was planned to offer 81MW on its Greek border. Capacity on the Albania-Montenegro border was scheduled to fall to 100MW, from 150MW this month.

Argus Romanian OTC base load assessments			Lei/MWh
	Buy	Sell	±
<i>Lei/MWh</i>			
December	202.00	204.00	nc
January	245.00	247.00	-2.25
February	232.00	240.00	-1.00
Q1 2021	228.00	232.00	nc
Q2 2021	193.00	196.00	1.50
2021	226.00	230.00	-0.75
<i>€/MWh</i>			
December	41.51	41.92	-0.01
January	50.35	50.76	-0.47
February	47.67	49.32	-0.22
Q1 2021	46.85	47.67	-0.01
Q2 2021	39.66	40.28	0.31
2021	46.44	47.26	-0.17

Argus Bulgarian OTC assessments 05 Nov 2020			€/MWh
	Buy	Sell	±
December	41.80	43.30	nc

Argus Greek OTC assessments 05 Nov 2020			€/MWh
	Buy	Sell	±
December	46.75	48.25	nc

Argus Albanian OTC assessments 05 Nov 2020			€/MWh
	Buy	Sell	±
December	46.50	48.50	nc

Greek day ahead pool		
	System marginal price forecast €/MWh	±
	37.78	na

Romanian Opcom day ahead			
	Lei/MWh	€/MWh	Vol MWh
Base load	181.12	37.22	46,879

Bulgarian Ibox day ahead				
	€/MWh	±	lev/MWh	±
Base load	38.15	-3.21	74.65	-6.28
Peak load	38.84	-8.76	76.00	-17.14

SOUTHEAST EUROPEAN AND TURKISH MARKETS

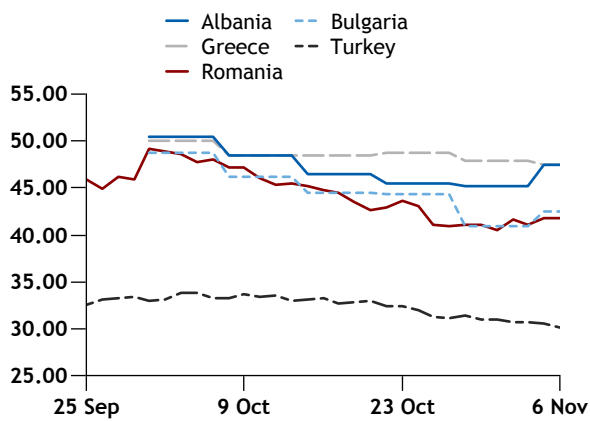
Turkish base load index		
	TL/MWh	€/MWh
December	304.00	30.63

Turkish Exist day ahead		
	TL/MWh	€/MWh
Base load	273.53	26.99

Argus Turkish OTC assessments			
	Buy	Sell	±
TL/MWh			
Week ahead	290.50	300.50	-2.30
December	303.70	307.30	0.50
January	310.00	316.00	nc
February	310.00	340.00	nc
Q1 2021	310.00	337.70	nc
Q2 2021	308.50	318.00	nc
Q3 2021	352.50	362.00	nc
Q4 2021	351.50	361.00	nc
2021	330.00	345.00	nc
Rolling 52 weeks	326.45	336.45	nc

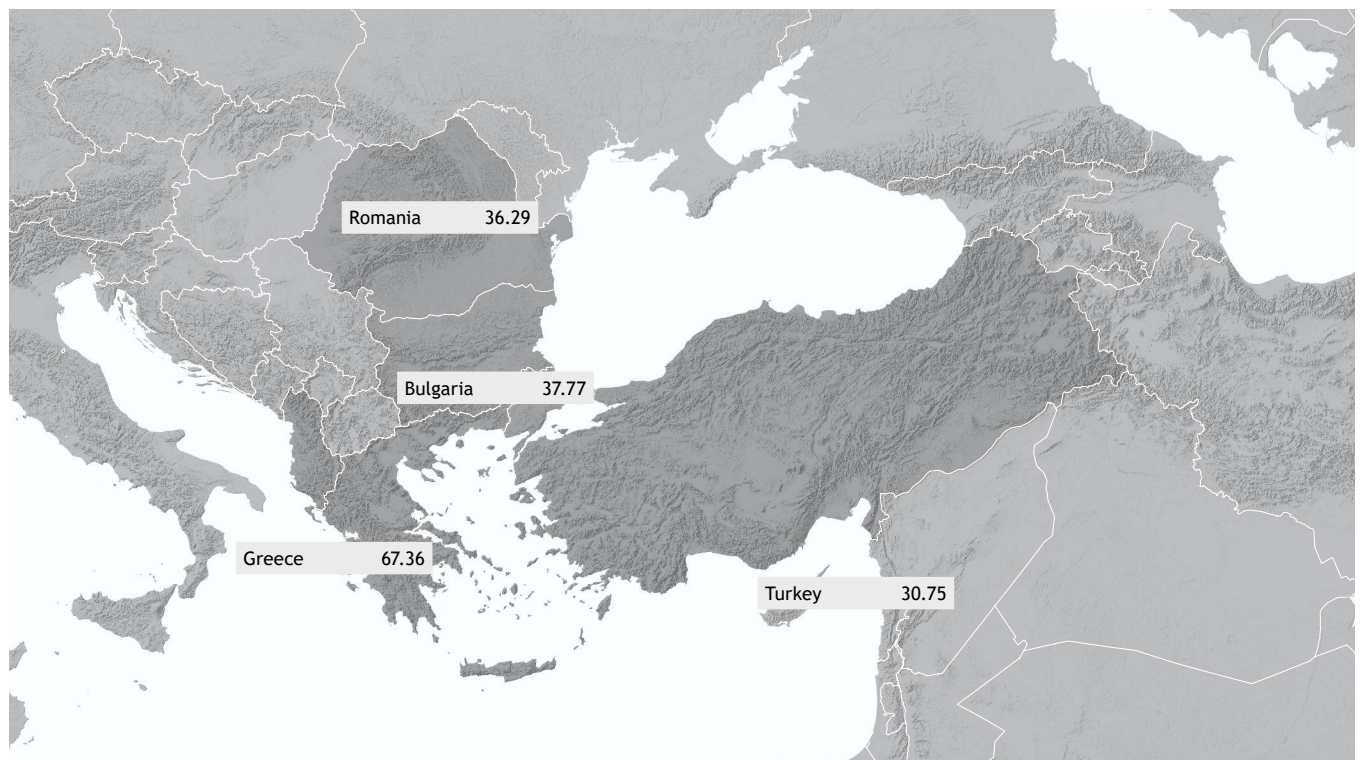
SEE front month baseload

€/MWh



€/MWh conversions from TL/MWh			
Week ahead	28.66	29.65	-0.70
December	29.96	30.32	-0.43
January	30.58	31.17	-0.50
February	30.58	33.54	-0.52
Q1 2021	30.58	33.32	-0.51
Q2 2021	30.43	31.37	-0.50
Q3 2021	34.78	35.71	-0.57
Q4 2021	34.68	35.61	-0.57
2021	32.56	34.04	-0.53
Rolling 52 weeks	32.21	33.19	-0.53

SPOT PRICES - SEVEN-DAY BASE-LOAD MOVING AVERAGES



NEWS

Iberdrola lowers Iberia, UK price forecasts

Spanish utility Iberdrola has lowered its forecasts for 2021-22 wholesale power prices in both the Iberian and UK markets but said it expected to “protect” sales margins over the period.

The company expects Omie day-ahead prices in Iberia to average €36/MWh this year, €46/MWh in 2021 and €47/MWh in 2022, according to its recently launched [2020-25 global business plan](#). This is down sharply from estimates of €57/MWh, €55/MWh and €54/MWh, respectively, in its previous business plan disclosed in February 2019.

In the UK, Iberdrola forecasts average prices of £35/MWh this year, £48/MWh in 2021 and £49/MWh in 2022 - down from previous forecasts of £53-56/MWh.

The utility expects prices to gradually recover in the Iberian market further out, reaching around €49/MWh in 2023-24 and €50/MWh in 2025, while falling slightly in the UK to £48/MWh in 2023 and £47/MWh in 2024-25.

Despite the sharp correction in price forecasts, Iberdrola said it expects to keep sales margins stabilised over the next few years.

“A level of €45-50/MWh or, if you want, €40-50/MWh, is going to be the trend and it is what we are assuming [for Iberia]. The negative effect is already here but it is not going to be worse in the future,” business chief executive Francisco Martinez Corcoles said yesterday in a conference call with analysts and investors.

The lower prices would be mainly a result of the medium-term impacts of the Covid-19 pandemic in Europe but would also reflect increased penetration of renewable capacity across the region.

“Sometimes we are too obsessed with the spot and forward prices, but this is only a reference,” chief executive Ignacio Galan said.

Iberdrola has a large customer base for which selling prices are not strongly correlated with the wholesale market, as well as a growing portfolio of fixed-prices power purchase agreements (PPAs), Galan said. “We feel we can protect these margins,” he said.

