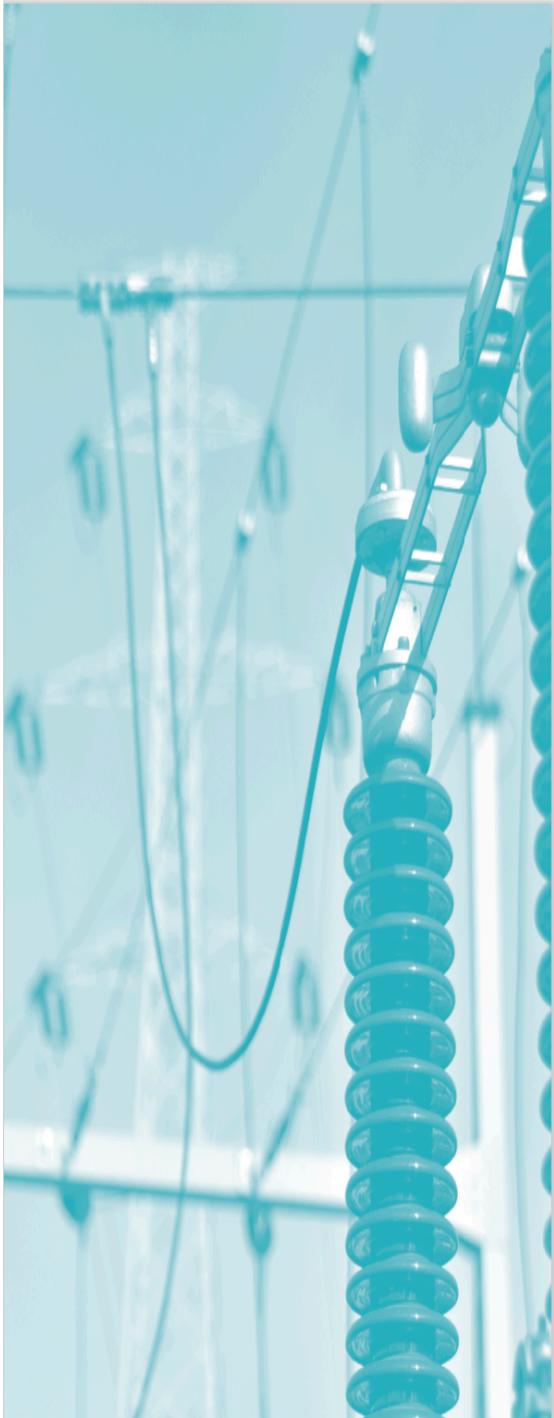


Energy Market Monitoring Report

December 2025



Market Results

Summary Dashboard

Monthly Market Metrics	Dec-24	Jan-25	Feb-25	Mar-25	Apr-25	May-25	Jun-25	Jul-25	Aug-25	Sep-25	Oct-25	Nov-25	Dec-25
DAM (€/MWh)	136.99	167.51	140.85	131.8	111.11	108.64	95.21	99.61	96.38	94.47	100.67	122.79	108.47
% Change from previous month	-6%	22%	-16%	-6%	-16%	-2%	-12%	5%	-3%	-2%	7%	22%	-12%
% Change from previous year	54%	68%	66%	52%	26%	1%	-12%	-10%	-4%	-16%	-18%	-16%	-21%
Total System Demand (GWh)	3661	3911	3490	3684	3308	3165	3177	3241	3203	3235	3585	3744	3880
% Change from previous month	5%	7%	-11%	6%	-10%	-4%	0%	2%	-1%	1%	11%	4%	4%
% Change from previous year	1%	8%	-9%	7%	-8%	-5%	-2%	7%	1%	2%	11%	8%	6%
Total Wind Generation (GWh)	1518	1449	1686	1202	920	694	940	786	870	1128	1297	1311	1525
% Change from previous month	46%	-5%	16%	-29%	-23%	-25%	35%	-16%	11%	30%	15%	1%	16%
% Change from previous year	-17%	5%	21%	-22%	-15%	4%	22%	20%	-19%	24%	4%	26%	0%
Total Solar Generation (GWh)	-	-	-	-	-	-	-	-	144	107	53	35	17
% Change from previous month	-	-	-	-	-	-	-	-	-1%	-26%	-51%	-33%	-52%
% Change from previous year	-	-	-	-	-	-	-	-	52%	94%	3%	32%	-35%
Renewable share of demand (%)*									32%	38%	38%	36%	40%
Gas Price p/therm	111.22	122.85	123.04	100.94	84.72	81.82	86.38	80.69	79.25	79.23	78.05	76.03	71.19
% Change from previous month	0%	10%	0%	-18%	-16%	-3%	6%	-7%	-2%	0%	-1%	-3%	-6%
% Change from previous year	32%	64%	94%	48%	18%	7%	6%	7%	-6%	-9%	-21%	-32%	-36%
Carbon Price (€/Tonne)	67.05	75.87	76.08	68.39	63.96	71	73.14	71.03	71.81	76.23	78.68	80.93	85.2
