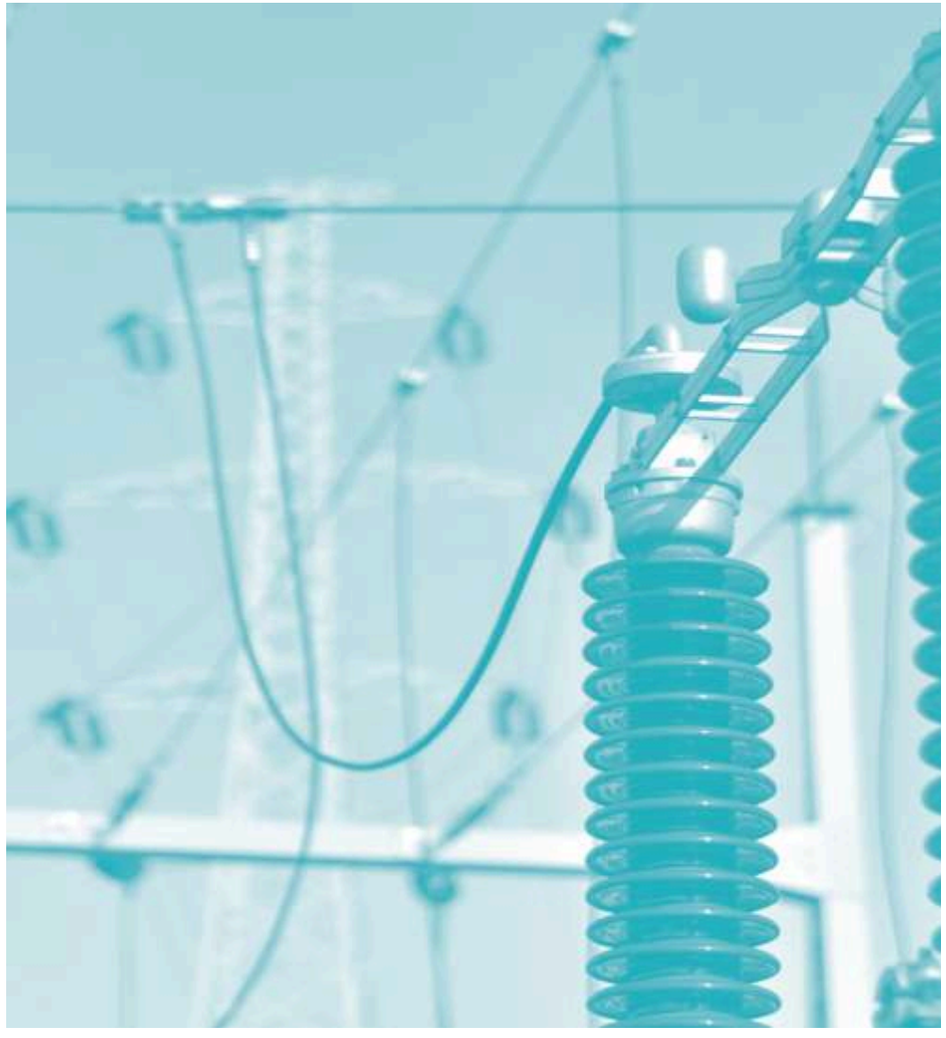
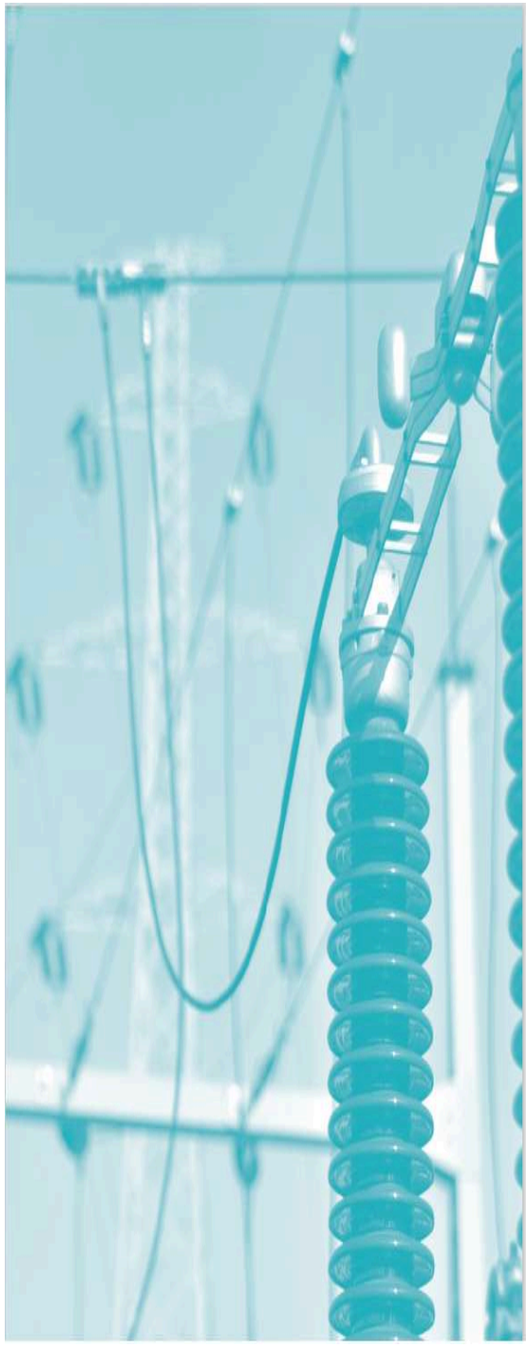


Energy Market Monitoring Report

April 2026

SEM committee



Market Results

Summary Dashboard

Monthly Market Metrics	Apr-25	May-25	Jun-25	Jul-25	Aug-25	Sep-25	Oct-25	Nov-25	Dec-25	Jan-26	Feb-26	Mar-26	Apr-26
DAM (€/MWh)	111.11	108.64	95.21	99.61	96.38	94.47	100.67	122.79	108.47	126.95	107.97	128.77	131.19
% Change from previous month	-16%	-2%	-12%	5%	-3%	-2%	7%	22%	-12%	17%	-15%	19%	2%
% Change from previous year	26%	1%	-12%	-10%	-4%	-16%	-18%	-16%	-21%	-24%	-23%	-2%	18%
Total System Demand (GWh)	3308	3165	3177	3241	3203	3235	3585	3744	3880	4090	3629	3776	3423
% Change from previous month	-10%	-4%	0%	2%	-1%	1%	11%	4%	4%	5%	-11%	4%	-9%
% Change from previous year	-8%	-5%	-2%	7%	1%	2%	11%	8%	6%	5%	4%	3%	3%
Total Wind Generation (GWh)	920	694	940	786	870	1128	1297	1311	1525	1400	1531	1537	1299
% Change from previous month	-23%	-25%	35%	-16%	11%	30%	15%	1%	16%	-8%	9%	0%	-15%
% Change from previous year	-15%	4%	22%	20%	-19%	24%	4%	26%	0%	-3%	-9%	28%	41%
Total Solar Generation (GWh)	-	-	-	-	144	107	53	35	17	30	39	115	175
% Change from previous month	-	-	-	-	-1%	-26%	-51%	-33%	-52%	76%	31%	194%	52%
% Change from previous year	-	-	-	-	52%	94%	3%	32%	-35%	-3%	-7%	20%	80%
Renewable share of demand (%)*					33%	41%	42%	40%	43%	40%	48%	48%	47%
Gas Price p/therm	84.72	81.82	86.38	80.69	79.25	79.23	78.05	76.03	71.19	90.08	80.19	130.60	112.41
% Change from previous month	-16%	-3%	6%	-7%	-2%	0%	-1%	-3%	-6%	27%	-11%	63%	-14%
% Change from previous year	18%	7%	6%	7%	-6%	-9%	-21%	-32%	-36%	-27%	-35%	29%	33%
Carbon Price (€/Tonne)	63.96	71.00	73.14	71.03	71.81	76.23	78.68	80.93	85.20	88.21	74.96	69.96	73.86
% Change from previous month	-6%	11%	3%	-3%	1%	6%	3%	3%	5%	4%	-15%	-7%	6%
% Change from previous year	1%	0%	7%	6%	2%	18%	24%	21%	27%	16%	-1%	2%	15%
EWIC % Import Periods	27.15%	78.36%	68.26%	45.83%	57.22%	60.45%	63.98%	60.07%	57.36%	60.55%	49.31%	53.49%	25.49%
EWIC % Export Periods	1.81%	0.77%	2.05%	1.31%	4.57%	3.92%	4.13%	3.40%	4.87%	7.49%	7.83%	8.03%	3.82%
EWIC % Not Flow Periods	71.04%	20.87%	29.69%	52.86%	38.21%	35.63%	31.89%	36.53%	37.77%	31.96%	42.86%	38.47%	70.69%
Moyle % Import Periods	78.16%	93.88%	78.85%	57.29%	79.03%	80.24%	73.69%	75.66%	77.89%	70.46%	66.74%	74.33%	76.84%
Moyle % Export Periods	6.08%	6.08%	16.70%	24.33%	20.90%	19.72%	26.21%	24.31%	21.98%	22.75%	33.10%	25.60%	22.92%
Moyle % Not Flow Periods	15.76%	0.03%	4.44%	18.38%	0.07%	0.03%	0.10%	0.03%	0.13%	6.79%	0.15%	0.07%	0.24%
Greenlink % Import Periods	80.17%	93.78%	90.76%	91.23%	88.68%	85.69%	80.21%	84.17%	83.20%	78.29%	76.85%	82.26%	82.39%
Greenlink % Export Periods	10.35%	5.58%	7.36%	7.83%	10.08%	11.25%	18.92%	13.89%	16.13%	20.40%	21.91%	17.71%	14.08%
Greenlink % Not Flow Periods	9.48%	0.64%	1.88%	0.94%	1.24%	3.06%	0.87%	1.94%	0.67%	1.31%	1.23%	0.03%	0.30%

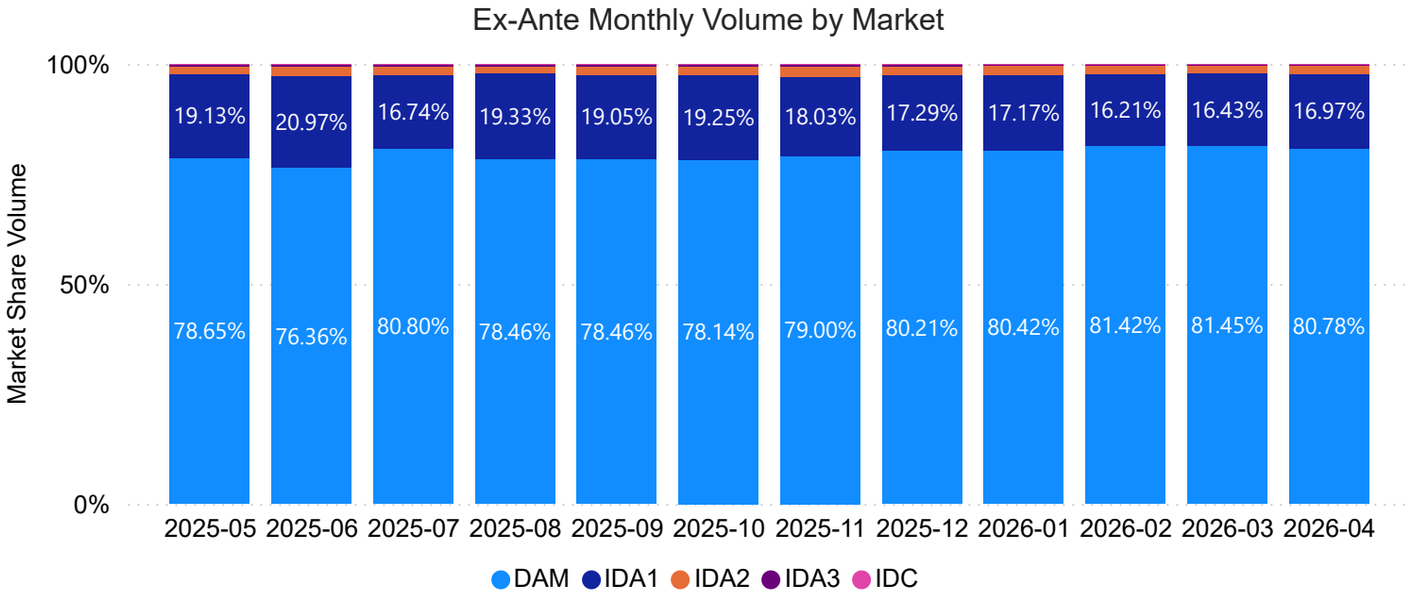
* *Renewable share of demand (%) includes generation from wind, solar, Hydro, Biomass sources.*

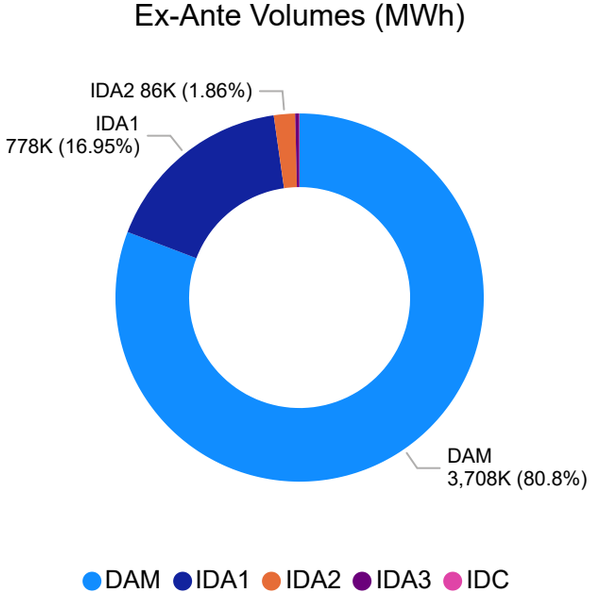
Market Volumes April 2026

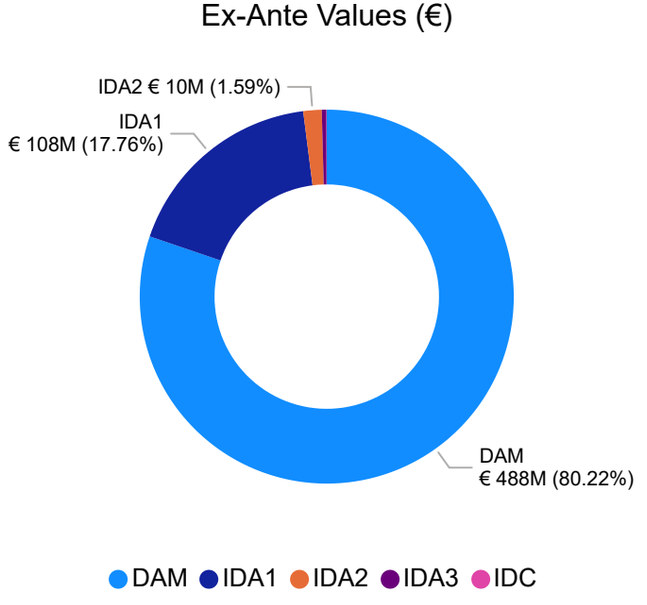
Daily Average Volume	MWh
DAM	123,592
IDA1	25,933
IDA2	2,851
IDA3	547
IDC	49

Total Monthly Volume	MWh
DAM	3,707,761
IDA1	777,991
IDA2	85,523
IDA3	16,396
IDC	1,336
Total	**4,589,007**

Total Market Value	€
DAM	€ 488,093,126
IDA1	€ 108,063,628
IDA2	€ 9,665,189
IDA3	€ 2,449,494
IDC	€ 160,485
Total	**€ 608,431,922**







Market Volumes and Values

The Day Ahead Market is, by far, the largest market in the SEM, circa 80% of all volumes are cleared in this market. The distribution of volumes across the SEM markets has been broadly constant since the introduction of these trading arrangements in Oct 2018.