Nuclear, CCGTs

Asked whether the massive renewable capacity additions expected over the next decade in Spain would lead to lower pool prices that could potentially harm profitability at Iberdrola’s portfolio of nuclear and combined-cycle gas turbine (CCGT) plants, Galan said that both technologies would have a reduced share in the country’s mix by 2030.

“Nuclear, we plan to close. We are in a loss – the only

thing that could happen is it could force a more rapid closure,” he said.

Iberdrola and fellow Spanish utilities Endesa and Naturgy agreed last year on a planned phase-out of the country’s 7.1GW nuclear power fleet over [2027-35](#).

In case some nuclear capacity is needed for security of supply reasons, capacity payments would be required, Galan said.

And CCGTs will probably be used only as “back-up in few hours” by the end of the decade, and only if a capacity remuneration mechanism is introduced in the future, Galan said.

Iberdrola plans to reach zero carbon emissions by 2030, and would compensate the emissions from any remaining CCGTs at that time with the plantation of trees, Galan said.
By Juan Weik

Iberdrola eyes 8.5GW new renewables in Spain

Spanish utility Iberdrola has announced plans to add about 8.5GW of renewable capacity in Spain by 2025, including doubling its previous addition target for 2022, as part of a €75bn global business plan.

Renewable capacity in Spain will increase from 16.5GW in 2019 to about 22GW by the end of 2022 and 25GW by 2025, Iberdrola said. Investments in renewable additions in Spain alone will reach more than €7bn, half of the total €14.3bn allocated for the Iberian market under a new business plan for 2020-25.

Under its 2018-22 business plan presented in February 2019, renewable capacity in Spain would increase by [3.2GW](#) to about 19GW by 2022, which means a further 3GW will now come on line during the period.

Overall, Iberdrola plans to nearly double its global renewable capacity to 60GW in 2025 from 32GW in 2019, with an intermediate 44GW target for 2022. The portfolio will comprise 26GW of onshore wind, 15GW of solar, 14GW of hydro and 4GW of offshore wind capacity.

And global capacity might expand by a further 58pc in the following five years, reaching an estimated 95GW in 2030, with faster growth rates anticipated for offshore wind.

Apart from Spain, Iberdrola plans to expand its renewable capacity in the UK to about 3GW in 2022 and 5GW in 2025 from 2.5GW in 2019.

Capacity would also increase in other European markets over 2020-25, including about 1GW in [Portugal](#) and France, 0.6GW in Italy, 0.5GW in Germany and Greece, and 0.2GW in Ireland.

Iberdrola’s project pipeline currently reaches 11.7GW in

NEWS

Spain, 7GW in the UK and 2.6GW in Portugal, including projects under construction.

The utility’s current renewable capacity in Spain is 16.71GW, 9.71GW of which is hydro, 6.09GW is wind, 306MW is mini-hydro and 600MW is mainly solar photovoltaic.

Renewable capacity in the UK currently stands at 2.81GW, 1.90GW of which is onshore and 908MW is offshore wind.

By Juan Weik

Spain plans 20GW renewables auctions by 2025

Spain plans to auction 20GW of incentivised renewable generation capacity to 2025 and expects to tender a minimum of 3.1GW of the total before the end of 2020.

A draft ministerial order published today sets out initial annual targets for the accumulated capacity awarded by the auctions by the end of each year, with the objective of increasing solar photovoltaic (PV) power by 10GW in 2025, wind power by 8.5GW, concentrated solar power (CSP) by 500MW, biomass by 380MW and other technologies such as wave and mini-hydro by 60MW.

The auctions, which are expected before the end of 2020, will offer incentives for 1GW of solar PV power, 1GW of wind power and 80MW of biomass generation capacity, as well as tendering just over 1GW of capacity open to all renewables technologies.

The auctions for subsequent years will depend on several factors, including the capacity awarded at previous years’ auctions, but the timetable envisages adding 1.5 GW/yr of wind power to 2025, 1.8 GW/yr of solar PV, 100 MW/yr of CSP and 60 MW/yr of biomass plants.

A "pay as bid" model based on sealed-bid offers in €/MWh will replace the previous auction model based on a reverse-bidding process against a government-set standard investment model.

The auctions are a central part of Spain’s plan to increase renewables capacity by 59GW over the coming decade to meet the targets outlined in its national energy and climate plan.

By Jonathan Gleave

ERG to raise capacity of UK wind farms

Italian energy company ERG will increase capacity of two wind farms currently under construction in Scotland by about 55MW.

The company obtained the authorisation to increase capacity of the 48MW Sandy Knowe wind project to 90MW and the capacity of Creag Riabhach to 92MW, from 79MW.

The wind farms will have a combined expected production of about 512 GWh/yr, and the total investment cost will be €214mn.

The first 50MW of Sandy Knowe is scheduled to be completed by the end of 2021 while remaining capacity is expected by the first half of 2023. The deadline for the Creag Riabhach project is settled for the end of 2022, ERG said.

The company currently has 254MW onshore wind capacity under construction in the UK and an installed wind capacity of about 1.8GW in Europe. ERG will present its nine-month results on 11 November.

By Fabio Roccon

German demand fall limited despite restrictions

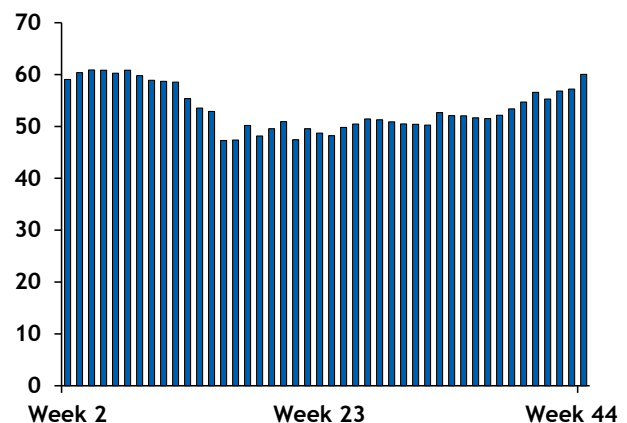
German electricity consumption has fallen this week since the introduction of a new partial lockdown on Monday, but remains above levels seen a year earlier.

German power demand averaged 59.83GW from Monday until today, Entso-e data show. This was the lowest level in three weeks, down from 60.99GW, or by 2pc, during the same period last week.

Germany is under a partial lockdown that began on Monday to mitigate the increase of Covid-19 cases. The hospital sector, and culture and leisure venues, are closed but the German industrial sector – which accounts for around 46pc of national demand – remains open, as are retail and schools, limiting the decline on electricity demand.

But power demand this week so far has been above the levels seen during the same time last year, when consumption averaged 58.98GW. Colder than average temperatures this week could have offered some support to national power demand year on year. Minimum temperatures in the west German city of Dusseldorf averaged 4.22°C/d this

German weekly power consumption 2020 in GW



NEWS

week, below the seasonal norm of 5.81°C/d for the period, and average minimum temperatures of 4.85°C/d during the same time last year.

In October, weather-adjusted electricity consumption was 2.6pc higher year on year, after it was 1.3pc lower in September and August, Swiss utility Axpo said this week.

In the first three quarters of 2020, German power demand was around 4.7pc lower on the year because of the more a restrictive lockdown. Domestic consumption fell to its lowest in May, averaging 48.10GW, around 10pc lower year on year. But demand recovered through the summer to pull September consumption close to 2019 levels. Power demand averaged 51.18GW in [July-September](#), 2.8pc lower on the year and 4.7pc below the five-year average for the period.

German energy and water association [BDEW](#) estimated German electricity consumption to be 3.5pc for 2020, compared to last year's levels.

Power prices

German power prices this week have risen, compared to last week, driven by lower wind output, shrugging off the decline in demand.

The German day-ahead base-load on the Epex Spot averaged €35.67/MWh for Monday-Friday delivery, up from €33.13/MWh the week before. Combined onshore and offshore wind output this week averaged 20.13GW, compared to 24.91GW for the same time last week.

By Felicia Grosse

German solar again drives direct selling increase

Renewable volumes added to the German direct marketing scheme under the renewables act (EEG) rose to the highest since July, supported again by a faster increase in solar photovoltaic (PV) additions.

German renewable capacity registered in the direct selling scheme this month – hydropower, biogas, biomass, geothermal, onshore and offshore wind and solar PV – totalled 83.63GW, up by 433.64MW from October and the fast-

est increase in four months, data from German transmission system operators show.

Solar PV additions to the scheme were the fastest with 247MW, which lifted total solar capacity to 16.14GW this month. The month-on-month increase was also the highest since July. German total solar capacity was at 52.78GW in September, according to data from regulator Bnetza.

Onshore wind capacity registered in the scheme this month rose to 164.51MW – also the highest since July. This lifted total onshore wind capacity to 51.8GW, which represents around 93.95pc of total German onshore wind installed capacity as of September.

All offshore wind farms are registered in the direct selling scheme, with those coming on line before 2016 having to opt in and all starting up since then exceeding a 100kW threshold. Some 7.74GW of offshore wind capacity was registered in the scheme this month, unchanged on the month as no new projects were commissioned.