% Change from previous month	0%	13%	0%	-10%	-6%	11%	3%	-3%	1%	6%	3%	3%	5%
% Change from previous year	-7%	16%	36%	18%	1%	0%	7%	6%	2%	18%	24%	21%	27%
EWIC % Import Periods	67.64%	67.88%	43.01%	55.18%	27.15%	78.36%	68.26%	45.83%	57.22%	60.45%	63.98%	60.07%	57.36%
EWIC % Export Periods	11.49%	10.18%	13.91%	2.66%	1.81%	0.77%	2.05%	1.31%	4.57%	3.92%	4.13%	3.40%	4.87%
EWIC % Not Flow Periods	20.87%	21.94%	43.08%	42.16%	71.04%	20.87%	29.69%	52.86%	38.21%	35.63%	31.89%	36.53%	37.77%
Moyle % Import Periods	81.55%	78.53%	64.62%	79.24%	78.16%	93.88%	78.85%	57.29%	79.03%	80.24%	73.69%	75.66%	77.89%
Moyle % Export Periods	18.41%	21.27%	22.43%	6.16%	6.08%	6.08%	16.70%	24.33%	20.90%	19.72%	26.21%	24.31%	21.98%
Moyle % Not Flow Periods	0.03%	0.20%	12.95%	14.60%	15.76%	0.03%	4.44%	18.38%	0.07%	0.03%	0.10%	0.03%	0.13%
Greenlink % Import Periods	NA	NA	68.97%	88.63%	80.17%	93.78%	90.76%	91.23%	88.68%	85.69%	80.21%	84.17%	83.20%
Greenlink % Export Periods	NA	NA	25.04%	9.49%	10.35%	5.58%	7.36%	7.83%	10.08%	11.25%	18.92%	13.89%	16.13%
Greenlink % Not Flow Periods	NA	NA	5.99%	1.88%	9.48%	0.64%	1.88%	0.94%	1.24%	3.06%	0.87%	1.94%	0.67%

* Renewable share of demand (%) includes generation from wind and solar sources.

Market Volumes December 2025

Daily Average Volume MWh

DAM	131,465
IDA1	28,334
IDA2	3,188
IDA3	881
IDC	42

Total Monthly Volume MWh

DAM	4,075,415
IDA1	878,343
IDA2	98,831
IDA3	27,323
IDC	959
Total	5,080,872

Total Market Value €

DAM	€ 454,070,349
IDA1	€ 102,480,946
IDA2	€ 11,952,492
IDA3	€ 3,504,292
IDC	€ 120,850
Total	€ 572,128,929