Generally, in the SEM, market participants will prefer to lock in their positions well ahead of delivery time given the increased volatility in prices closer to real time.

Another important factor is associated with the TSO dispatch arrangements. The vast majority of wind generation in the SEM is cleared at the Day Ahead stage. That might also explain to some extent the additional volumes cleared in this market.

Day Ahead Market
April 2026

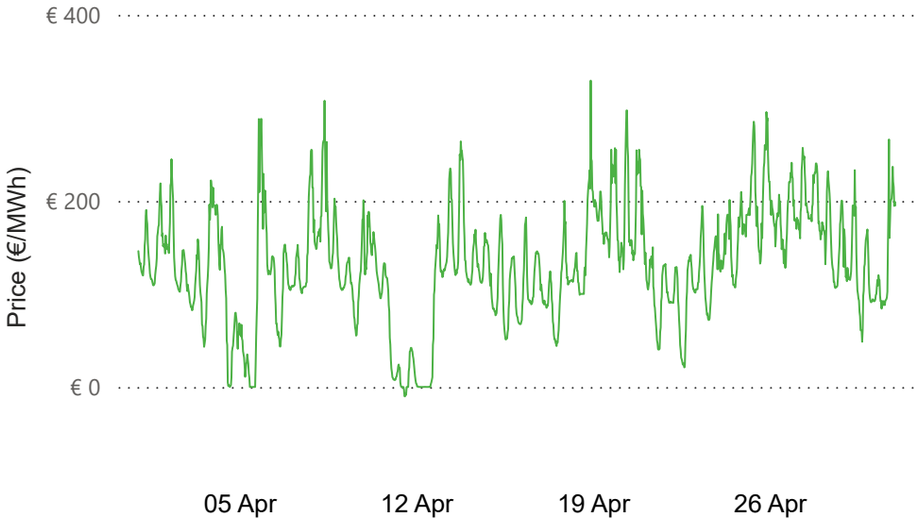
€ 131.19
Average DAM Price

-€ 10.09
Min DAM Price

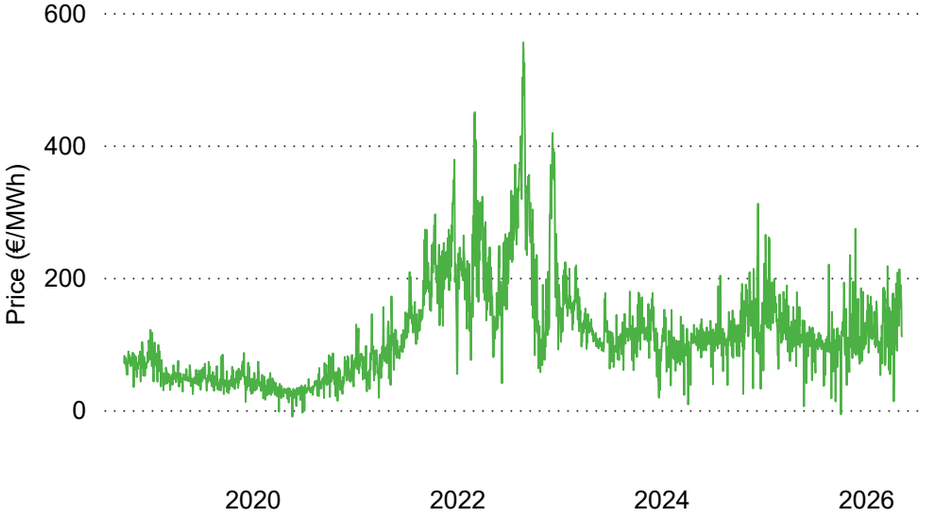
€ 329.27
Max DAM Price

The most frequent price range for the month was between €100 and €150.

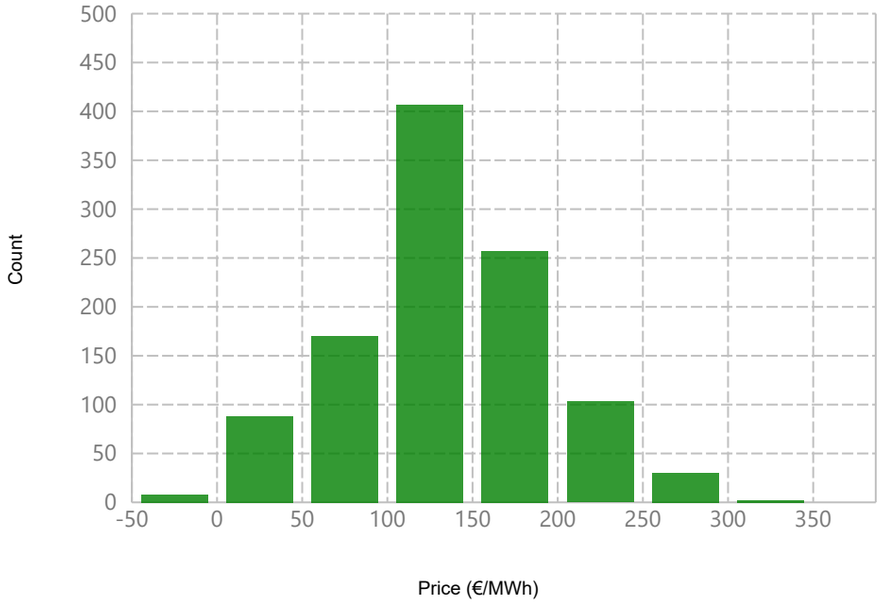
DAM Prices



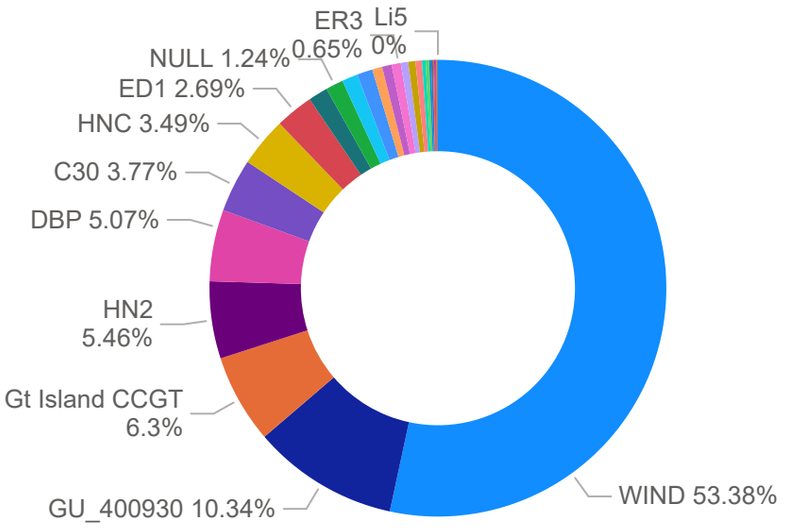
Historic Daily Average DAM Prices



Histogram of DAM Prices



DAM Sell Side Generator Order Results



Intraday Market
April 2026

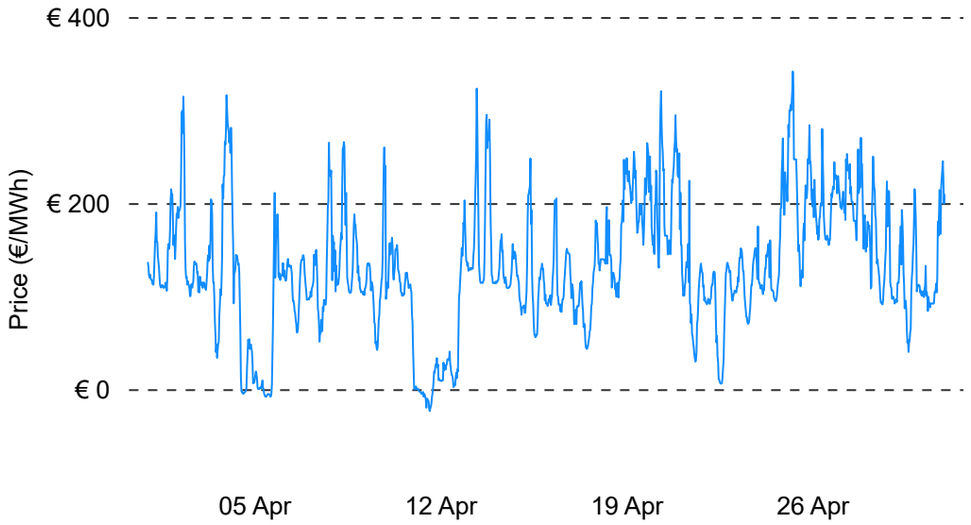
€ 130.68
Average IDA1 Price

-€ 23.51
Min IDA1 Price

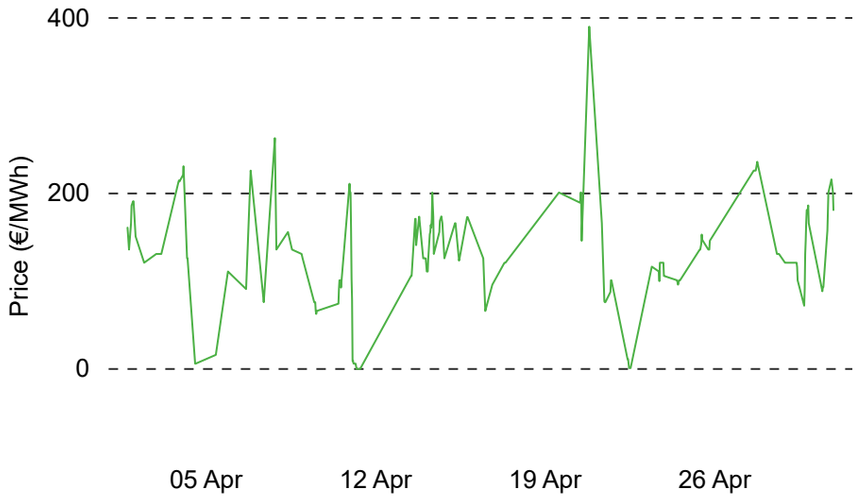
€ 341.52
Max IDA1 Price

The most frequent price range for the month was between €100 and €150.