The German direct marketing scheme has been mandatory for all new renewable power plants with a capacity of more than 100kW since 2016, as is stated in the EEG law, while smaller technologies can choose whether to enter the scheme or continue to receive a fixed feed-in tariff.

Direct sellers receive a fee for managing their contracted renewable energy output. Site owners receive subsidies in the form of a market premium – generally the difference between the fixed feed-in tariff and the average German monthly base-load day-ahead price on the Paris-based Epex Spot exchange.

Without market premium

Renewable volumes registered to be sold outside of the EEG without receiving any subsidies also rose but the increase was slower on the month.

A combined 489.06MW of renewable energy capacity was registered in Germany's "other" direct marketing scheme this month, up by 40.06MW from October.

Solar PV projects again dominated the increase, with 20.88MW of new capacity registered under the subsidy-

Argus successfully completes annual losco assurance review

Argus has completed the ninth external assurance review of its price benchmarks covering crude oil, products, LPG, petrochemicals, biofuels, thermal coal, coking coal, iron ore, steel, natural gas and biomass benchmarks. The review was carried out by professional services firm PwC. Annual independent, external reviews of oil benchmarks are required by international regulatory group losco's Principles for Oil Price Reporting Agencies, and losco 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>

NEWS

free scheme this month, pushing total solar capacity to 275.95MW.

Onshore wind capacity registered in the unsubsidised scheme rose by 19.5MW on the month and saw the highest increase in seven months, to 46.66MW.

Output from subsidy-free renewable power plants can either be sold directly in the wholesale power market or through a power purchase agreement to nearby consumers. The latter has the advantage that certain levies on the power produced would not apply. In both scenarios, guarantees of origin can be issued for subsidy-free renewable energy sites.

By *Jacqueline Echevarria*

Finnish coal-to-waste conversion expected in 2022

Finnish energy company Turku Seudun Energiantuotanto (TSE) will fully convert the existing 145MW coal-fired unit 4 at the Naantali plant to run on recycled waste in 2022, it said today.

TSE signed fuel supply deals with several energy companies today, including Fortum waste solutions and Delete Ymparistolvelut. The agreements cover the delivery of 50,000-80,000t of recycled fuel each year in 2021-26.

The installed capacity at Naantali 4 will remain unchanged once the conversion is complete, TSE said. The company plans to phase out coal in its energy production by 2025. Naantali's coal-fired unit's 1 and 2 – with a combined installed capacity of 220MW – were decommissioned in July.

There are currently no plans to convert the remaining 105MW coal-fired unit 3 to run on alternative fuels, TSE added. Finland aims to become carbon neutral by 2035 and is set to ban the use of coal in energy generation by 2029.

By *Cristina Pinto*

Siemens to install VPP, 20MW battery in Finland

German engineering firm Siemens has paired up with several technology firms in order to install a 20MW battery, together with a virtual power plant (VPP), at a site belonging to Finnish beverage firm Sinebrychoff.

Carlsberg subsidiary Sinebrychoff aims to optimise energy usage at its brewery plant in Helsinki. The VPP and 20MW battery will enable the firm to improve the quality of power supply to the brewery, managing board member of Siemens Matthias Rebellius said.

Siemens will also upgrade the grid connection in order to optimise energy usage at the plant, it said. The technology upgrade is scheduled for summer 2021.

The Sinebrychoff plant's power will also be connected to

the Finnish energy market, enabling the firm to be compensated for playing a role in enabling grid flexibility by Finnish grid operator Fingrid, Siemens said.

By *Felicia Grosse*

Italian hydro reserves rise

Italy's hydropower stocks rose slightly last week amid higher rainfall, reducing the deficit over the five-year average.

Reservoirs stood at about 3.64TWh at the end of the week 44, up by about 36GWh, data from European transmission system operator association Entso-E show. Stocks closed 0.5 pc lower than the five-year average from 1.15pc previously, while the premium to 2019 fell to about 70GWh. This was the lowest value since week 39, Entso-E data show.

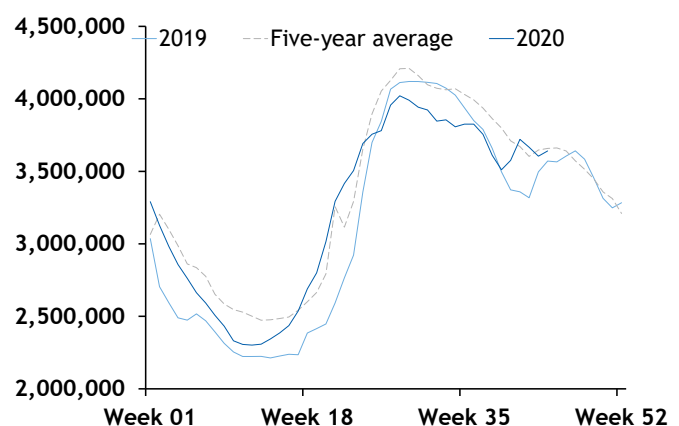
Rainfall supported inflows into reserves. The hydro-rich regions of Malpensa, Brescia and Paganella received a total of about 131mm, compared with a long-term average of 99mm. Rain is expected to be lower over the next 15 days, with Malpensa and Paganella receiving a combined 61mm, 43mm lower than the seasonal norm.

Water levels at big lakes in the north of the country are all above seasonal averages with the exception of Lake Maggiore, which stood at about 91pc of its capacity, sector association ANBI said. Flows at the Po river and Piedmont's rivers remain lower than in 2019, it said.

Power demand remained flat at a daily average of about 846GWh, which was the highest value since week 39, according to national grid power operator Terna. Hydropower output rose to about 138 GWh/d while thermal generation dropped to about 372 GWh/d, down by 37GWh week on week. Wind production rose sharply to a daily average to about 49GWh, while solar generation was also flat at about 43 GWh/d, Terna data show.

Italian hydropower stocks

MWh



NEWS

Italian Edison's 3Q20 output lower on the year

Italian utility Edison's domestic power generation recovered in the third quarter but remained lower than a year earlier.

Production totalled about 4.9TWh in July-September, company data show. This was the highest quarterly value of the year but was 4.9pc lower than third-quarter 2019. Generation was pushed down by lower gas-fired output, which accounted for about 78pc of total production. Thermal stood at 3.8TWh, compared with 4TWh a year earlier. Gas generation in the first nine months of 2020 fell by about 15pc year on year owing to lower consumption and outages of two plants in the first months of the year, Edison said.

Hydrogeneration fell by 9.4pc to 731GWh in the third quarter, while other renewables totalled 330GWh, up by 12.2pc year on year. Edison took over EdF Renouvelables' Italian assets in July last year and this still supported generation, the firm said.

Edison pointed out its interest in capacity market auctions for delivery years after 2023. Italian authorities could organise tenders for 2024 in mid-2021, following approval of the implementation plan from the European Commission, the company said. Grid operator Terna needs to wait for the results of permits for new auctioned capacity for 2023 and the impact of the Covid-19 pandemic on power demand before setting a date, as well as for the update of the mechanism to be compliant with the clean energy package, it said.

The results are expected at the end of March 2021. The company was successful for about 2.8GW in auctions for 2022 and 2023 at an average price of €33,000/MW/yr.

By Fabio Roccon

Slovenia's Gen exceeds planned output in October

Slovenian state-controlled energy group Gen produced almost 16pc more power than planned last month amid favourable hydrological conditions.

The Gen group generated 353.7GWh in October – 15.6pc higher than planned for the month. The group produced one of its highest monthly hydro volumes in the past 10 years, it said, with subsidy Sel generating 61pc more power than planned. And joint venture Hess – of which Gen owns 51pc and HSE, Slovenia's other major state-owned electricity producer, owns 49pc – produced 86pc higher volumes than planned last month.

The 696MW Krsko nuclear plant – the output of which is split between Slovenia and Croatia – generated 258.6GWh for the Gen group in October. This was 4.5pc above plan for the month, as favourable conditions on the Sava river – which the plant uses for cooling – allowed it to run at higher

efficiency than expected during the month.

But the 350MW Brestanica plant operated little in October, Gen said. The plant mostly provides tertiary reserves and black-start capacity to the grid, but had **increased its output** for sale on the market in September because of "favourable conditions" in the power and gas markets, operator TEB said last month. The new **53MW PB7 gas-fired unit** at the Brestanica plant was connected to the gas network last month, Gen said.

HSE also reported its highest monthly output on record in October, **producing 995GWh** during the period – 50pc higher than planned for the month.

By Josh Evans

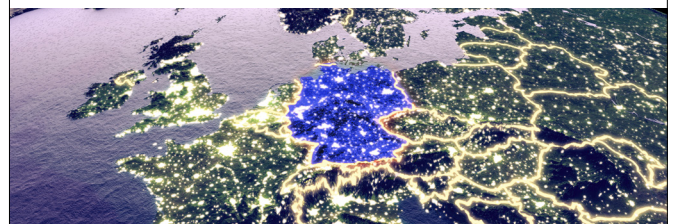
Serbia progresses plans for 599MW wind farm

The city assembly of Subotica in northern Serbia has adopted a detailed regulation plan for the construction of renewable power producer Fintel Energija's 599.2MW Maestral Ring wind farm.