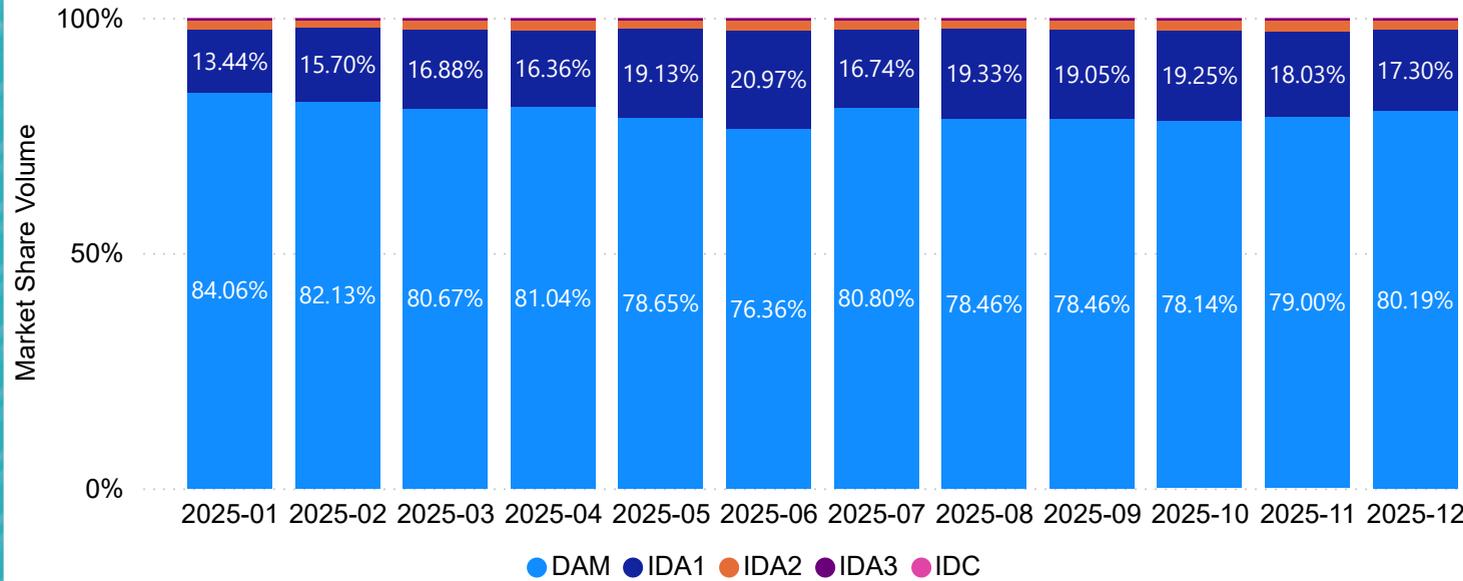
Market Volumes and Values

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.

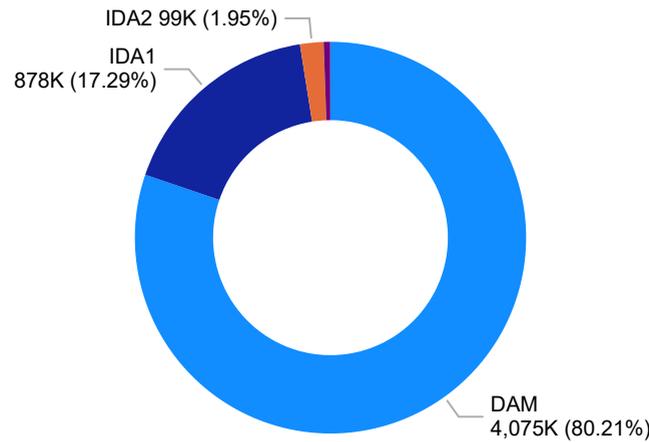
Generally, in the SEM, market participants will prefer to lock in their positions well ahead of delivery time given the increased volatility in prices closer to real time.

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.

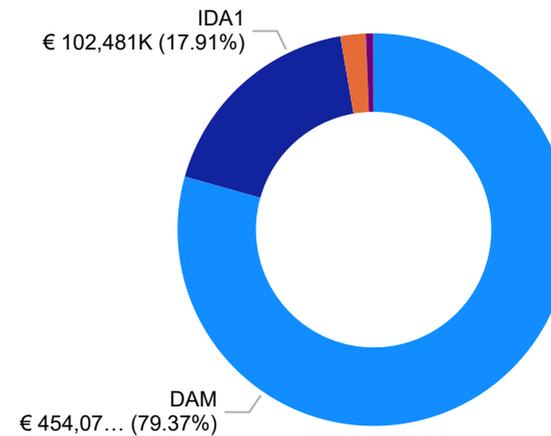
Ex-Ante Monthly Volume by Market



Ex-Ante Volumes (MWh)



Ex-Ante Values (€)