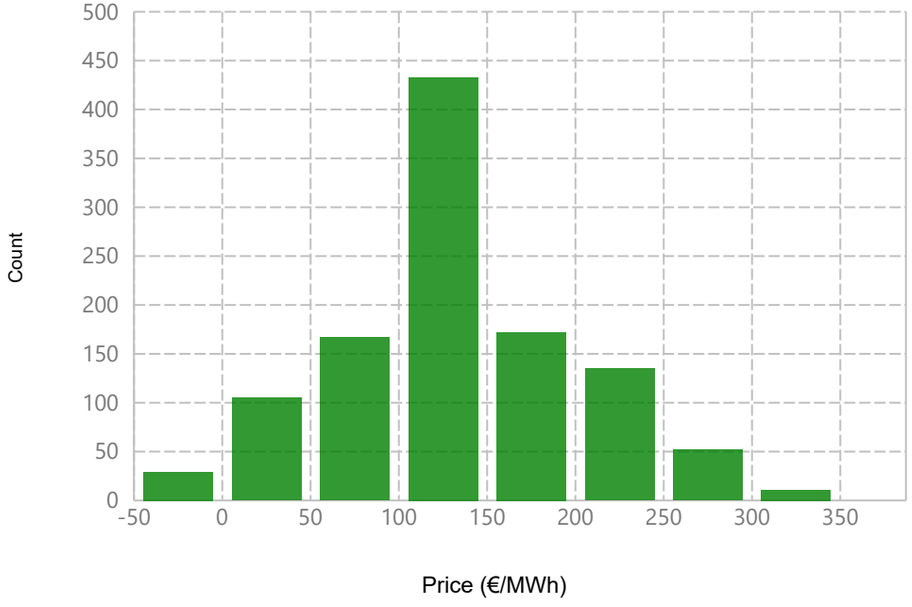
IDA 1 Prices



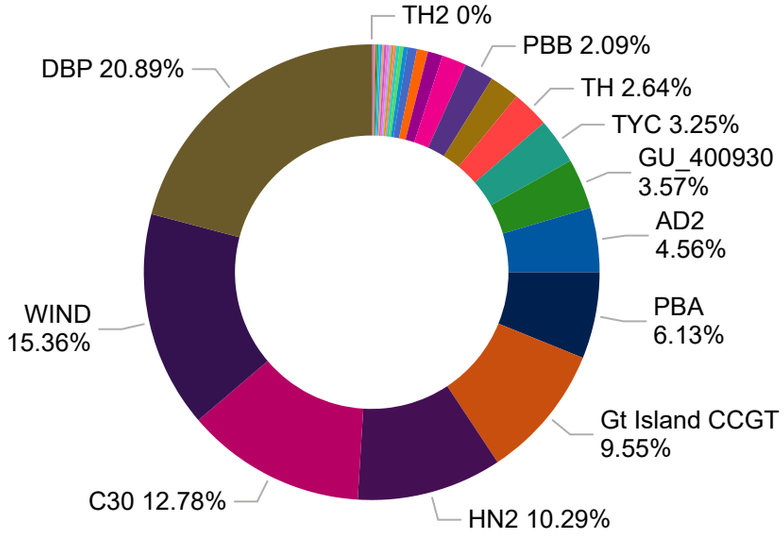
IDC Prices



Histogram of IDA1 Prices



IDA1 Sell Order Results By Market Participant



SEM vs GB DAM
April 2026

SEM Day Ahead Price
€ 131.19
Average DAM Price

-€ 10.09
Min DAM Price

€ 329.27
Max DAM Price

GB (EPEX) Day Ahead Price
€ 94.71
Average DAM Price

-€ 44.73
Min DAM Price

€ 170.01
Max DAM Price

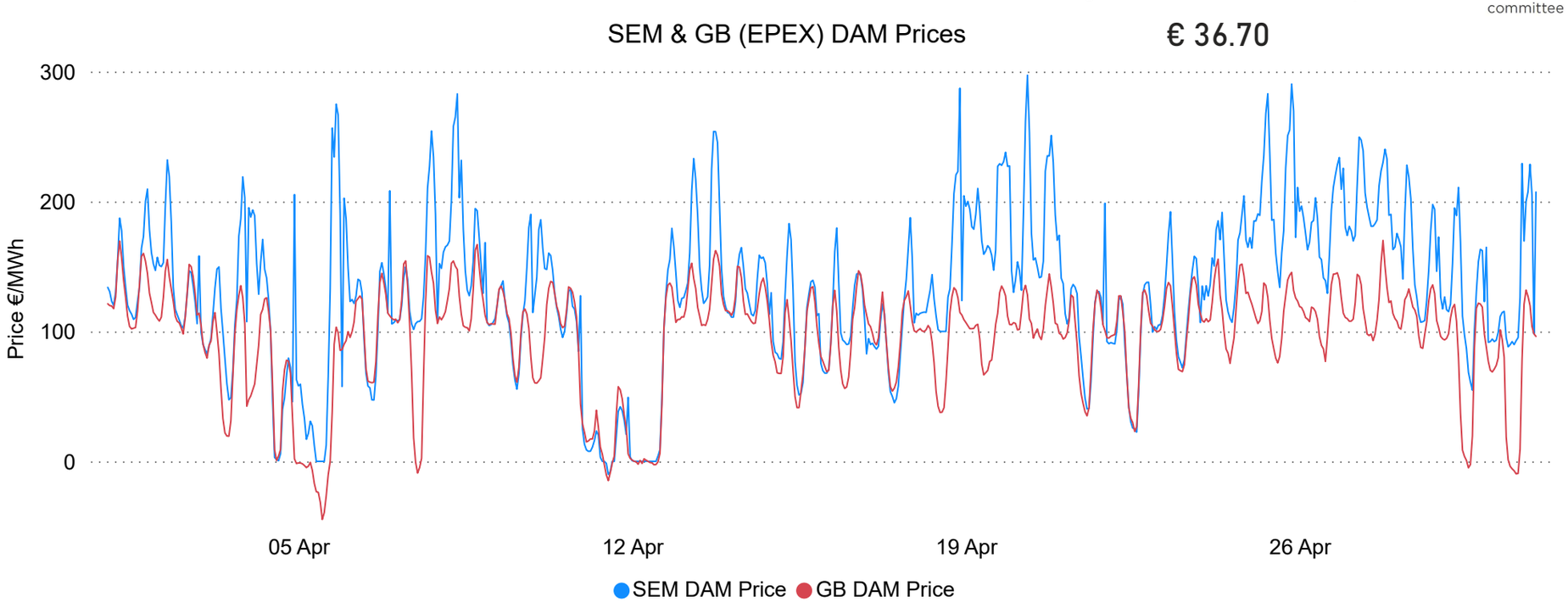
SEM-GB (EPEX) Price Differential

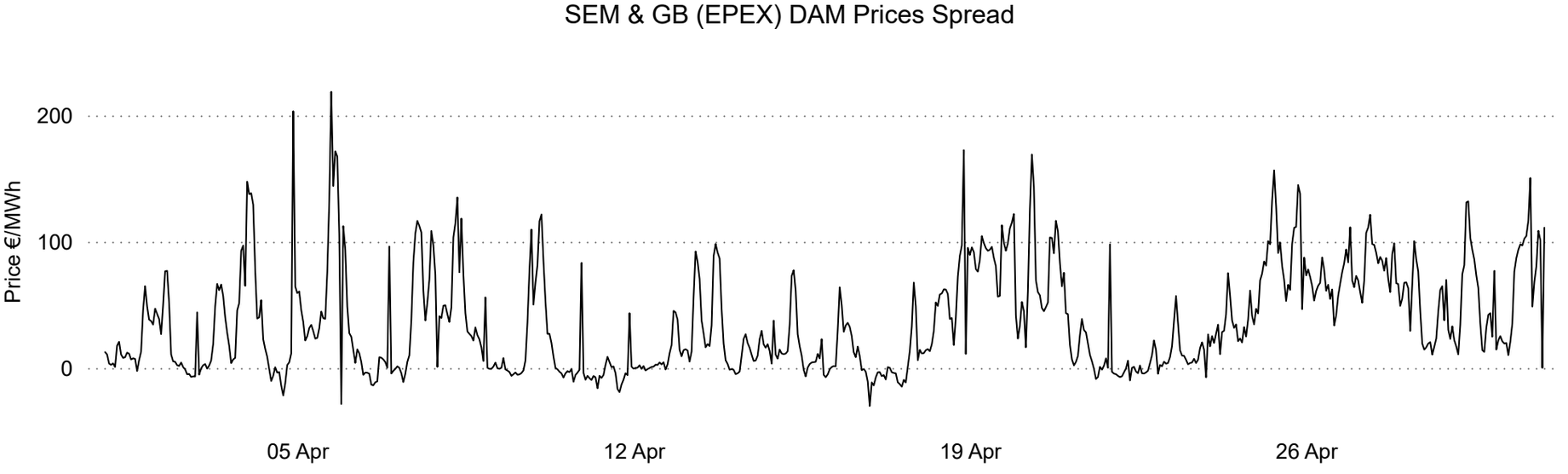
The charts show that the SEM and GB prices appear to follow the same general trend. Significant spreads can be observed on several occasions.

Periods of significant spreads between the two markets are generally correlated with periods of very low wind in the SEM.

Average SEM-GB (EPEX) Price Spread
€ 36.70

SEM committee



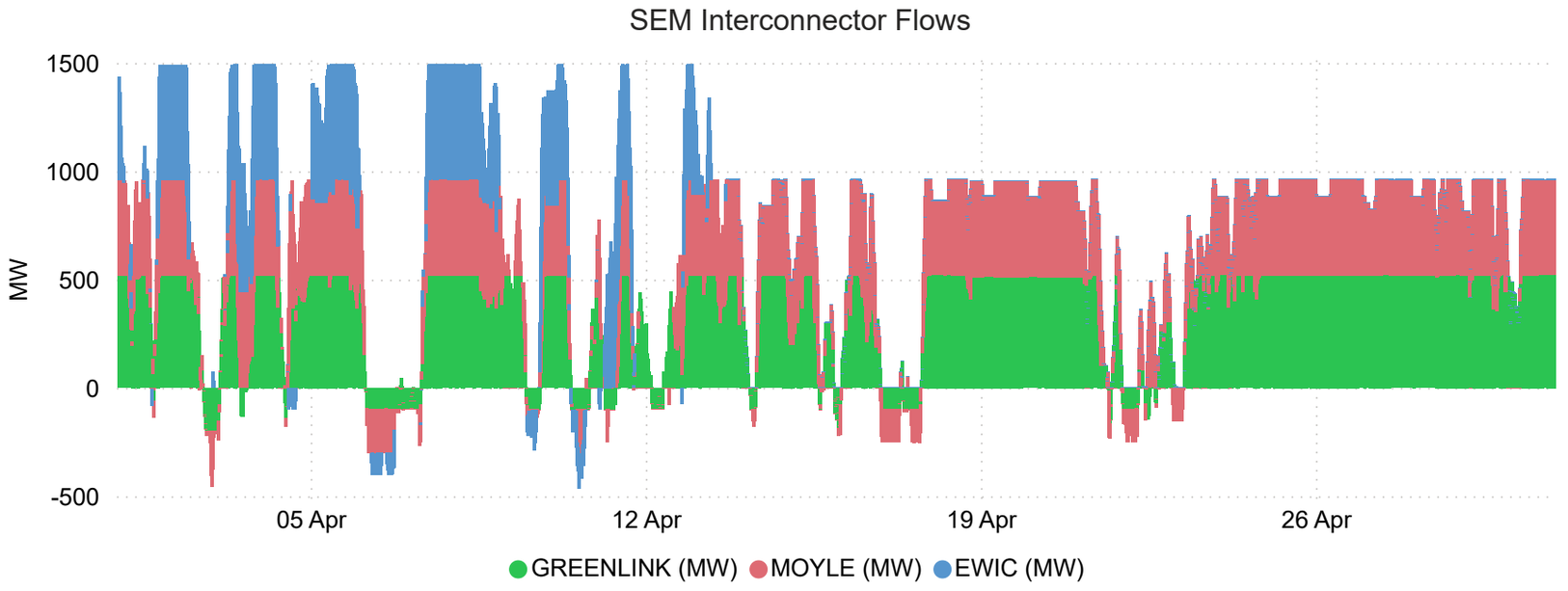


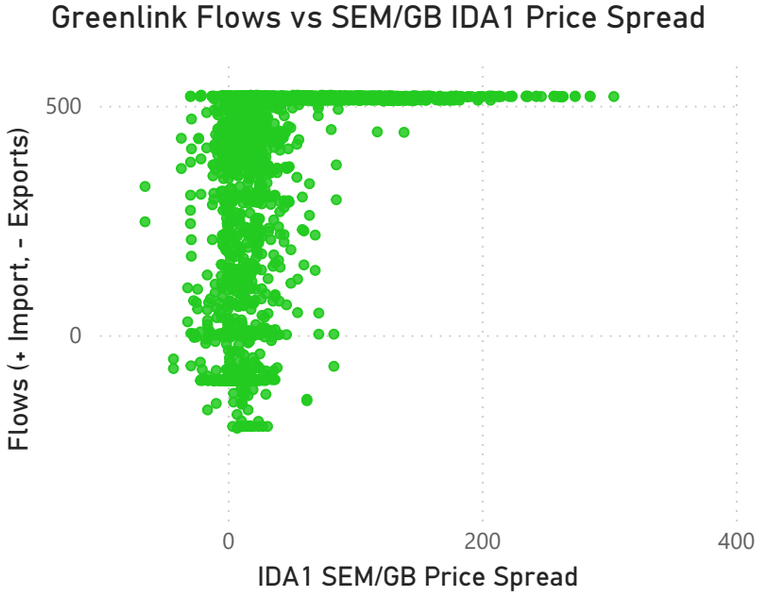
SEM Interconnectors
April 2026

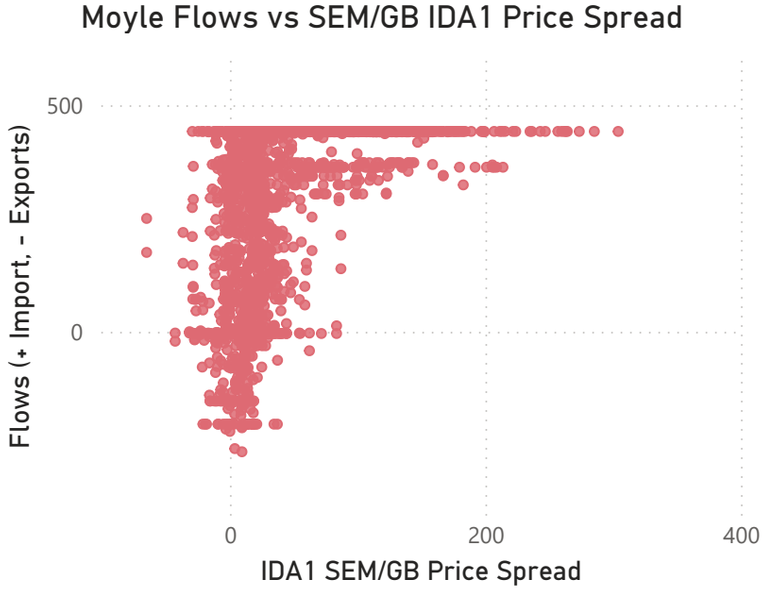
Interconnectors were predominantly importing power across the month. This reflects the predominantly higher prices in the SEM compared with GB.

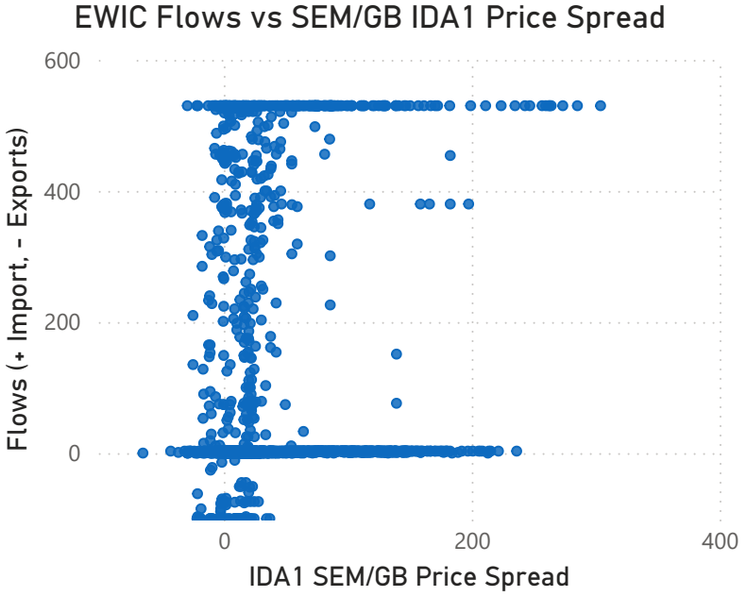
Export flows on interconnectors were also observed occasionally when strong wind output resulted in oversupply in the SEM.