The **regulation plan**, outlining legal prerequisites for the project and its expected impact on infrastructure and the environment, envisages the complex operating on an area of 108.15km² near Cantavir, Visnjevac, Gabric, Bikovo, Stari Zednik and Novi Zednik.

The wind farm is expected to produce more than 1 TWh/yr of power and will be made up of 113 turbines, the assembly

New prices for merged German gas market



Argus has launched forward price assessments for Germany's new virtual trading point (VTP) to prepare for the merger of the existing NCG and Gaspool market areas, scheduled for 1 October 2021.

Germany VTP (Trading Hub Europe) price assessments are now published in **Argus European Natural Gas**.

[Learn more](#)

NEWS

said, without giving details on the expected date of commissioning. The adoption of the plan is a precondition for the development of the project, but it still requires further co-operation with other provincial institutions and ministries in the country, it said.

Fintel Energija first announced plans to build Maestral Ring in February 2019, although it originally envisioned the unit to have a smaller capacity, of 572MW. The firm already operates three wind farms in Serbia, including the 69MW Kosava 1 complex, which was commissioned in September 2019 and gained privileged producer status earlier this year. The firm also plans to add several more wind farms with a combined capacity of 861MW in the country. Its pipeline includes the 51.8MW Kosava 2 and 140MW Torak wind projects.

By Josh Evans

Croatia to auction 2021 renewable output

Croatian market operator Hrote will offer 110MW of 2021 power from the country's Eco renewable balance group later this month, and 20MW of first-quarter 2021 power in a separate auction.

Hrote will offer the 110MW of 2021 base load in an auction on Croatian power exchange Cropex on 19 November. The auction will open at a starting price of €45/MWh, with a minimum bid of 5MW allowed.

And Hrote will hold another auction on Cropex for 20MW for January-March 2021 base-load delivery on 23 November – also with a starting price of €45/MWh and minimum bid of 5MW.

Guarantees of origins (GOOs) are not included in the offerings, with these sold in separate auctions on Cropex.

The Hungarian 2021 base-load contract was assessed at €47.05/MWh yesterday, while the front-quarter base-load contract was assessed at €46.85/MWh. Cropex's day-ahead market has delivered at a discount of €0.71/MWh to Hungary's Hupx day-ahead spot so far this year, narrowing from a discount of €1.08/MWh in 2019.

By Josh Evans

Kosovo to tender 2021 frequency services

Kosovan grid operator Kostt has opened a tender to receive manual frequency restoration reserve (mFRR) services next year once Kosovo forms an independent power zone.

Kostt is looking to contract providers for mFRR for upward regulation with a capacity of 197MW and downward regulation with 90MW capacity in two separate lots. The tender will close on 24 November, with results due on 9 December.

To maintain grid security, Kostt has to contract at least one mFRR provider before it could become independent, which was one of the requirements in its connection agreement with European transmission system operators association Entso-E. The grid operator in July already signed a contract with Albanian state-owned utility Kesh to receive mFRR services.

The move comes ahead of the planned transfer of capacity tenders on the Albania-Kosovo border to the See-Cao auction platform starting from next year. The border has been jointly operated by Albanian grid operator OST and its Serbian counterpart EMS in lack of an independent grid operator in Kosovo.

EMS last month stopped holding monthly capacity tenders on the border, which in return invalidated the tender held by OST earlier in October for half of November capacity and brought net transfer capacity to 0MW. But the Serbian grid operator last week resumed short-term auctions on the border, with OST also relaunching daily capacity tenders on 1 November.

Allocations for cross-border capacity between Kostt and OST will also allow the 400kV Kosovo-Albania interconnector to begin operation. The transmission line was completed in 2016 but has remained unused because of a dispute between EMS and Kostt over who would receive the revenues from the line.

By Bilal Muftuoglu

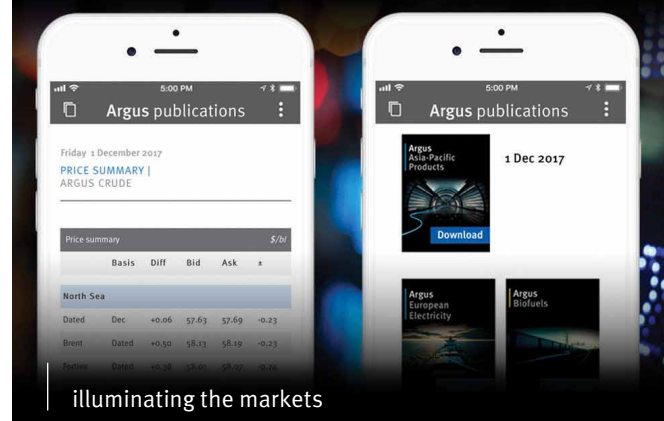
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Baltics disagree on Russian-Latvian power trade

Latvia and Estonia cannot start direct power trade with Russia based on a new trilateral Baltic methodology until it has been approved by all three market regulators, Lithuania's National Energy Regulatory Council (VERT) said.

But Estonian transmission system operator (TSO) Elering has said that "all preconditions" for opening the Russian-Latvian border have been met and electricity trade was taking place from 5 November.

VERT insisted that Latvia and Estonia cannot start electricity trade via their interconnections with Russia based on a new trilateral Baltic methodology until it has been approved by all three market regulators. The Lithuanian regulator has yet to approve the new methodology.

The Lithuanian energy taskforce said that the current trilateral Baltic methodology on electricity trade with third countries, approved in 2018, remains in force, following the launch of Belarus' Astravyets nuclear power plant on 3 November. Under the 2018 methodology, the Baltic countries' capacity for electricity trade with Russia and Belarus, except for the Kaliningrad region, is 0MW, it said.

However, Elering argues that the 2018 agreement expired with the launch of Astravyets.

A new agreement submitted by the Estonian, Latvian and Lithuanian TSOs is currently in force, according to Elering. The new capacity allocation agreement has the approval of the Estonian Competition Authority, as well as from Latvia, which is why electricity trade is taking place from 5 November, Elering said.

The Lithuanian energy ministry said on 6 November that the Baltic TSOs were "discussing" how to settle the differences and noted that "the major achievement" is that all three Baltic states are not trading with Belarus. Meanwhile, trade volumes with Russia are significantly lower.

Lithuanian TSO Litgrid has said that it had already started consultations on the new trilateral methodology.

Lithuania on 3 November stopped trading electricity with Belarus because of the start-up of the Astravyets nuclear power plant.

VERT announced today that it has revoked permits to import electricity from Belarus from seven firms: Energridas, Alpiq Energy, AJ Power, Aiveks, Energijos Kodas, A. En. Slovensko and Spectrum Baltic.

Turkish OTC market recovery could halt

Strong liquidity in the Turkish over-the-counter (OTC) power market in August-October could come to a halt this month amid swift losses of the Turkish lira against major currencies.

A total of 1.15TWh traded in the Turkish OTC market last month, including the Viop futures and options exchange, equalling roughly 5pc of total power consumption during the period. This was up from 0.95TWh in September, but lower than 1.33TWh a month earlier.

And the average of August-October volumes reached 1.14TWh, significantly higher than 0.7TWh in the same period a year earlier. This was in line with a strong demand recovery during the period, with power consumption standing above year-ago levels in each of the months, for the first time since the start of the Covid-19 outbreak. Turkish demand totalled 775.1TWh in August-October, against 734.2TWh a year earlier.

Liquidity last month came mostly from front-year contracts, with 2021 base load changing hands for a combined 0.79GWh (*see chart*).

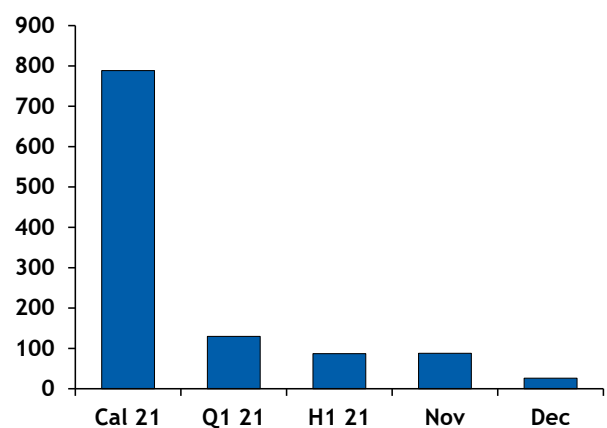
But trading activity in the OTC market has slowed considerably since the last week of October as the lira started to post sharp declines. November base load was the only contract to see liquidity last week, changing hands twice before expiry.

Trade has continued to stall this week, with just a 3MW physical 2021 base load and a 5MW financial Thursday base load changing hands on 2-6 November.

Turkish power trading activity, with regard to contracts on the far end of the curve in particular, has been affected by the volatility in the lira's value against major currencies in past years and has slowed during sudden spikes in the exchange rate. This is partly because long-term contracts in

Turkish OTC volumes

GWh



NEWS

the Turkish OTC market are usually concluded in dollars or in the lira equivalent, based on forward swap rates.

A dollar traded for a record high of 8.53 lira at today's close, against 8.43 lira a day earlier and 7.96 lira just before the last week of October.