● DAM ● IDA1 ● IDA2 ● IDA3 ● IDC

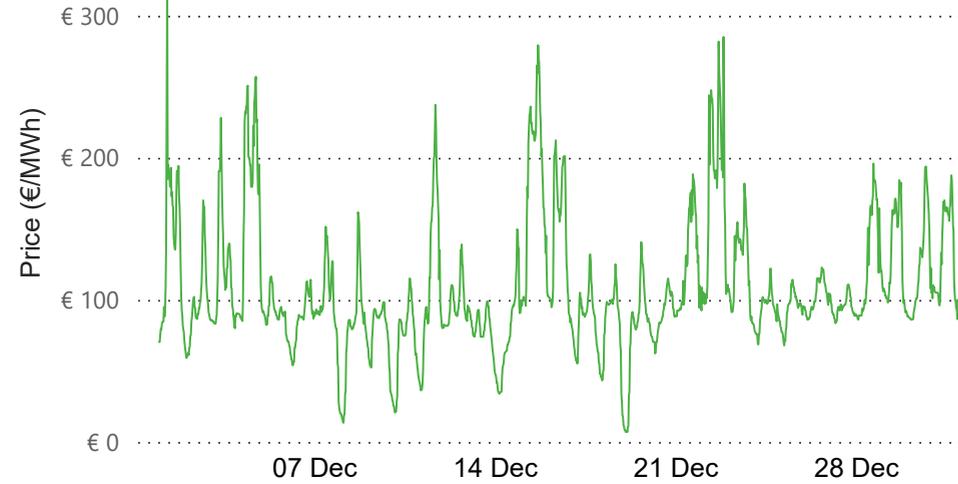
● DAM ● IDA1 ● IDA2 ● IDA3 ● IDC

Day Ahead Market December 2025

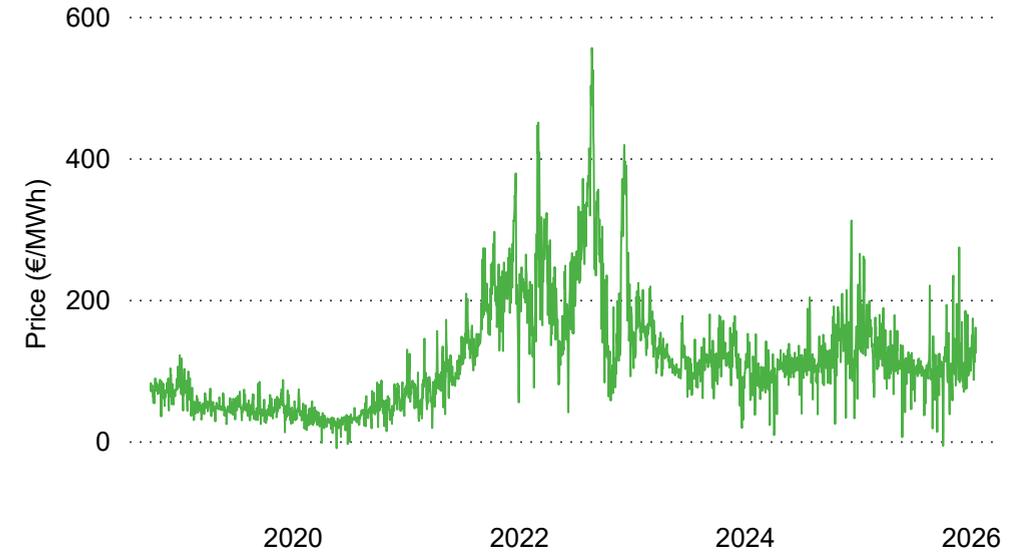
€ 108.47
Average DAM Price
€ 6.80
Min DAM Price
€ 324.92
Max DAM Price

The most frequent price range for the month was between €50 and €100.