EWIC underwent a planned annual maintenance outage from 13 April 2026 (08:00) to 2 May 2026 (17:00)







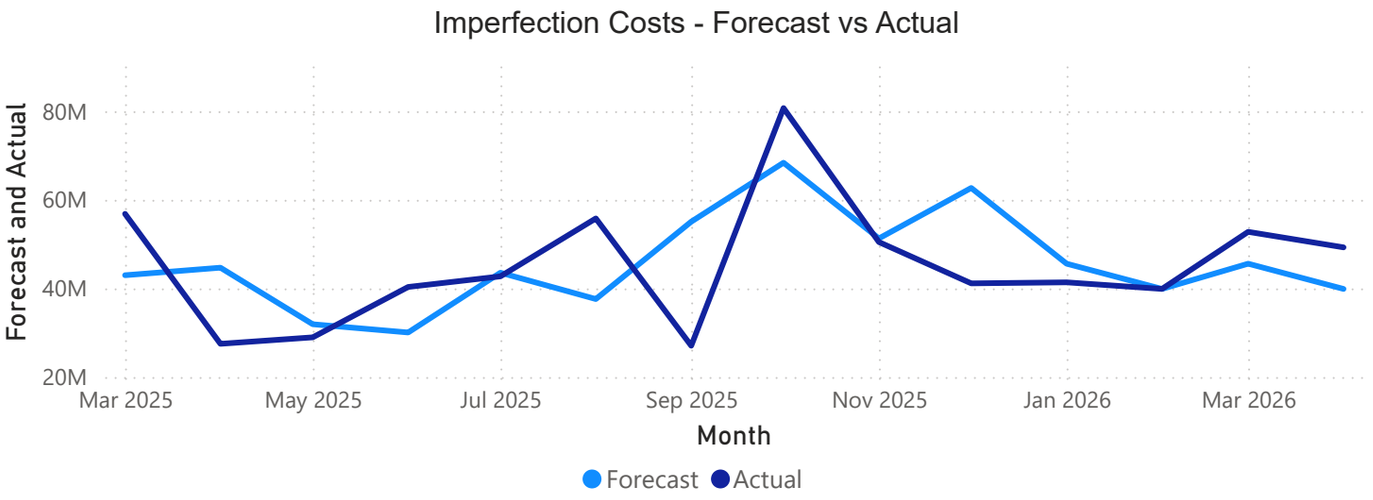


Balancing Market April 2026

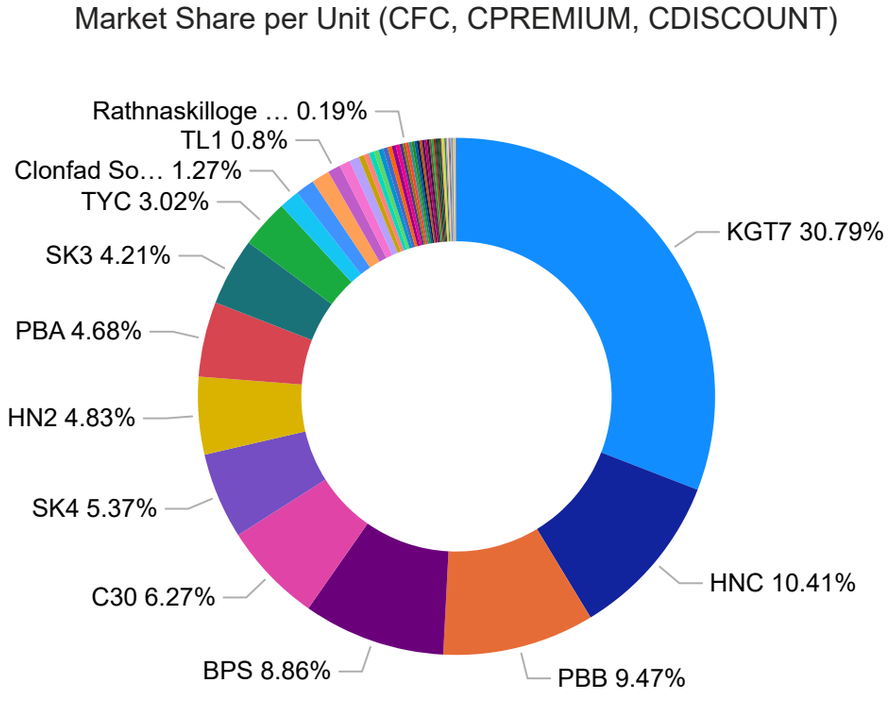
Components of Imperfection costs:

Below is a list of all the payments and charges, with a one-line explanation:

Component	Explanation
CIMB	All differences between meter and trades at imbalance price.
CPREMIUM	Extra for TSO inc actions if offer price better than imbalance price.
CDISCOUNT	Extra for TSO dec actions if bid price is better than imbalance price.
CAOOPO	If there is an undo of a TSO dec action, ensure unit gets inc/dec price difference.
CABBPO	If there is an undo of a TSO inc action, ensure unit gets inc/dec price difference.
CCURL	Pay back revenue for output turned down for system stability reasons.
CUNIMB	Charge if dispatch instruction was not followed within tolerance.
CFC	Make-whole extra fixed costs incurred, pay back fixed costs saved.
CTEST	Extra risk due to test = extra reserve = cost to be recovered.



Determinant Name	Value €
CABBPO	11,151.52
CAOOPO	-43,676.92
CCURL	-2,231,058.56
CDISCOUNT	17,155,954.15
CFC	15,167,527.76
CIMB	-7,049,645.62
CPREMIUM	27,009,003.15
CTEST	-3,517.72
CUNIMB	-745,384.33
Total	**49,270,353.42**



Constraints Payments

This chart shows the distribution of selected constraint payments across key generating units. KGT7(EP Kilroot) was the largest recipient of constraint payments in April, followed by HNC(Huntstown 1).

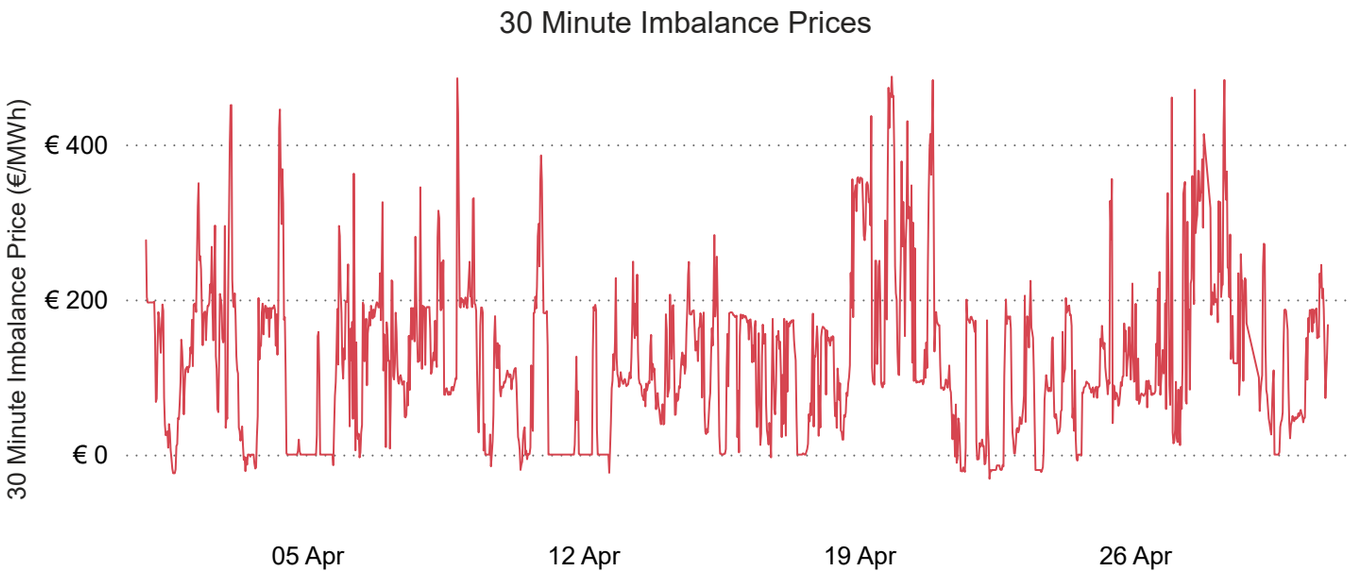
Balancing Market April 2026

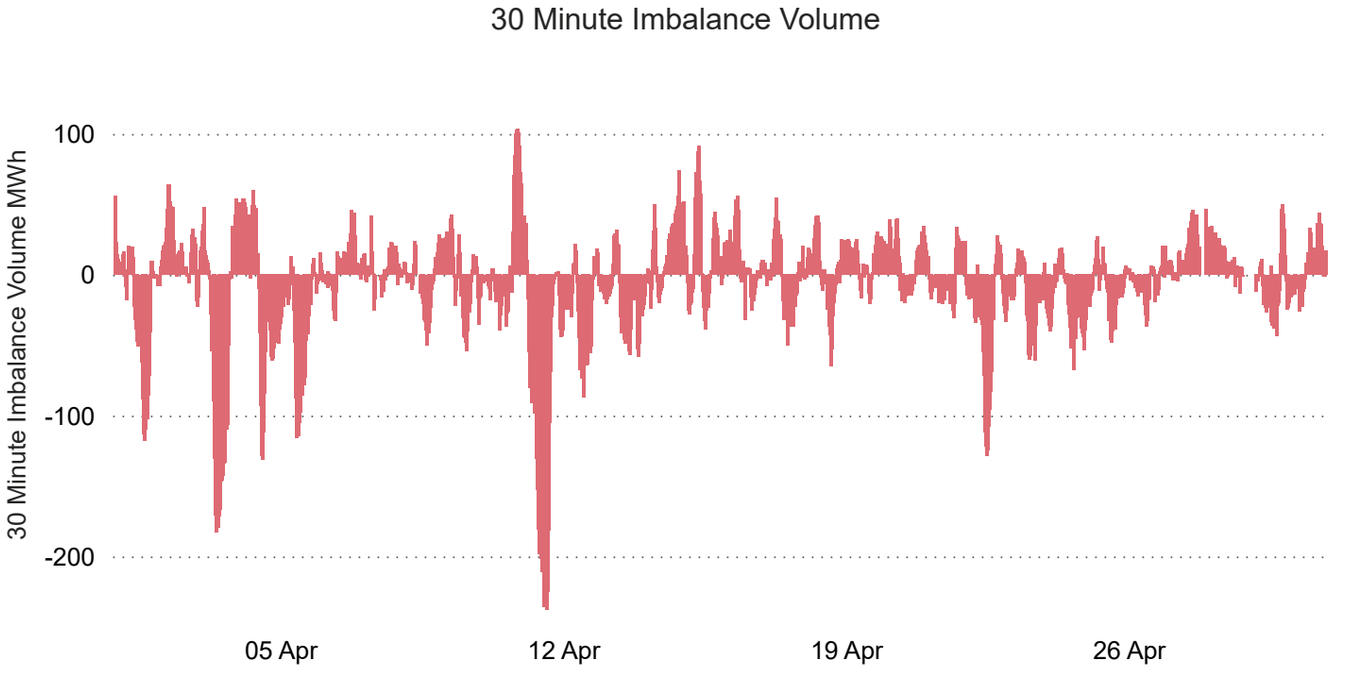
30 Minutes Imbalance Price

€ 120.04
Average Price

-€ 31.26
Lowest Price

€ 487.48
Highest Price



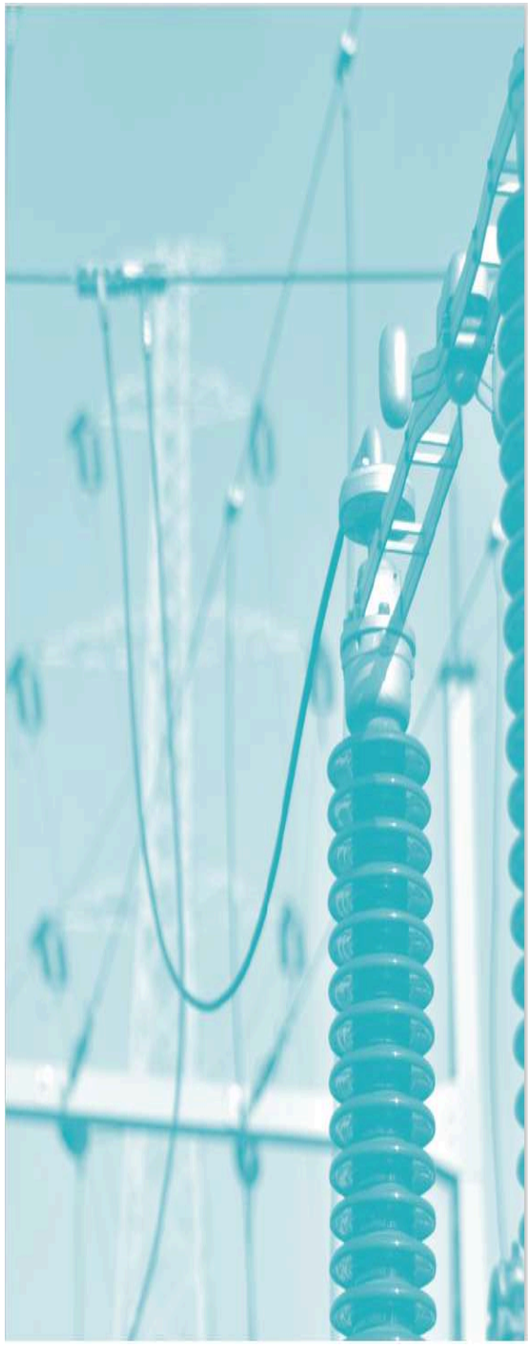


SEM committee

Imbalance Price & Volumes

The average Imbalance (BM) Price this month was lower than the Day Ahead Price. Also, the Balancing Market prices has exhibited a much higher range of prices indicating a higher level of volatility compared to Day Ahead Market Prices. This is an expected characteristic of the Balancing Market.