By Bilal Muftuoglu

Ukraine plans higher power generation in 2021

Ukraine's energy ministry has forecast higher domestic electricity generation and lower exports next year.

The ministry's generation plan forecasts output of 151TWh from all generation types next year, more than the 143.09TWh expected this year.

Acting energy minister Olga Buslavets said the planned balance took into account proposals from all of the country's energy generating companies.

The plan includes an increase in generation from state-owned nuclear generator Energoatom to 75.23TWh in 2021, up from an expected 73.73TWh in 2020, acting president Petro Kotin said. This increase is expected to help improve the financial condition of the nuclear generator and will contribute to the sustainable operation of the Ukraine energy system during the heating period, Kotin said.

Electricity production at thermal power plants and combined heat and power (CHP) plants will increase to 41.14TWh and 12.79TWh, respectively, in 2021 under the projections. This compares with planned output of 38.87TWh and 11.1TWh in 2020 (see chart).

Production from hydro plants is planned to increase to 5.28TWh next year from 4.85TWh in 2020, with generation from pumped storage hydro plants planned to rise to 1.74TWh from 1.5TWh.

The projected volumes take into account the low water levels of rivers in recent years. These hydro volumes could

then be revised upwards after the end of winter, the energy ministry said.

Electricity production from alternative sources in 2021 is projected at 14.875TWh, more than the 11.375TWh forecast for this year. But curtailments to output from these sources owing to the system operator's commands are projected at 1.5TWh in 2021 – accounting for 11.4pc of the forecast generation at solar and wind power plants.

The forecast balance for 2021 does not expect any imports or exports of electricity with Russia or Belarus. Imports from Europe are projected at 5.094TWh in 2021, up on the 5TWh expected this year, and exports will be at 1.397TWh – down significantly from 6.96TWh this year.

By Victoria Dovgal

Ukraine increases December transmission tariff

Ukrainian energy regulator Nerc has approved a 30pc increase in the electricity transmission tariff from the start of December.

The tariff will increase to 312.80 hryvnia/MWh (€9.35/MWh) from 1 December, from HRN240.20/MWh previously.

The increase covers some of the losses being suffered by transmission system operator (TSO) Ukrenergo. The tariff is expected to cover the operator's requirement to support feed-in-tariffs (FiTs) for green electricity produced by households.

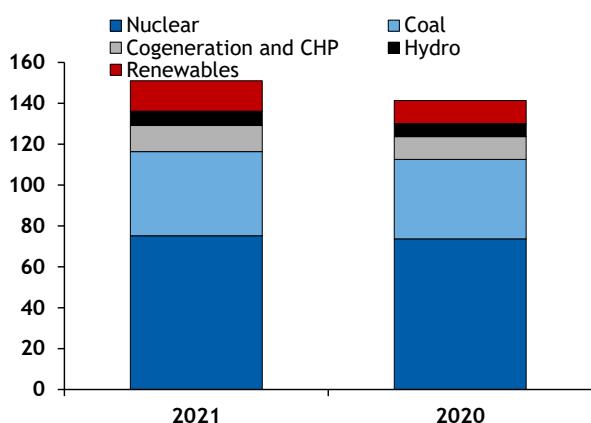
The TSO had [previously proposed](#) an even higher fee of HRN640.50/MWh – with the new tariff increase still not expected to be sufficient to fully cover the reimbursement of the green tariff for industrial renewable generators. Ukraine is looking to work out non-tariff sources to support compensation for green generation to such producers, with an issuance of local government bonds or direct financing from the state's budget under consideration.

Previously, Ukrenergo [suggested](#) that a limit should be placed on the costs it would be responsible for related to reimbursement of the FiT in 2021, in order to prevent further deterioration of its financial situation.

The TSO reported a net loss of HRN28.6bn in January-September 2020, compared with HRN4.2bn net profit in the same period a year before. The main part of the net loss – HRN24.7bn, or 86pc – was related to payouts to the state-owned guaranteed buyer and universal service providers for subsequent reimbursement of FiTs.

By Anastasia Gasan

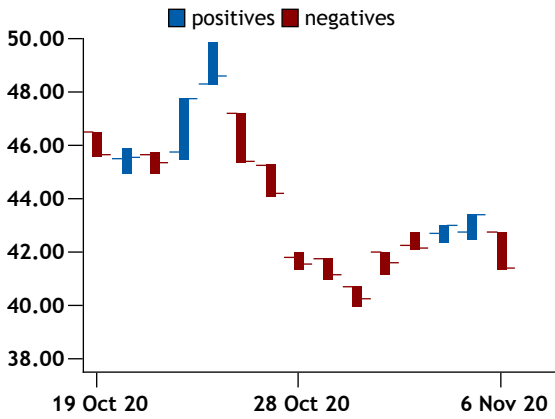
Ukraine electricity generation plan 2021 TWh