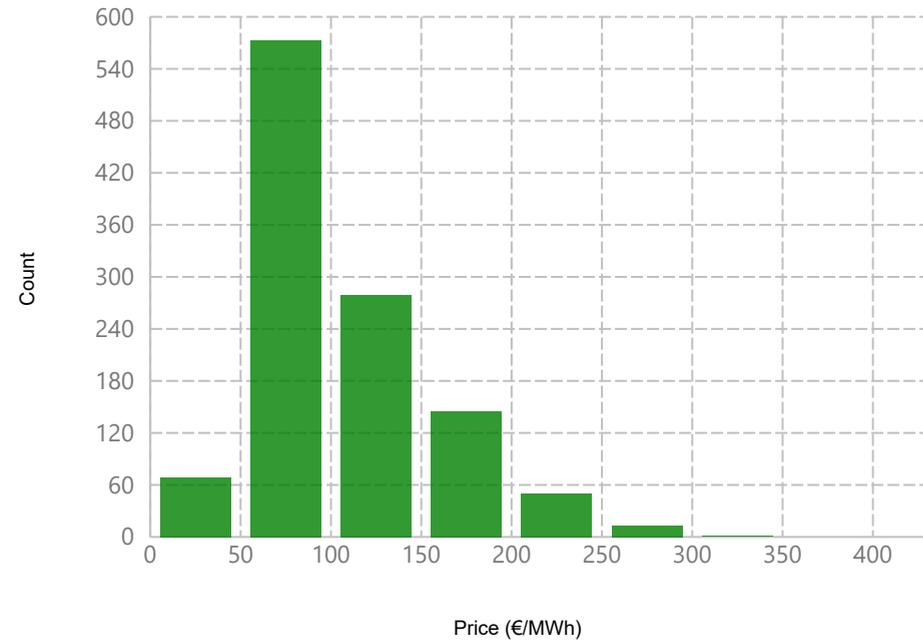
DAM Prices



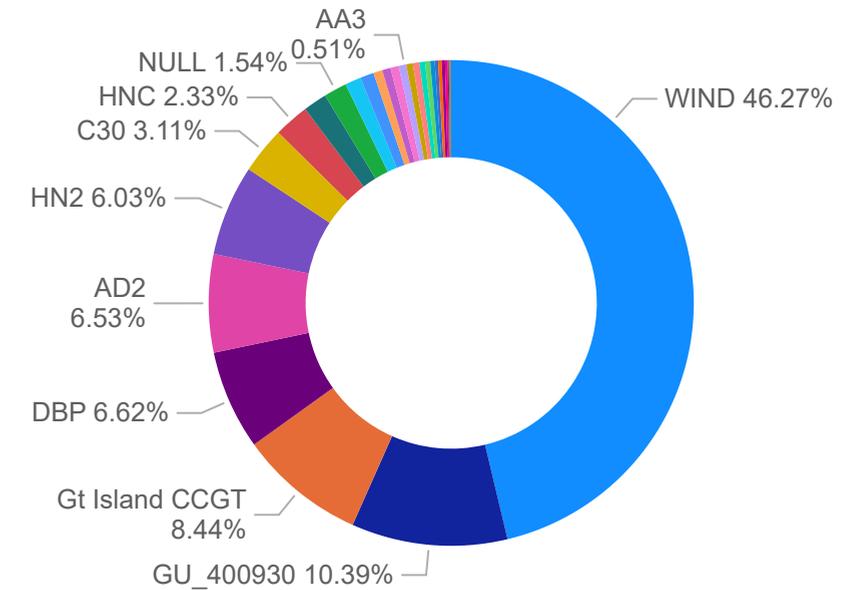
Historic Daily Average DAM Prices



Histogram of DAM Prices



DAM Sell Side Generator Order Results

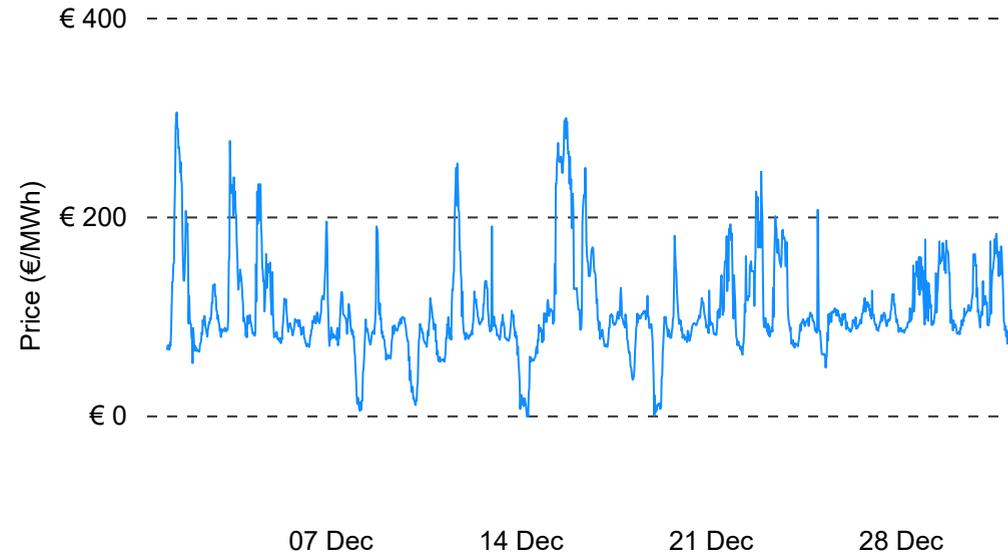