There were no Reliability Options events this month as the Balancing Market prices have not breached the PSTR level.



Demand and Generation Mix

Demand
April 2026

SEM Demand

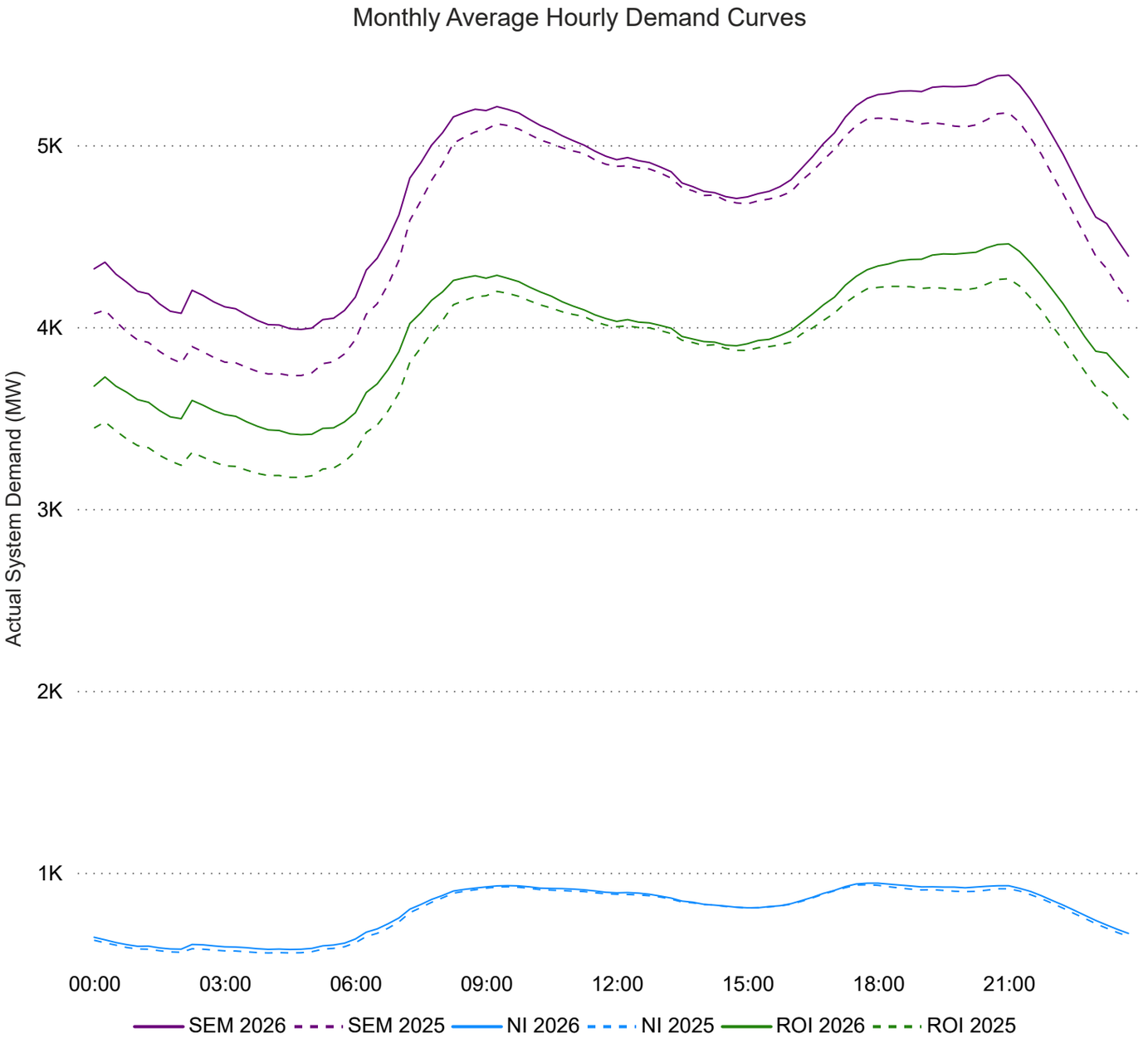
4,759.74 SEM Average 2026	4,593.55 SEM Average 2025
3,986.83 SEM Min 2026	3,732.57 SEM Min 2025
5,385.13 SEM Max 2026	5,177.60 SEM Max 2025

NI Demand

793.84 NI Average 2026	780.44 NI Average 2025
577.83 NI Min 2026	558.67 NI Min 2025
942.47 NI Max 2026	933.70 NI Max 2025

ROI Demand

3,965.90 ROI Average 2026	3,813.12 ROI Average 2025
3,407.73 ROI Min 2026	3,173.33 ROI Min 2025
4,456.90 ROI Max 2026	4,265.73 ROI Max 2025



SEM Demand

The graph indicates a 3.6% increase in all-island demand compared to the same period last year.

ROI demand rose by 4% compared to the same period last year, whereas NI demand recorded a smaller increase of 1.7% compared to the same timeframe.

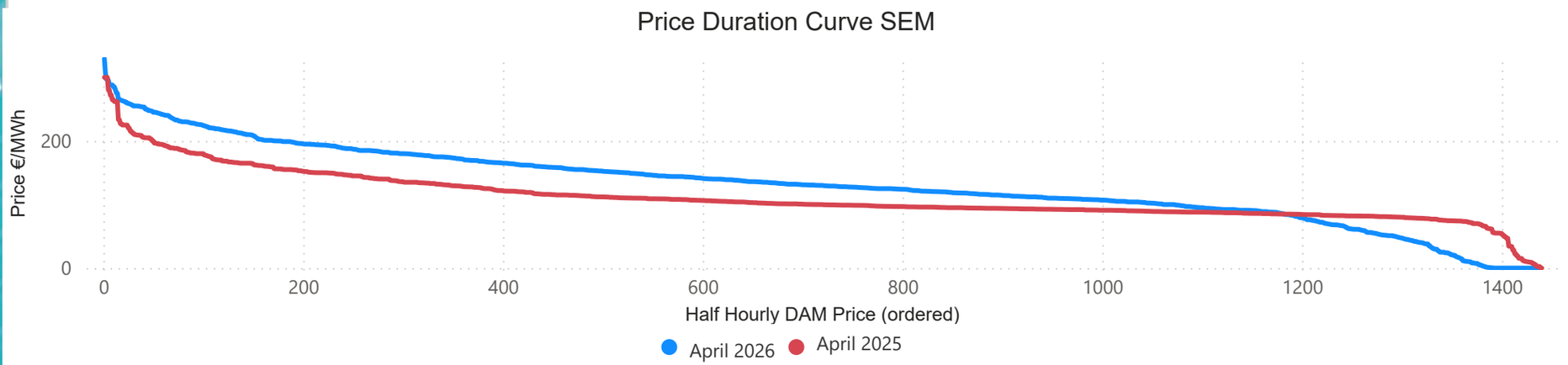
The demand is beginning to see the re-emergence of the duck curve, as weaker mid-day demand is followed by steeper evening ramps as solar output declines.

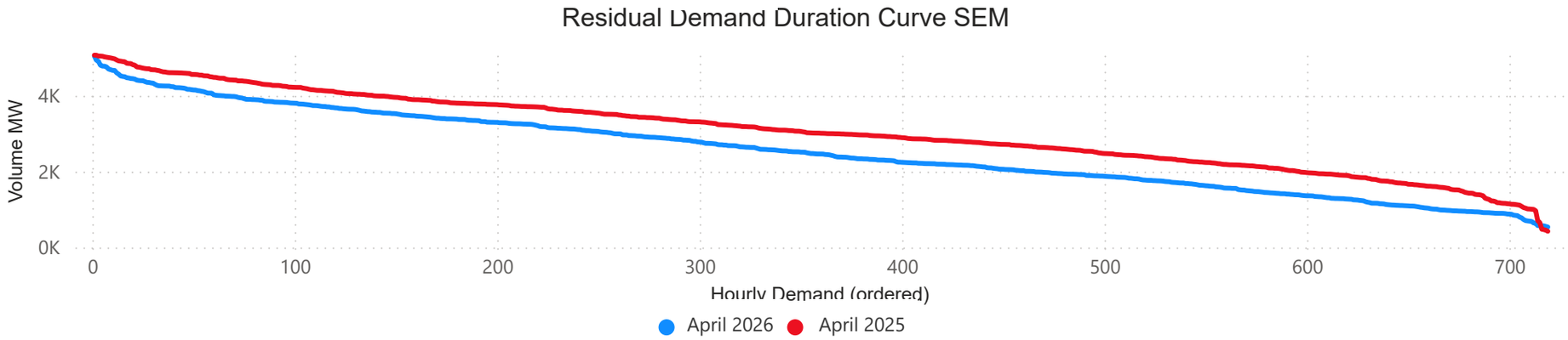
Duration Curves April 2026

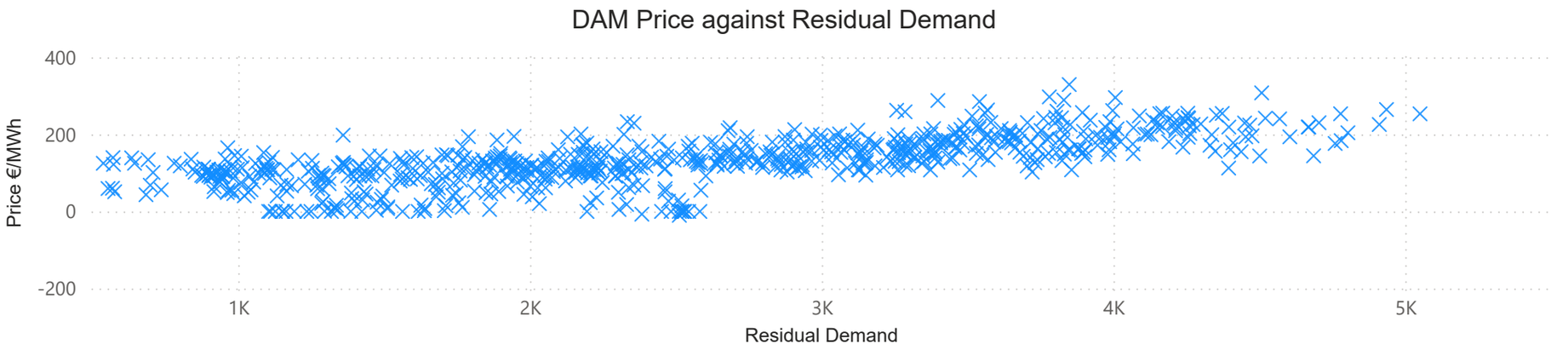
Price Duration
The price duration curve shows the half hourly DAM prices across the month ordered from the largest to the smallest.

Residual Duration
The residual demand curve shows the ordered hourly demand level across the month which can't be met by renewable generation.

Price against Residual Demand
Shows the residual demand for each period relative to the DAM price for that period.