TECHNICAL INDICATORS

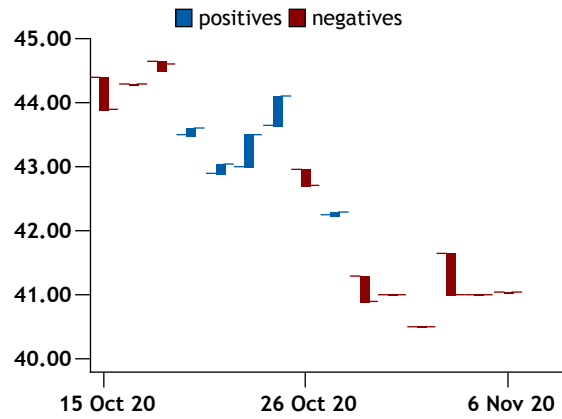
French front month base load

€/MWh



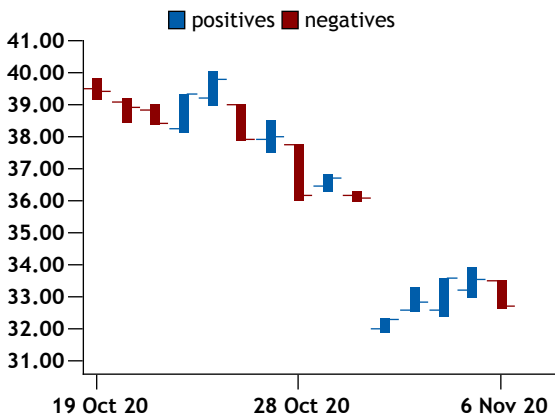
Hungarian front month base load

€/MWh



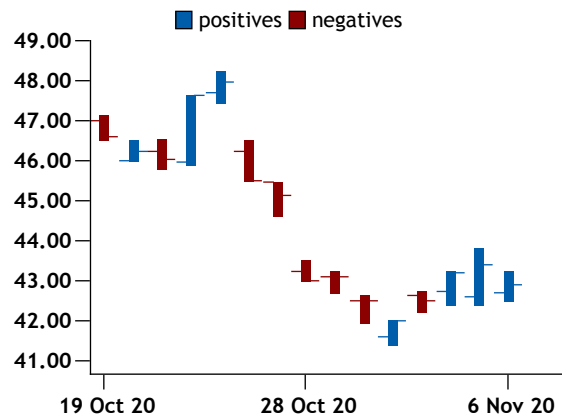
German front month base load

€/MWh



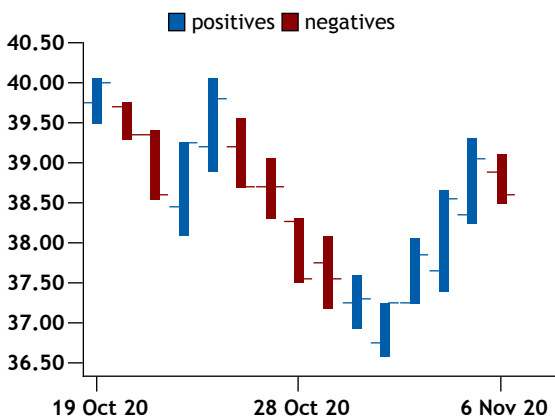
Italian front month base load

€/MWh



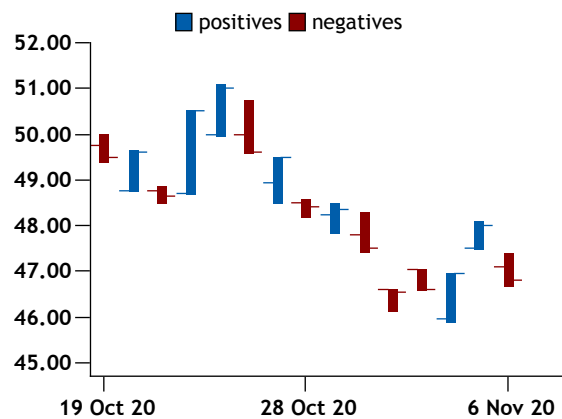
German year ahead base load

€/MWh



UK front month base load

£/MWh



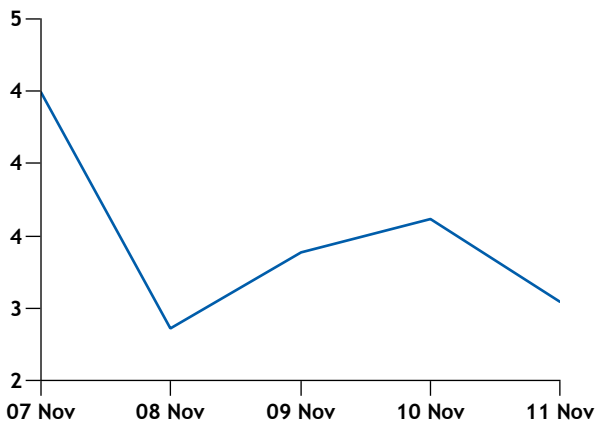
RENEWABLE POWER FORECASTS

Wind power forecast (06 November 18:00 UTC)										
Area	07 Nov		08 Nov		09 Nov		10 Nov		11 Nov	
	Base	Peak	Base	Peak	Base	Peak	Base	Peak	Base	Peak
Europe	35,366	31,859	20,339	18,603	15,590	14,772	15,887	16,209	22,605	23,465
Germany	4,490	2,908	2,861	2,776	3,389	3,026	3,619	3,369	3,048	2,373
DE-Grid 50Hertz	1,368	1,323	396	280	888	814	1,226	1,159	636	276
DE-Grid Amprion	1,129	683	530	387	482	377	232	144	454	312
DE-Grid EnBW	131	80	6	2	8	3	2	1	46	40
DE-Grid Transpower	1,862	822	1,929	2,107	2,011	1,832	2,159	2,065	1,913	1,745
Austria	817	1,026	316	68	1	1	33	34	146	161
Belgium	567	431	706	787	511	462	180	140	680	751
Denmark	570	593	240	171	544	527	1,190	1,340	712	522
Finland	1,479	1,492	918	716	1,108	1,227	169	71	115	107
France	4,409	3,890	2,710	2,486	2,037	1,796	1,049	992	2,095	2,255
Greece	1,330	1,398	870	826	342	335	747	830	926	990
Ireland	1,076	1,264	1,421	1,498	394	198	1,021	1,180	1,543	1,307
Italy	1,236	1,024	728	779	933	927	823	852	679	654
Netherlands	368	142	457	469	290	252	309	305	541	509
Norway	956	846	541	553	531	522	457	403	613	629
Poland	545	583	188	73	117	112	538	543	663	584
Portugal	2,169	2,429	1,227	736	14	12	192	282	77	58
Romania	555	466	26	43	5	5	541	682	482	388
Spain	8,119	6,795	2,112	1,825	192	78	917	1,373	666	574
Sweden	3,953	4,209	1,018	710	774	558	352	340	334	300
UK	2,213	2,000	3,745	3,793	4,329	4,769	3,612	3,365	9,128	11,347

Wind power forecasts for countries with >400MW installed capacity

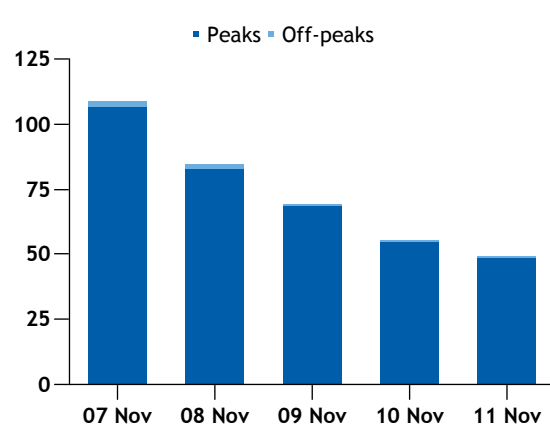
Solar power forecast (06 November 18:00 UTC)										
Area	07 Nov		08 Nov		09 Nov		10 Nov		11 Nov	
	Base	Peak	Base	Peak	Base	Peak	Base	Peak	Base	Peak
Germany	4,530	8,879	3,531	6,913	2,891	5,708	2,315	4,574	2,060	4,064
DE-Grid 50Hertz	1,188	2,319	1,031	2,005	670	1,320	542	1,063	573	1,125
DE-Grid Amprion	952	1,879	703	1,385	657	1,302	543	1,077	397	785
DE-Grid EnBW	538	1,056	401	780	446	882	378	748	334	660
DE-Grid Transpower	1,760	3,440	1,379	2,705	1,061	2,092	792	1,566	708	1,397
Czech Republic	229	439	166	325	155	305	102	200	91	180
France	885	1,747	1,007	2,000	911	1,809	1,013	2,013	990	1,968
Italy	2,059	3,781	1,868	3,426	1,643	3,137	1,528	2,923	1,590	3,045
Spain	1,002	2,002	1,183	2,358	1,369	2,731	1,538	3,070	1,114	2,222

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

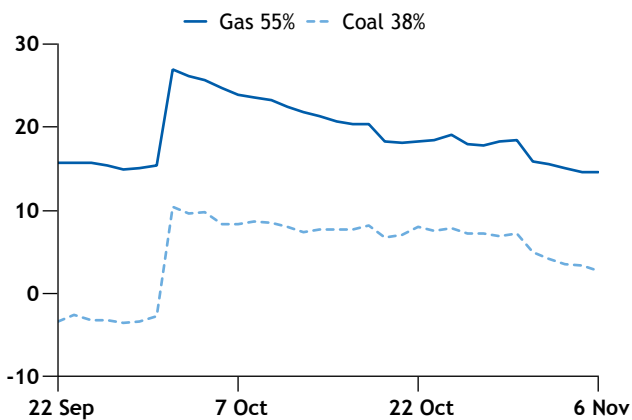
Spark spreads for various thermal efficiencies are calculated from Argus outright fuel, CO₂ emissions and electricity prices, and are not assessments based on actual spark-spread trades. Fuel, emissions and electricity prices are taken from the Argus European Electricity, Argus European Natural Gas,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

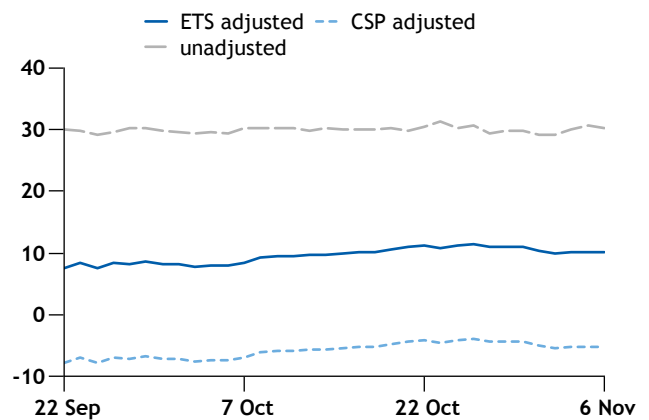
UK ETS and CSP adjusted spark and dark spreads					£/MWh
Contract	NBP 55%		ARA Coal 38%		
	base load	peak load	base load	peak load	
Working day ahead	8.282	13.232	-5.711	-0.761	
December	8.297	14.647	-3.586	2.764	
January	11.390	20.140	0.357	9.107	
February	10.331	18.581	-0.874	7.376	
March	8.479	13.679	-	-	
April	8.287	12.887	-	-	
May	7.805	12.755	-	-	
1Q21	10.117	17.467	-1.624	5.726	
2Q21	7.973	12.723	-7.649	-2.899	
3Q21	8.141	12.341	-8.838	-4.638	
4Q21	8.978	16.328	-4.244	3.106	
Summer 2021	8.082	12.532	-8.220	-3.770	
Winter 2021	9.142	16.342	-	-	
Summer 2022	6.487	11.787	-	-	
Winter 2022	8.356	16.456	-	-	
2021	9.180	15.040	-5.212	0.648	

UK unadjusted spark spreads				£/MWh
Contract	NBP 49.13%			
	base load	peak load		
Working day ahead	19.304	24.254		
December	19.106	25.456		
January	22.101	30.851		
February	21.028	29.278		
March	19.390	24.590		
April	19.370	23.970		
May	19.043	23.993		
1Q21	20.890	28.240		
2Q21	19.209	23.959		
3Q21	19.501	23.701		
4Q21	19.880	27.230		
Summer 2021	19.380	23.830		
Winter 2021	19.924	27.124		
Summer 2022	17.887	23.187		
Winter 2022	19.233	27.333		
2021	20.247	26.107		