Intraday Market December 2025

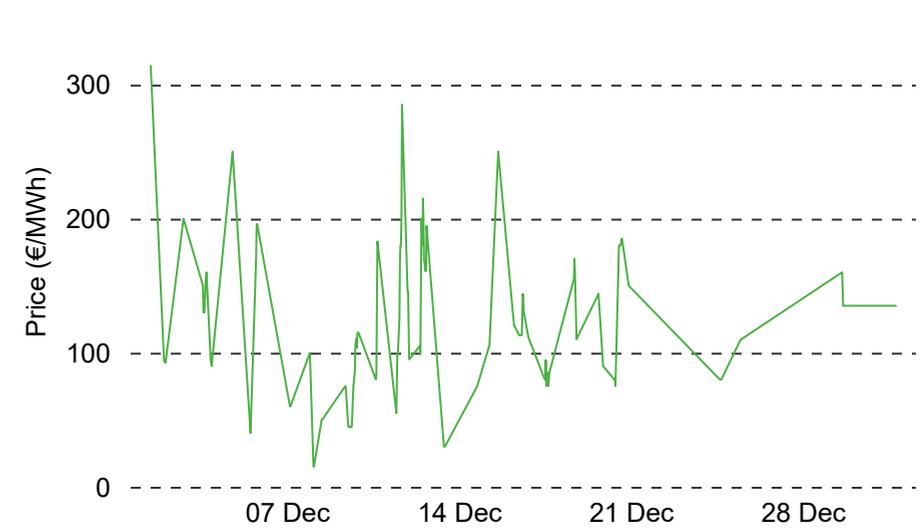
€ 105.72
Average IDA1 Price
-€ 1.18
Min IDA1 Price
€ 304.70
Max IDA1 Price

The most frequent price range for the month was between €50 and €100.