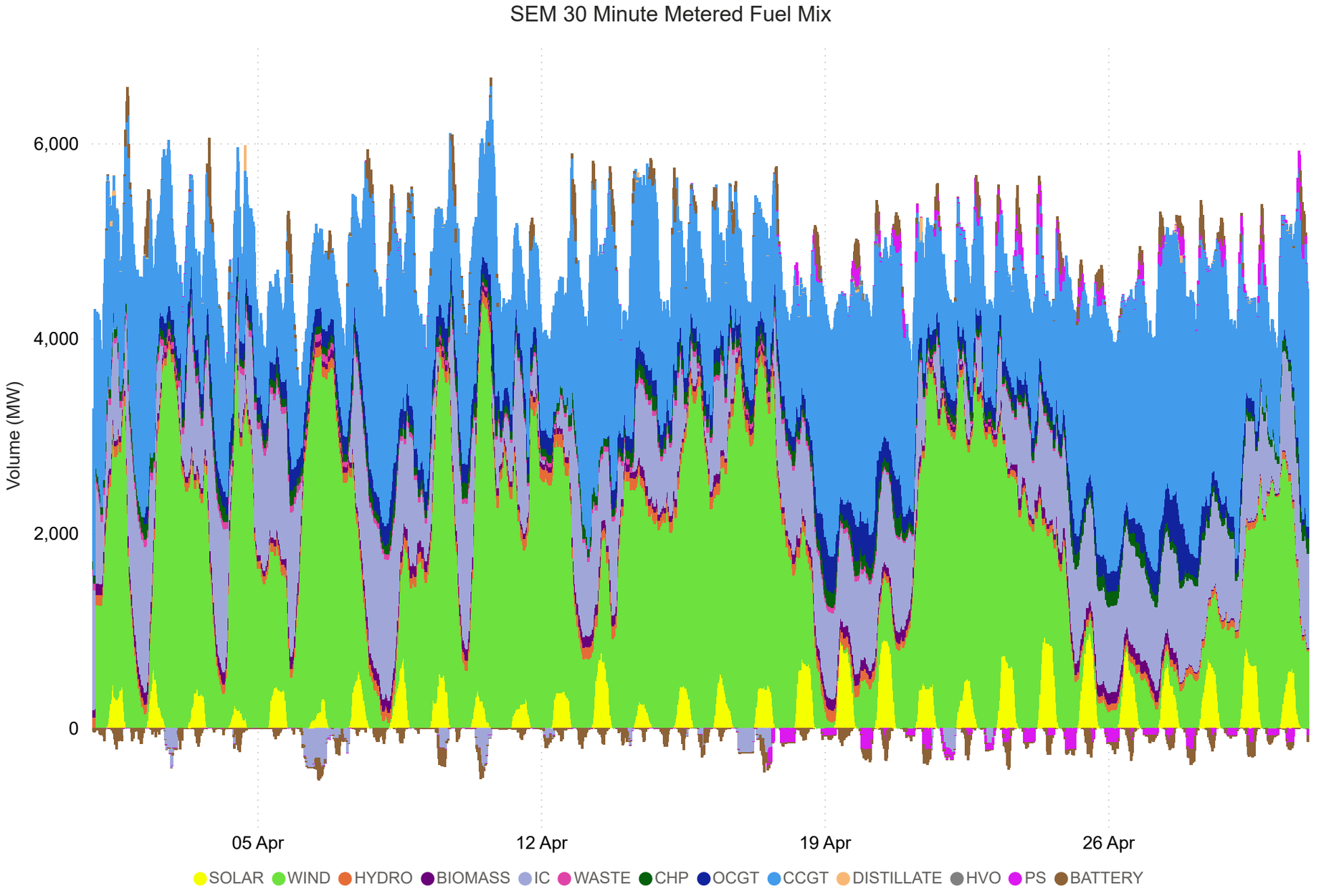


Fuel Mix
April 2026

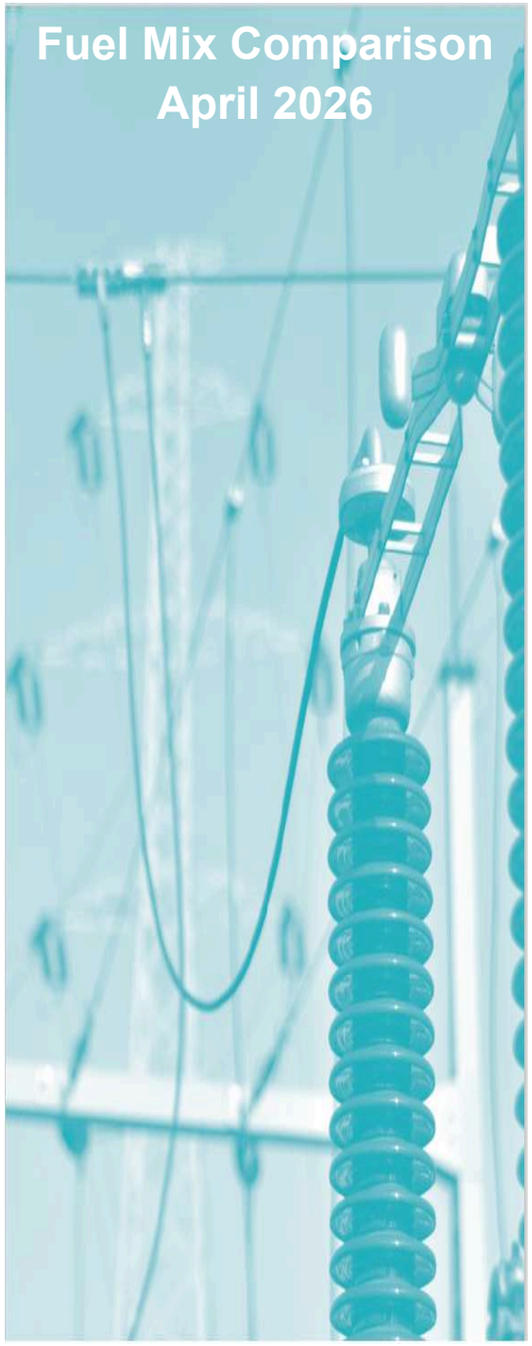
FuelType	Avg Monthly	% Monthly
WIND	1805	38.3%
CCGT	1511	32.1%
INTERCONNECTOR	721	15.3%
SOLAR	207	4.4%
OCGT	169	3.6%
CHP	101	2.1%
HYDRO	96	2.0%
BIOMASS	77	1.6%
WASTE	41	0.9%
DISTILLATE	1	0.0%
HVO	1	0.0%
PUMP_STORAGE	-7	-0.1%
BATTERY	-10	-0.2%

FuelType	Max Monthly	Min Monthly
WIND	4258	11
CCGT	3139	598
INTERCONNECTOR	1494	-435
SOLAR	986	0
OCGT	613	0
BATTERY	421	-279
DISTILLATE	260	0
CHP	244	41
PUMP_STORAGE	218	-224
HYDRO	140	20
BIOMASS	128	12
WASTE	76	0
HVO	42	0

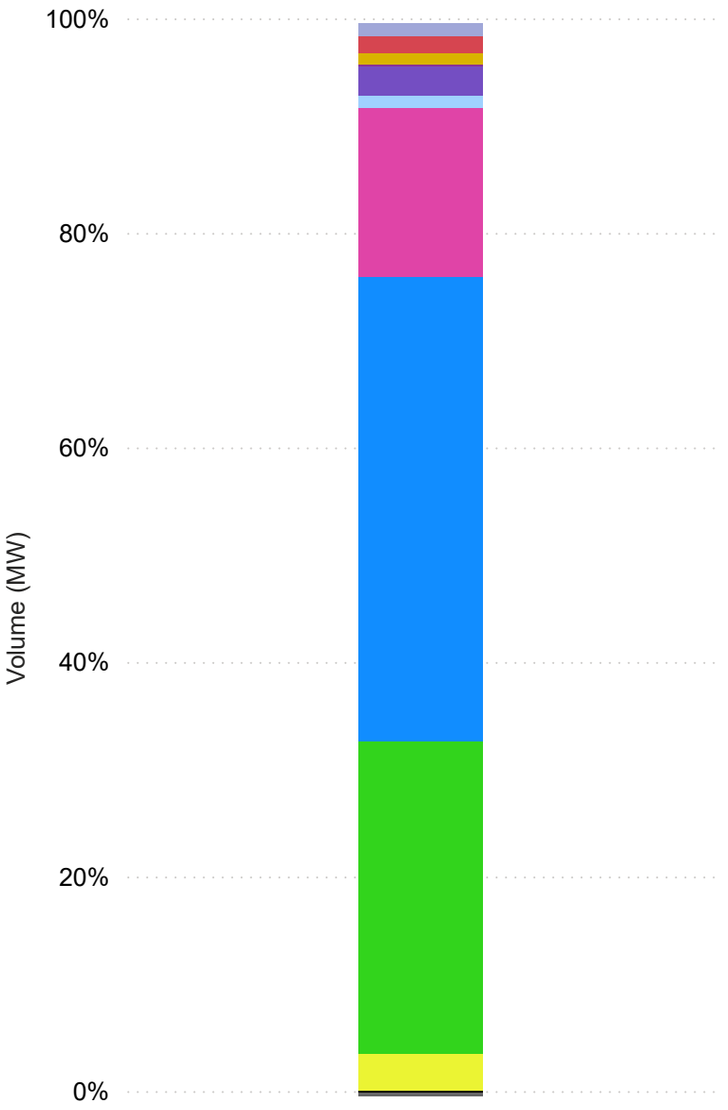
SEM committee

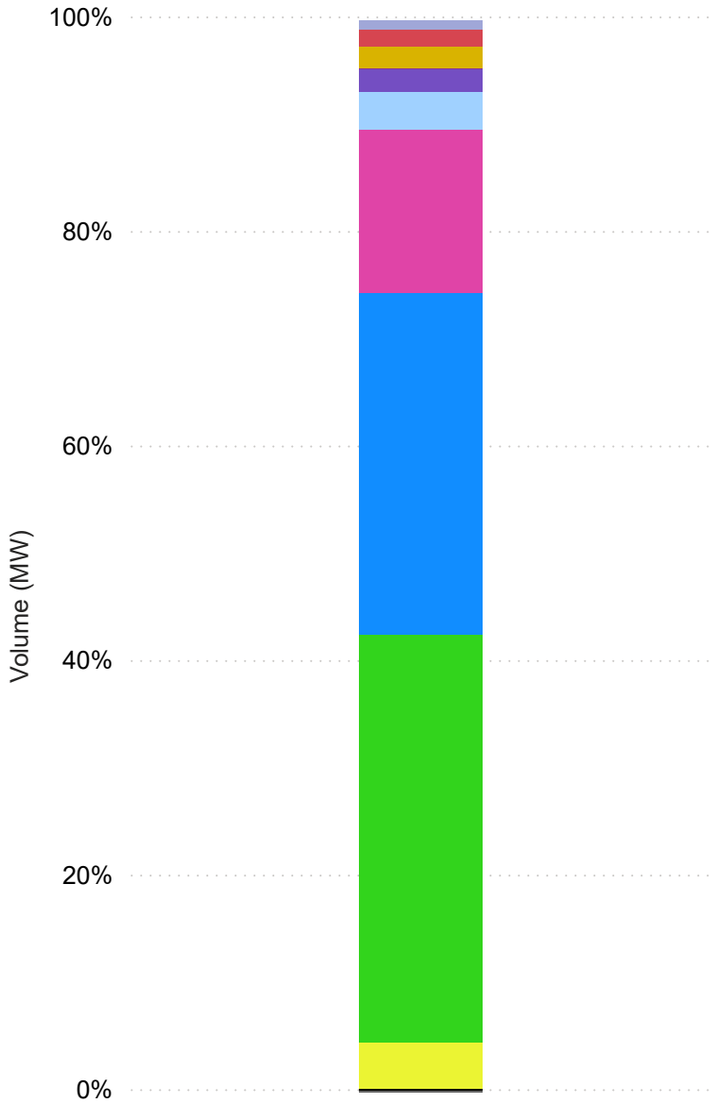


Fuel Mix Comparison April 2026



- SOLAR
- WIND
- CCGT
- INTERCONNECTORS
- OCGT
- CHP
- HVO
- DISTILLATE
- HYDRO
- BIOMASS
- WASTE
- BATTERY
- PUMPED STORAGE





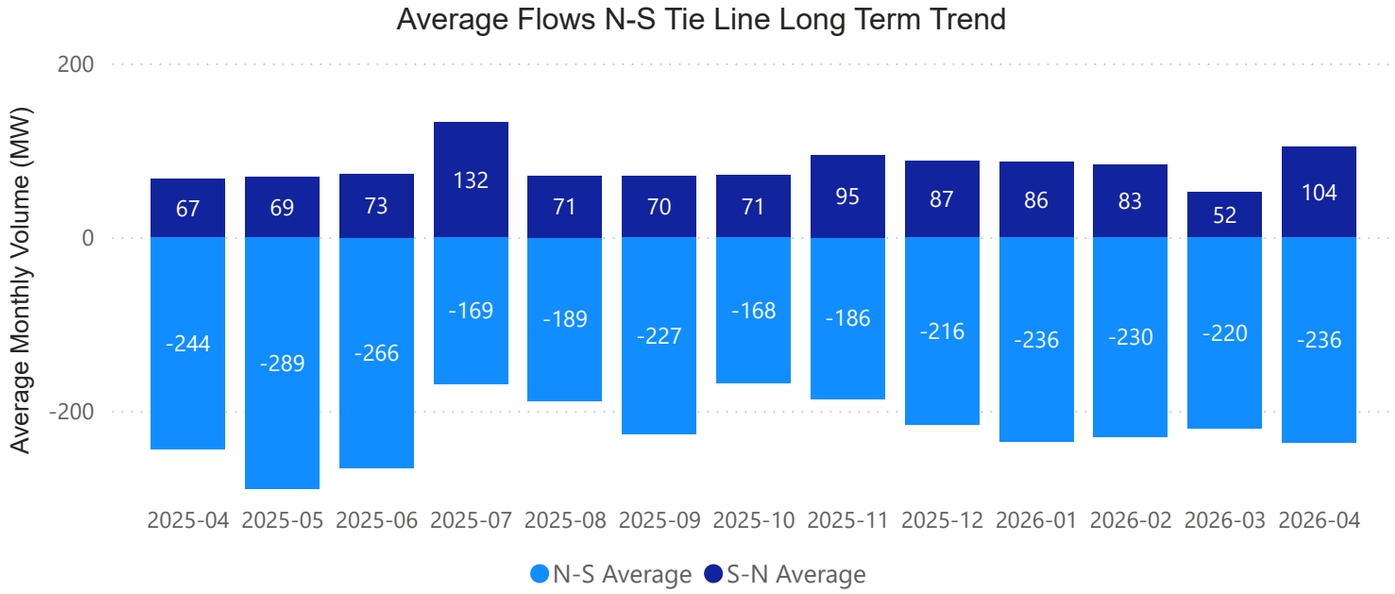
North-South Tie Line April 2026

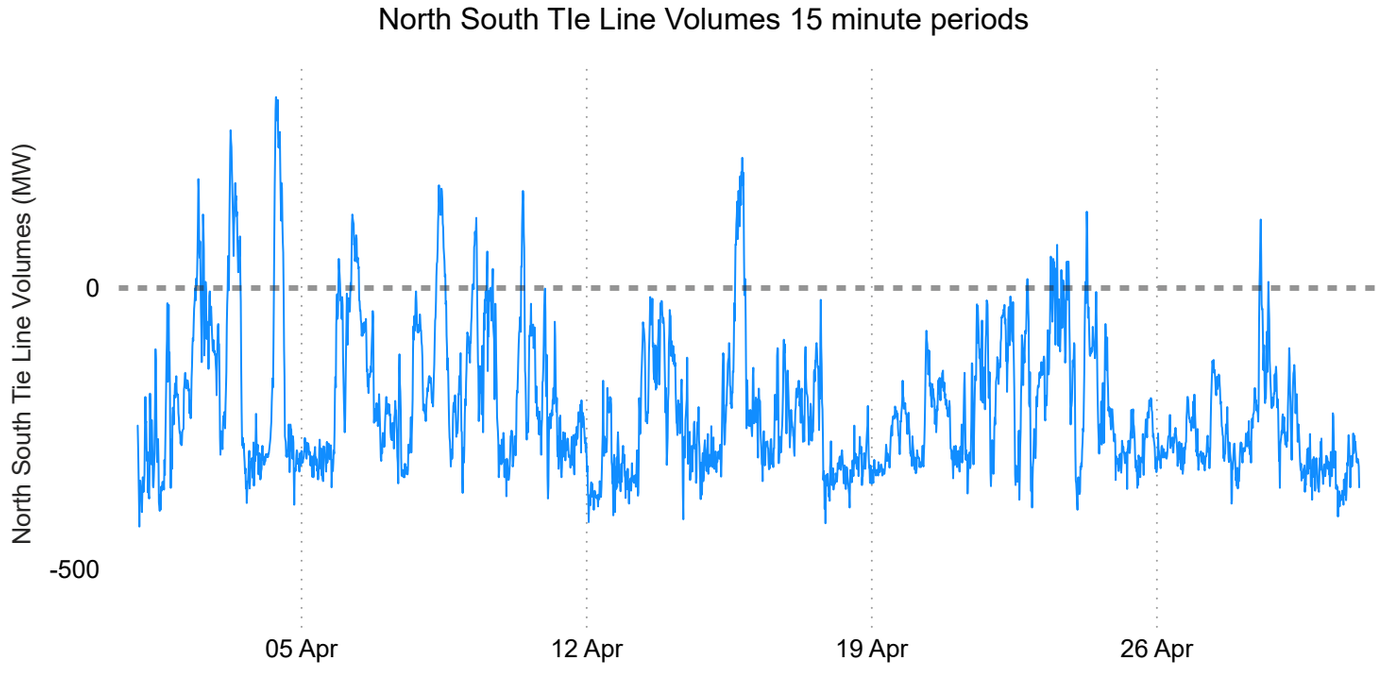
Average Flow NI to ROI (MW)
-235.86

Average Flow ROI to NI (MW)
104.02

Average Net Flow NI to ROI (MW)
-213.14

-ve flow NI to ROI
+ve flow ROI to NI





North South Tie Line

Flows across the N-S Tie Line were predominantly in the North to South direction. This has been the long term trend. Reasons for this trend are outlined below:

•When wind penetration is high in NI, there is often a surplus of power as the TSOs must run a minimum number of thermal units in NI to address transmission constraints in the system.