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



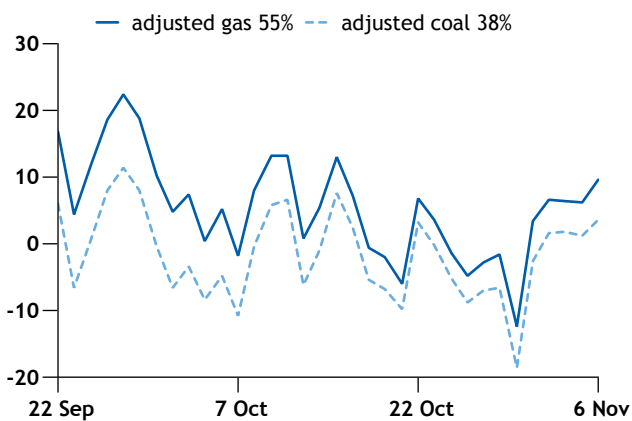
UK calendar-year base-load dark £/MWh



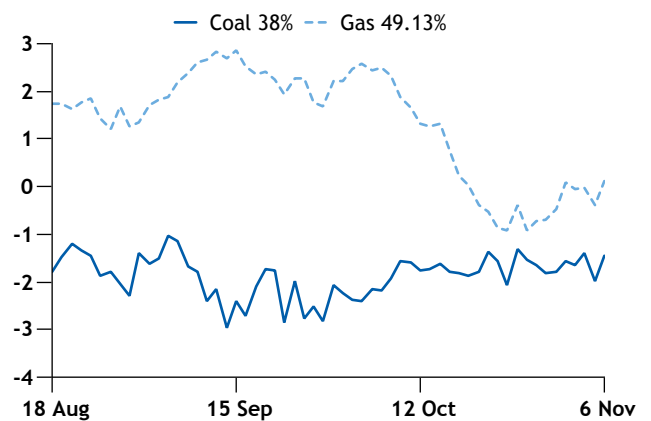
SPARK SPREADS

German ETS adjusted spark and dark spreads							German unadjusted dark spreads		
Contract	NCG 55%		Gaspool 55%		ARA Coal 38%		ARA Coal 38%		
	base load	peak load	base load	peak load	base load	peak load	base load	peak load	
Working day ahead	9.619	15.119	8.800	14.300	3.670	9.170	26.481	31.981	
December	-1.582	8.568	-1.646	8.504	-6.755	3.395	16.191	26.341	
January	2.350	12.800	2.359	12.809	-2.192	8.258	20.754	31.204	
February	5.854	15.954	6.000	16.100	1.212	11.312	24.158	34.258	
March	2.268	8.868	-	-	-	-	1Q21	21.618	30.768
April	1.045	5.845	-	-	-	-	2Q21	17.892	23.692
May	-0.141	4.859	-	-	-	-	3Q21	21.370	27.770
1Q21	3.441	12.591	3.577	12.727	-1.328	7.822	4Q21	25.010	36.410
2Q21	1.127	6.927	1.154	6.954	-5.054	0.746	1Q22	27.187	39.337
3Q21	5.445	11.845	5.527	11.927	-1.576	4.824	2021	21.510	29.710
4Q21	6.528	17.928	6.528	17.928	1.977	13.377	2022	24.550	34.100
1Q22	7.779	19.929	7.779	19.929	3.981	16.131	2023	25.866	36.816
2Q22	4.638	9.788	4.638	9.788	-	-			
2021	4.173	12.373	4.227	12.427	-1.457	6.743			
2022	6.591	16.141	6.591	16.141	1.315	10.865			
2023	7.690	18.640	7.690	18.640	2.319	13.269			

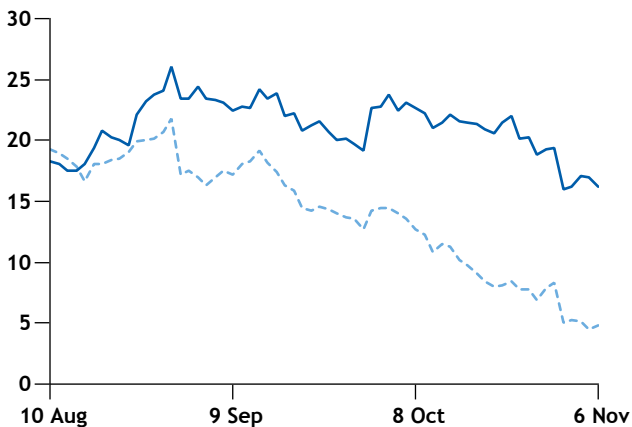
German day-ahead base-load spreads €/MWh



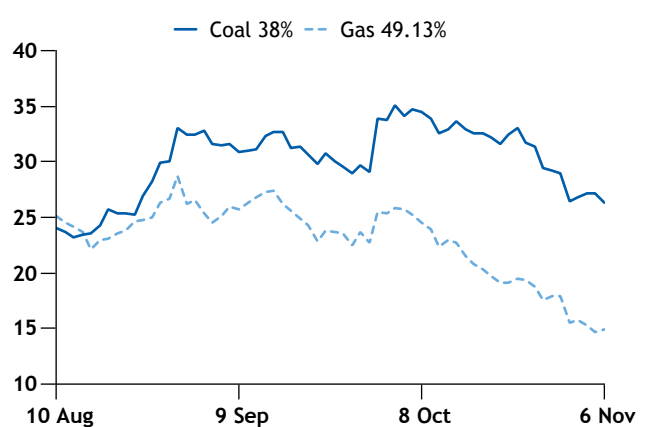
German year-ahead adjusted spark and dark €/MWh



German month-ahead base-load sparks €/MWh



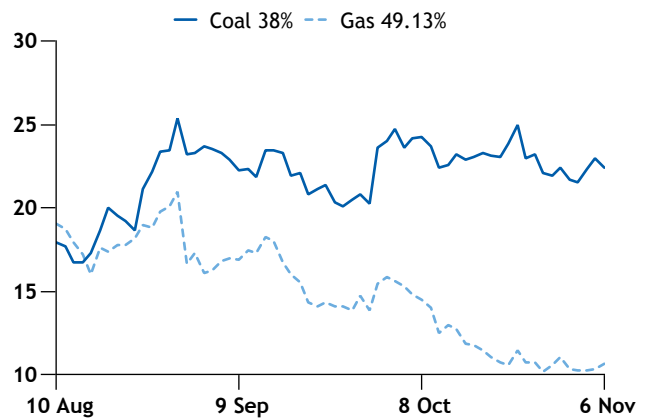
German month-ahead peak-load sparks €/MWh



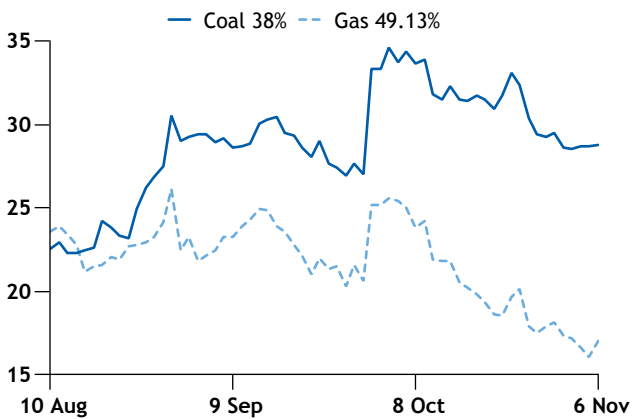
SPARK SPREADS

Dutch ETS adjusted spark and dark spreads					€/MWh
Contract	TTF 55%		ARA Coal 38%		
	base load	peak load	base load	peak load	
Working day ahead	7.596	12.306	1.920	6.630	
December	4.282	10.632	-0.555	5.795	
January	6.673	13.723	2.358	9.408	
February	8.023	17.523	3.462	12.962	
1Q21	6.577	12.027	1.972	7.422	
2Q21	4.614	7.914	-2.004	1.296	
3Q21	6.014	9.314	-1.426	1.874	
4Q21	7.123	15.473	2.227	10.577	
2021	6.027	11.127	0.143	5.243	
2022	5.882	12.532	0.315	6.965	
2023	6.481	14.531	0.619	8.669	

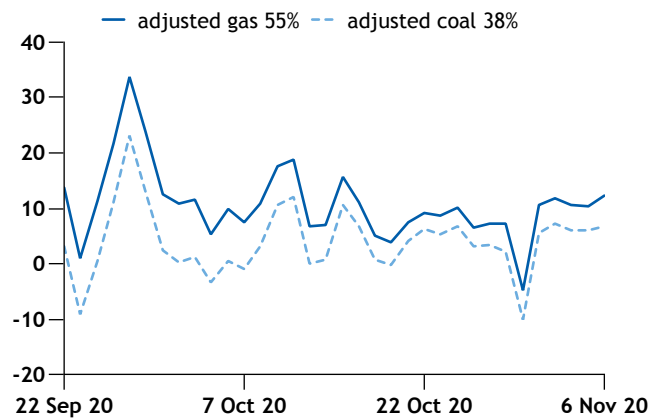
Dutch front-month base-load spreads €/MWh



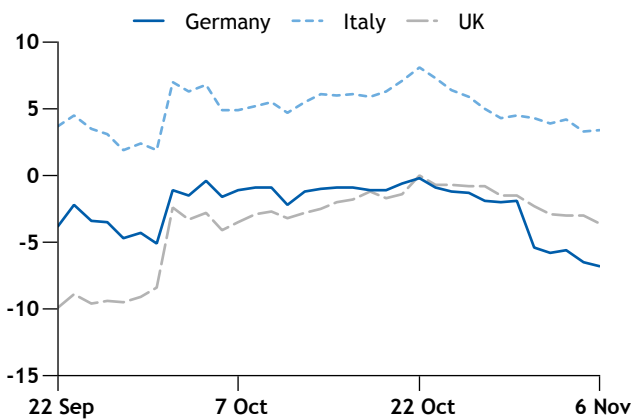
Dutch front-month peak-load spreads €/MWh