• Demand in ROI has been growing at a faster pace than in NI.

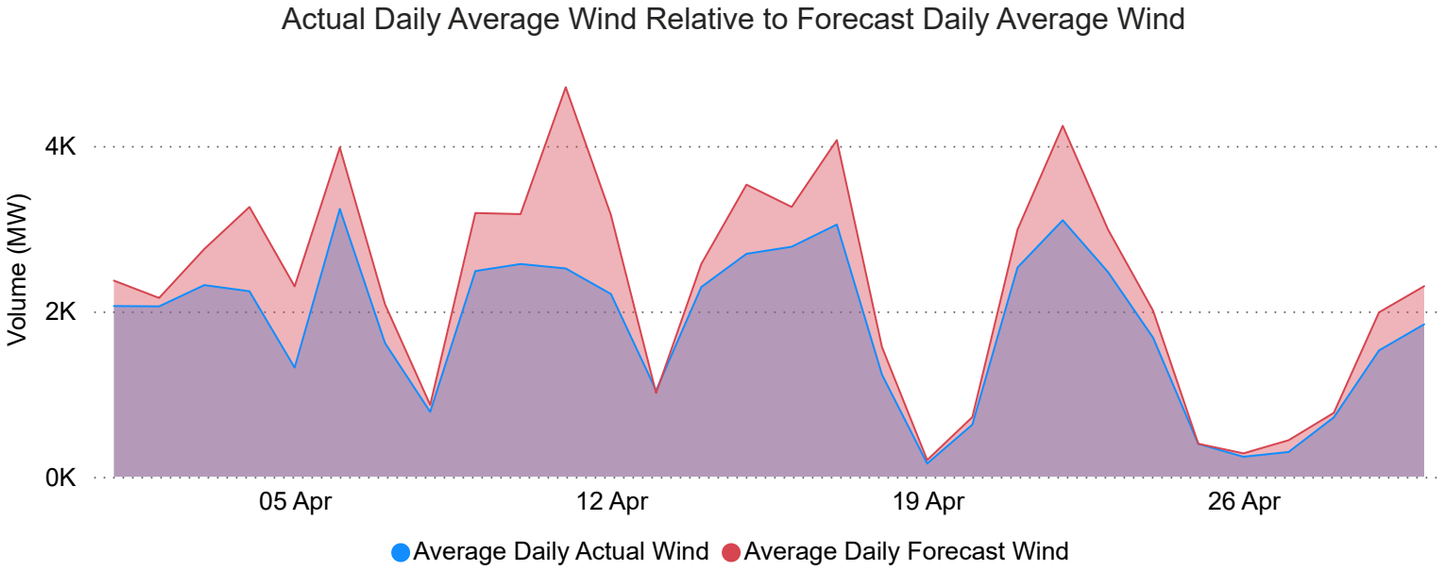
Wind Generation April 2026

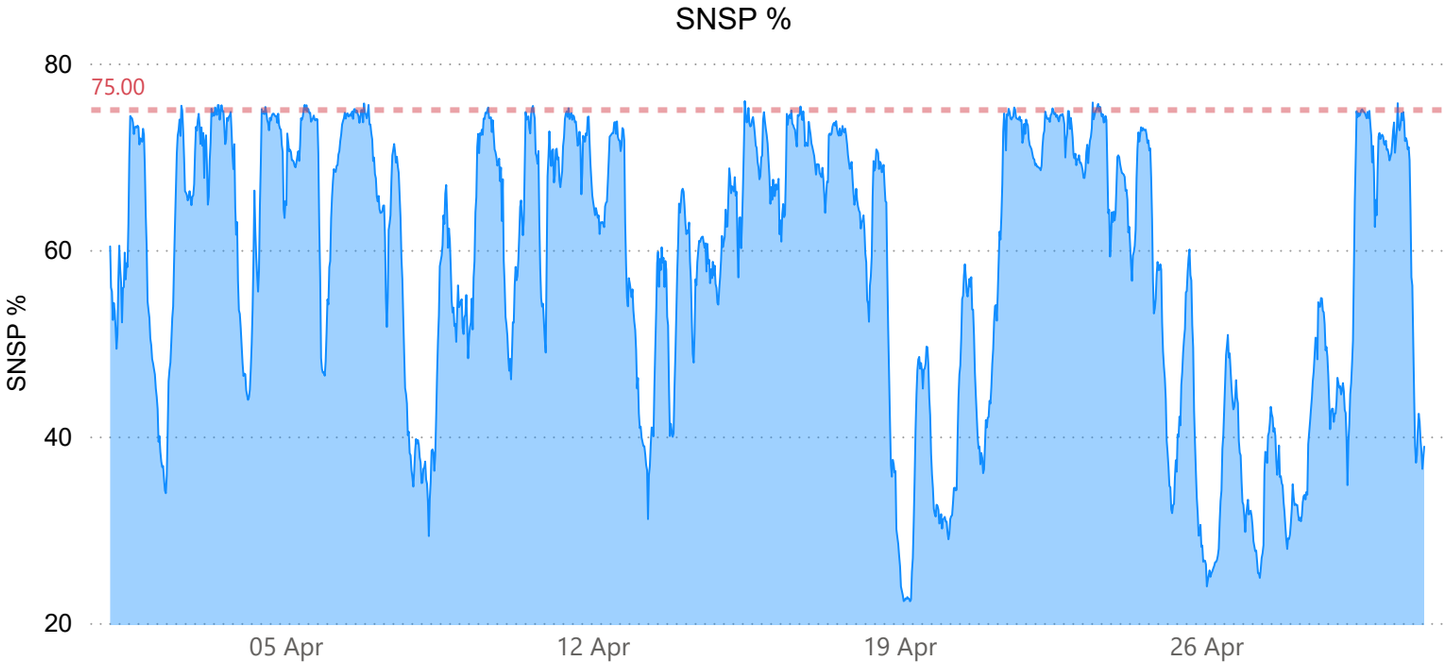
Average Daily Actual Wind (MW)
1,804

Average Daily Forecast Wind (MW)
2,312

Min SNSP%
22.33

Max SNSP%
75.96





Wind Generation

Average wind output showed a 15% decrease compared with the previous month, but increased by 41% compared to the same period last year.

SNSP

SNSP is closely linked to wind generation and as such follows the same trend across the month.

CO_2 April 2026

CO2 Intensity (gCO2/kWh)

161.54
Average

90
Lowest

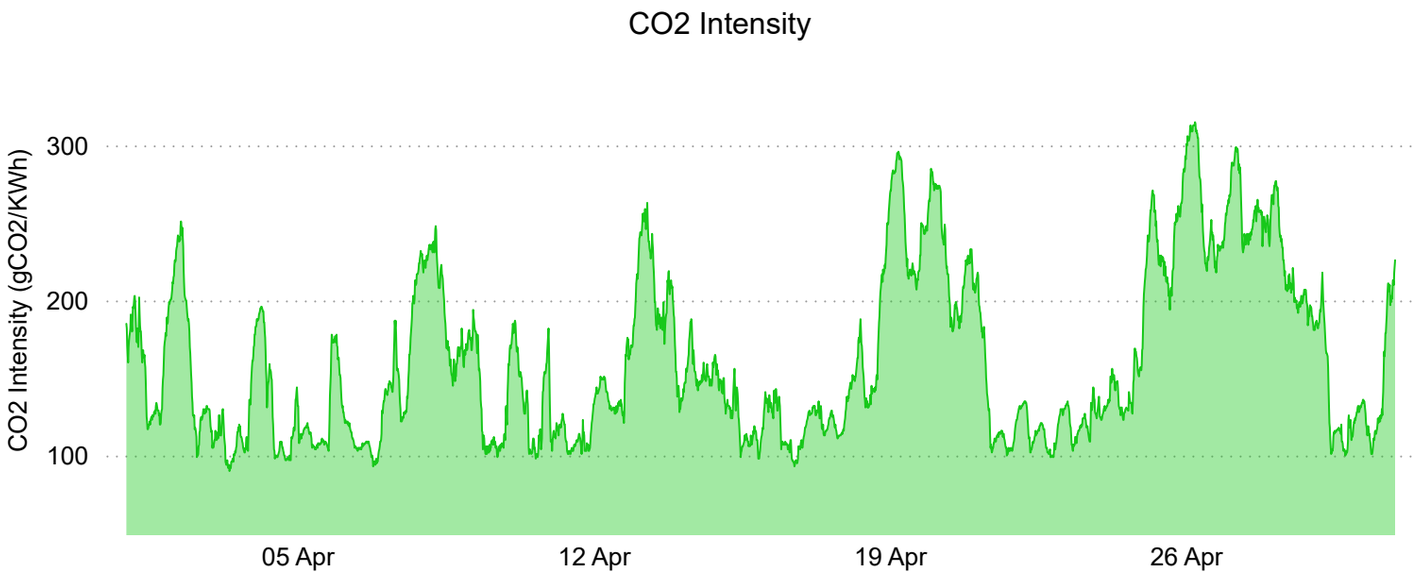
315
Highest

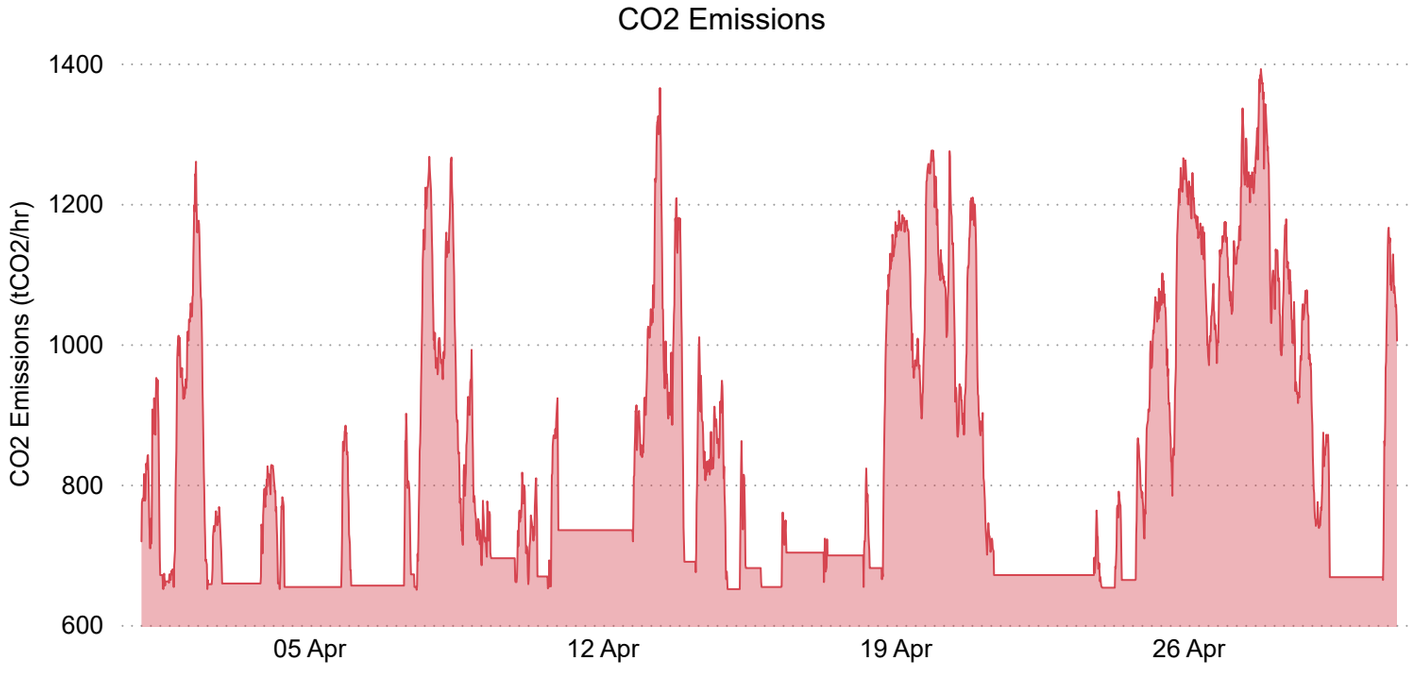
CO2 Emissions (tCO2/hr)

824.45
Average

650
Lowest

1392
Highest



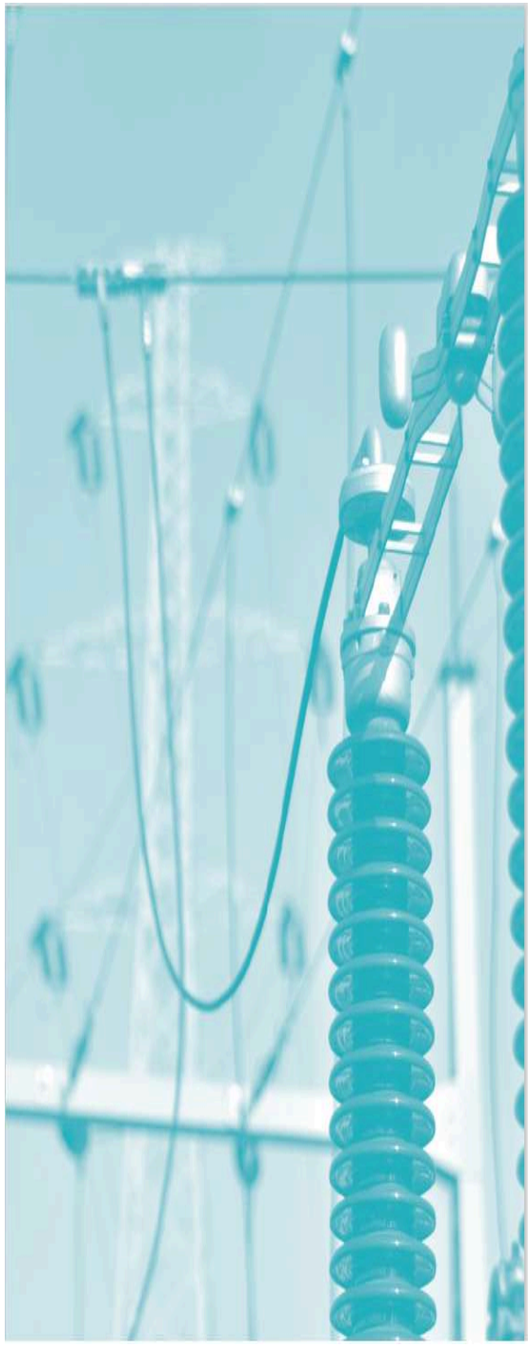


CO_2 Intensity

CO2 Intensity i.e. how many grams of carbon are emitted for every unit of electricity used, should be negatively correlated with the volume of wind output on the system.