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



European front-month base-load dark €/MWh



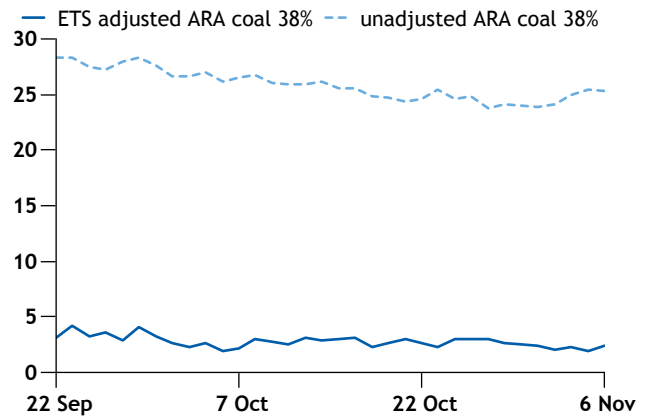
Italian ETS adjusted spark and dark spreads €/MWh

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	10.555	15.955	6.936	12.336	2.709	8.109
December	8.873	17.173	5.418	13.718	1.191	9.491
January	11.909	21.159	9.431	18.681	5.204	14.454
February	13.695	20.695	10.852	17.852	6.624	13.624
1Q21	11.404	18.404	8.557	15.557	4.330	11.330
2Q21	8.127	11.327	4.535	7.735	0.307	3.507
3Q21	14.182	18.382	9.534	13.734	5.306	9.506
4Q21	13.050	21.950	10.959	19.859	6.731	15.631
2021	11.636	17.536	8.345	14.245	4.118	10.018
2022	11.786	18.136	9.305	15.655	5.077	11.427

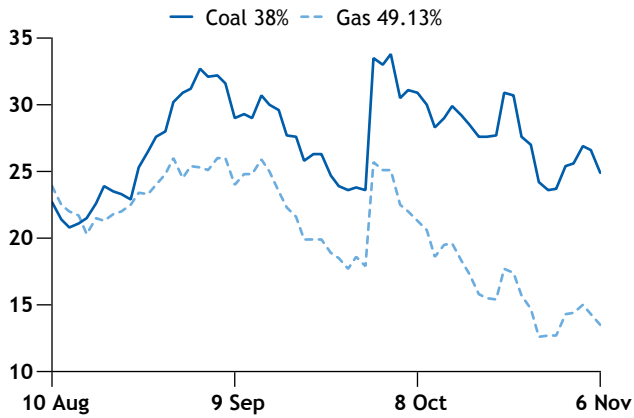
SPARK SPREADS

French ETS adjusted spark and dark spreads					€/MWh
Contract	ARA Coal 38%		Peg 55%		
	base load	peak load	base load	peak load	
Working day ahead	1.670	7.420	7.300	13.050	
December	1.945	12.445	7.054	17.554	
January	8.058	22.658	12.509	27.109	
February	11.912	26.262	16.654	31.004	
1Q21	7.172	22.372	11.959	27.159	
2Q21	-4.654	2.996	2.027	9.677	
3Q21	-3.076	4.574	4.427	12.077	
4Q21	10.127	29.627	-	-	
2021	2.343	14.843	8.227	20.727	
2022	3.615	18.115	-	-	
2023	4.519	20.469	-	-	

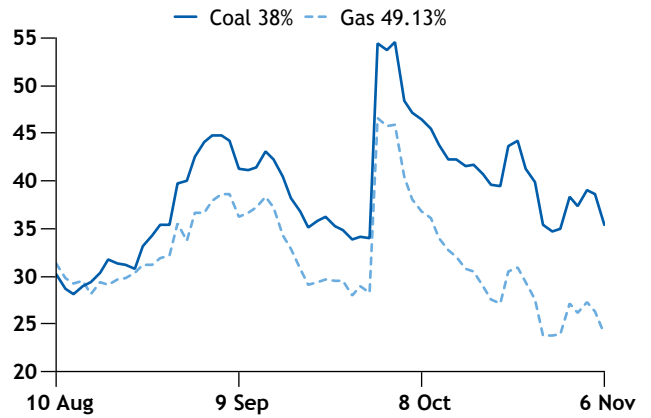
French calendar-year base-load dark €/MWh



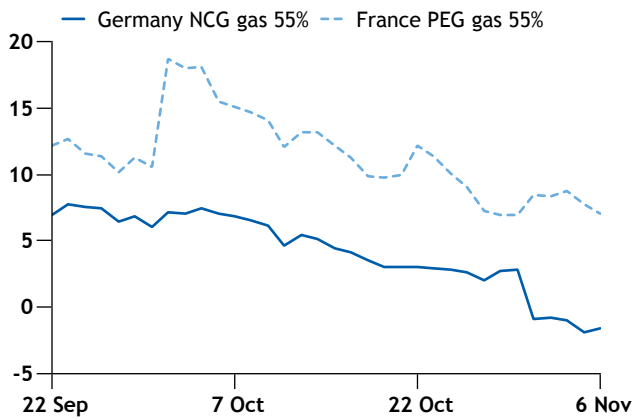
French front-month base-load spreads €/MWh



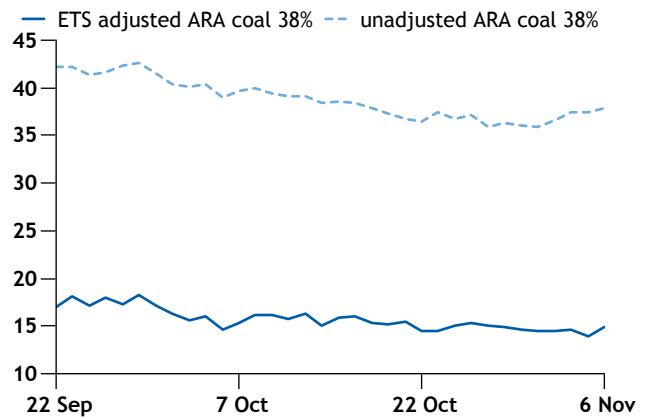
French front-month peak-load spreads €/MWh



NCG vs Peg front-month base-load spark €/MWh



French calendar-year peak-load dark €/MWh



WEATHER DATA

European weather - Departure from normal temperatures °C												
Location	7 Nov		8 Nov		9 Nov		10 Nov		11 Nov		Precipitation (mm)	
	Avg	± normal*	Avg	± normal*	Avg	± normal*	Avg	± normal*	Avg	± normal*	5-day	15-day
UK – London Heathrow	10.1	0.4	12.4	2.9	13.4	4.0	12.0	2.8	11.5	2.4	4.4	12.9
Norway – Bergen Florida	9.9	3.2	8.5	2.0	7.3	0.9	8.3	2.0	8.2	2.1	8.9	63.6
Norway – Oslo Blindern	5.6	1.8	4.4	0.8	3.6	0.1	4.3	1.0	6.2	3.0	2.4	14.4
France – Paris Orly	13.0	3.6	13.7	4.5	13.0	4.0	11.9	3.0	11.8	3.1	2.9	9.5
The Netherlands – Amsterdam Schiphol	8.3	-0.5	10.1	1.4	11.4	2.9	10.3	2.0	9.8	1.7	2.7	11.5
Germany – Essen	10.8	2.5	12.2	4.1	11.7	3.8	10.5	2.8	8.8	1.3	1.4	10.2
Germany – Berlin Tempelhof	6.4	-0.9	6.0	-1.1	6.0	-0.9	5.4	-1.4	5.8	-0.8	0.2	6.3
Poland – Warsaw Okęcie	8.1	1.9	6.9	0.9	5.0	-0.8	5.1	-0.6	3.3	-2.2	0.6	7.3
Czech Republic – Prague Ruzyně	3.9	-1.9	2.7	-2.9	3.4	-2.0	3.6	-1.6	4.7	-0.4	0.4	5.9
Hungary – Budapest Lorinc	6.7	-1.8	6.5	-1.8	6.4	-1.7	6.2	-1.6	6.4	-1.2	1.0	5.3
Serbia – Belgrade Surcin	8.3	-1.5	9.8	0.2	6.4	-3.0	7.8	-1.4	8.6	-0.4	1.1	5.0
Romania – Bucharest Imh	8.5	0.3	8.0	0.0	7.2	-0.6	8.3	0.7	6.1	-1.4	0.5	2.4
Spain – Madrid Barajas	11.8	0.6	11.3	0.3	10.9	0.1	11.1	0.5	10.3	-0.1	15.1	29.7
Greece – Athens Airport	17.0	0.6	17.3	1.1	17.7	1.6	17.6	1.6	16.7	0.9	4.0	13.5
Bulgaria – Sofia Observatory	8.9	0.4	9.7	1.4	9.6	1.5	8.3	0.4	6.5	-1.2	0.8	4.1
Turkey – Istanbul Ataturk	14.1	0.3	15.2	1.5	16.0	2.4	15.3	1.9	13.9	0.6	2.5	17.1

*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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