CO2 Emissions

CO2 emissions i.e. the estimated total CO2 emissions from all large power stations, follows the same trends as CO2 intensity levels over the course of the month.



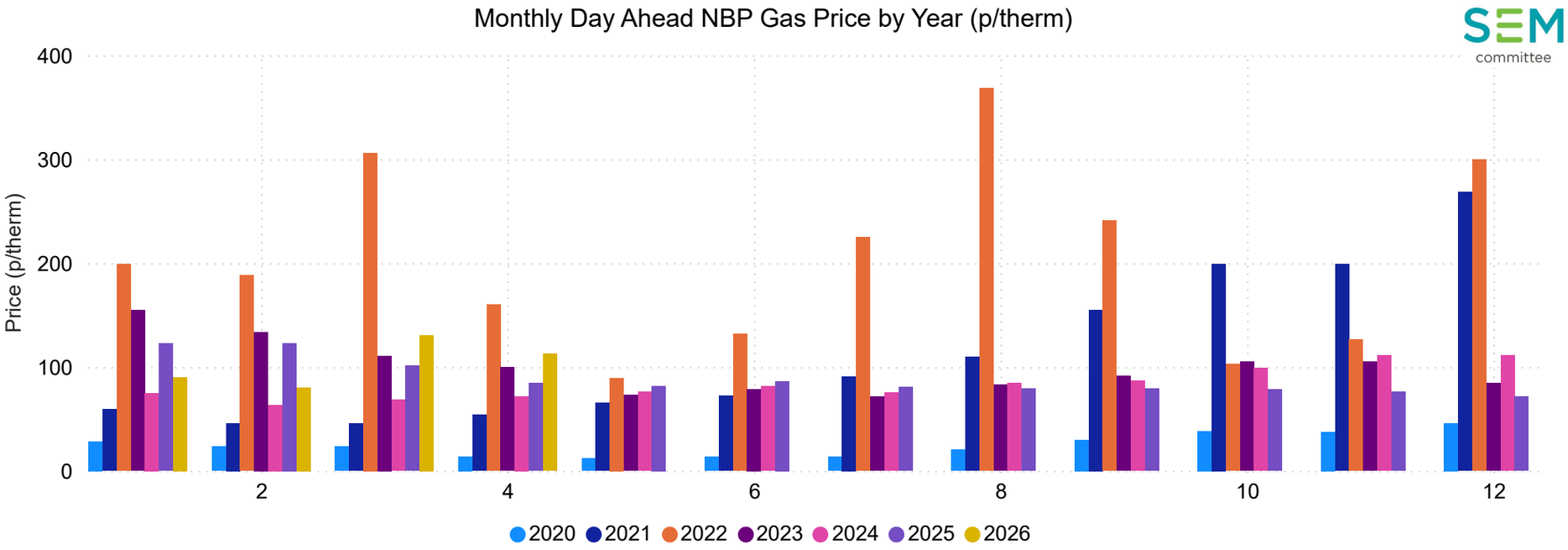
Fuel Costs and Spreads

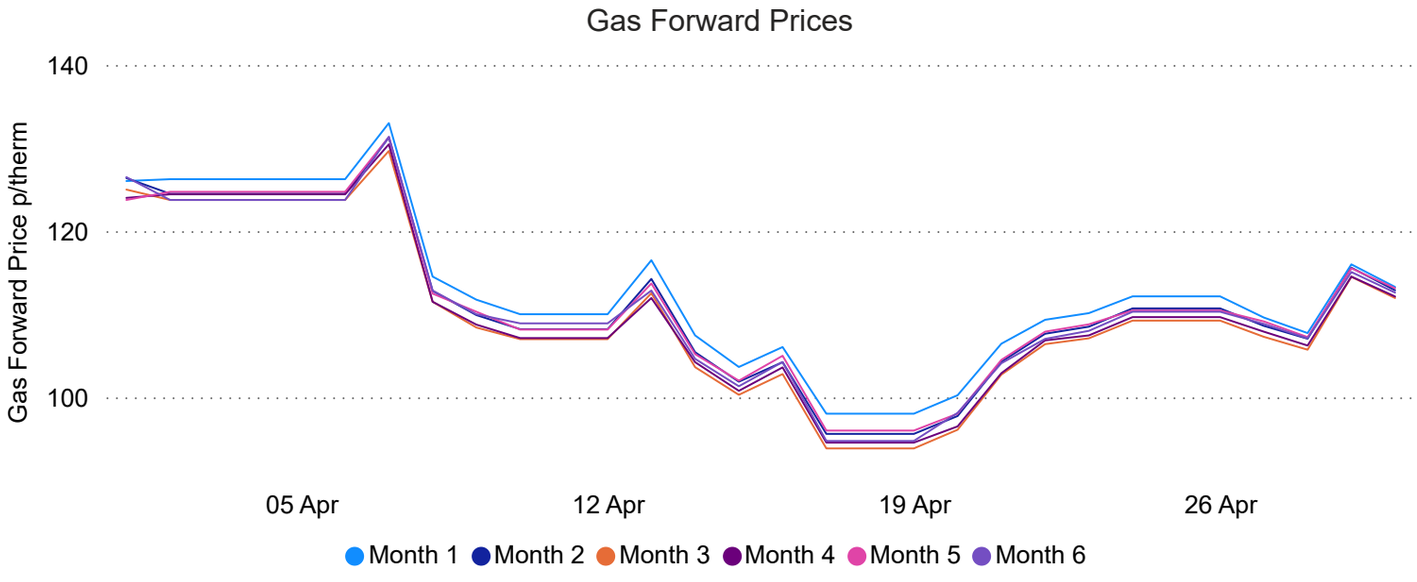
Gas Price
April 2026

112.41
Monthly Average (p/therm)

98.00
Monthly Low (p/therm)

131.00
Monthly High (p/therm)





Gas Prices

Gas prices softened through the second half of April, averaging ~112p/therm, a 14% decrease from Mar 26, driven by lower geopolitical risk premiums and reduced demand from milder weather and stronger renewables.

Carbon Price April 2026

EU Carbon Prices (€/tonne)

€ 73.86
Monthly Average

€ 71.30
Monthly Low

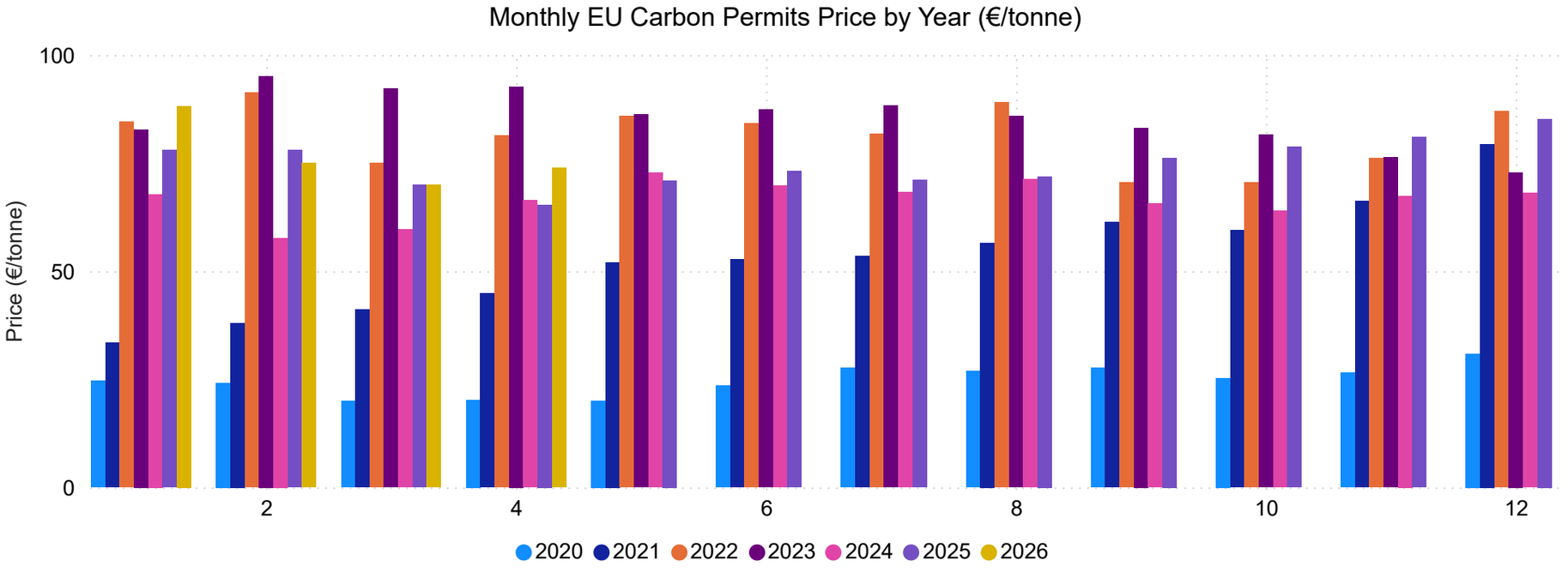
€ 76.80
Monthly High

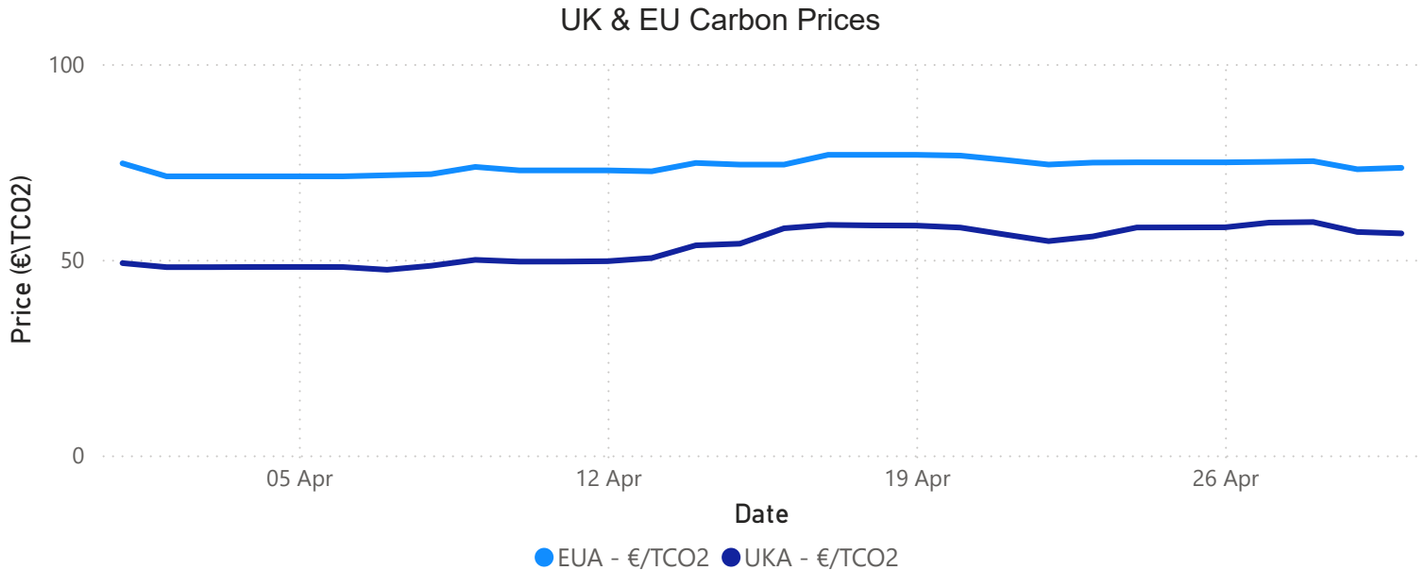
UK Carbon Prices (€/tonne)

53.66
Monthly Average

47.43
Monthly Low

59.62
Monthly High





Carbon Prices

Carbon prices averaged 73.86€/tonne, a 6% increase on average from last month.

Spark Spreads
April 2026

Clean Spark Spread

İndicates the average revenue a gas power station can expect from generating a unit of electricity during ‘baseload’ operation, after fuel and carbon costs. It’s calculated as the daily average on the 30-minute DAM price intervals.

The Clean Spark Spread was negative on a few periods of strong wind generation combined with elevated gas prices.

For instance, on 11th April, the average DAM price was €13.18/MWh, while the estimated short-run marginal cost of a CCGT (49.13% efficiency) was €90.28/MWh, resulting in a theoretical Clean Spark Spread of -€77.1/MWh.