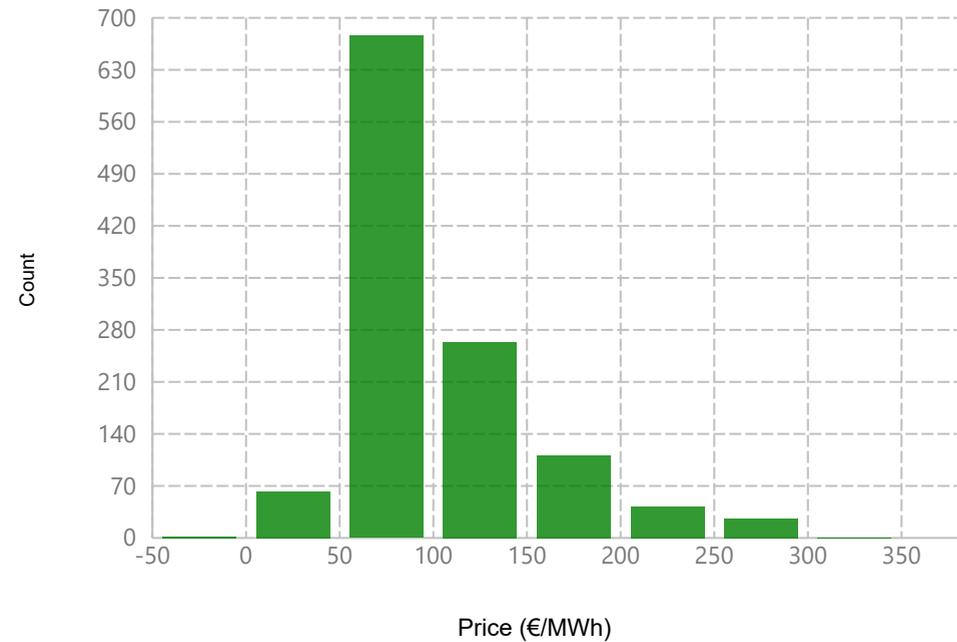
IDA 1 Prices



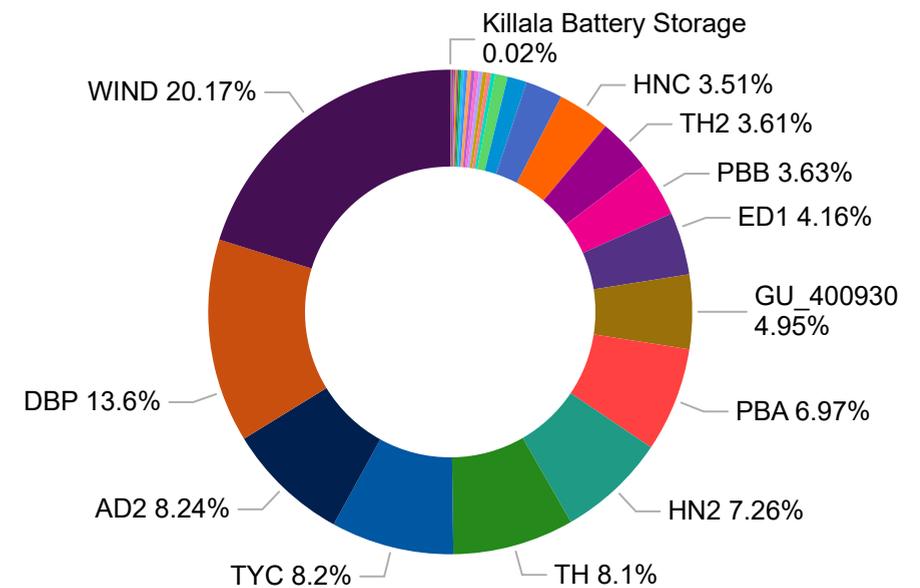
IDC Prices



Histogram of IDA1 Prices



IDA1 Sell Order Results By Market Participant



SEM vs GB DAM December 2025

SEM Day Ahead Price

€ 108.47

Average DAM Price

€ 6.80

Min DAM Price

€ 324.92

Max DAM Price

GB Day Ahead Price

€ 86.24

Average Price

€ 7.81

Min Price

€ 137.77

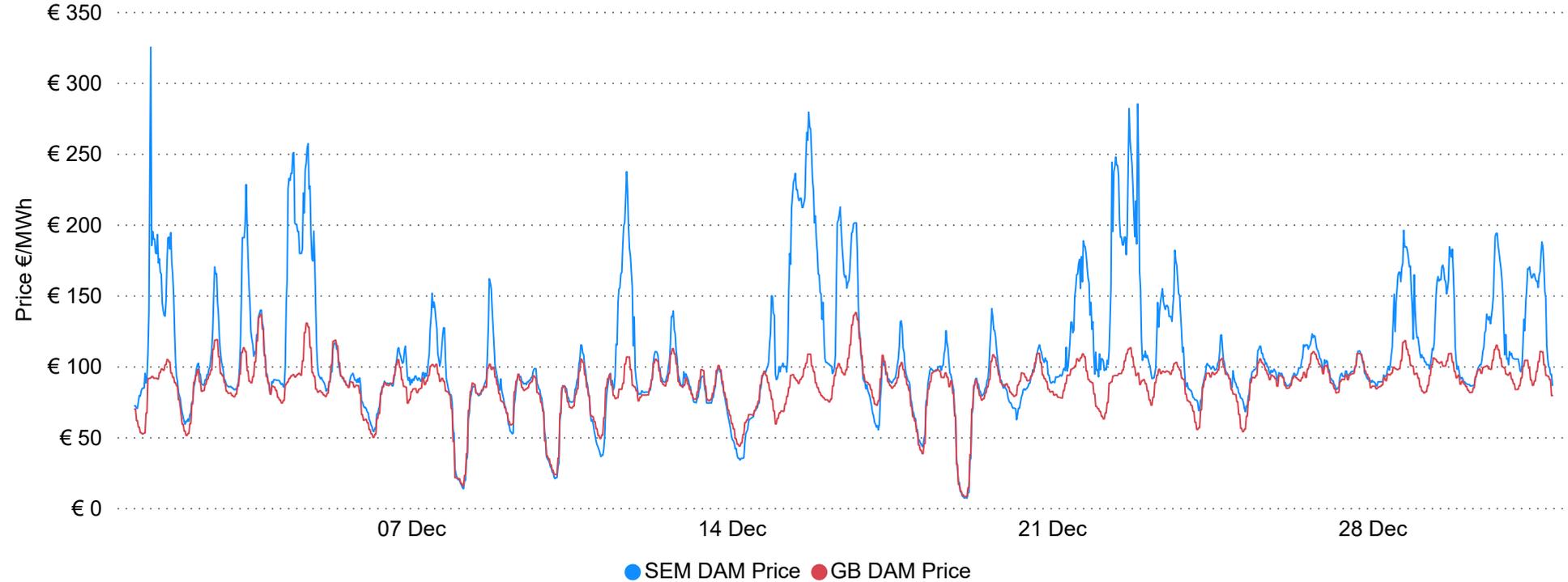
Max Price

SEM-GB Price Differential

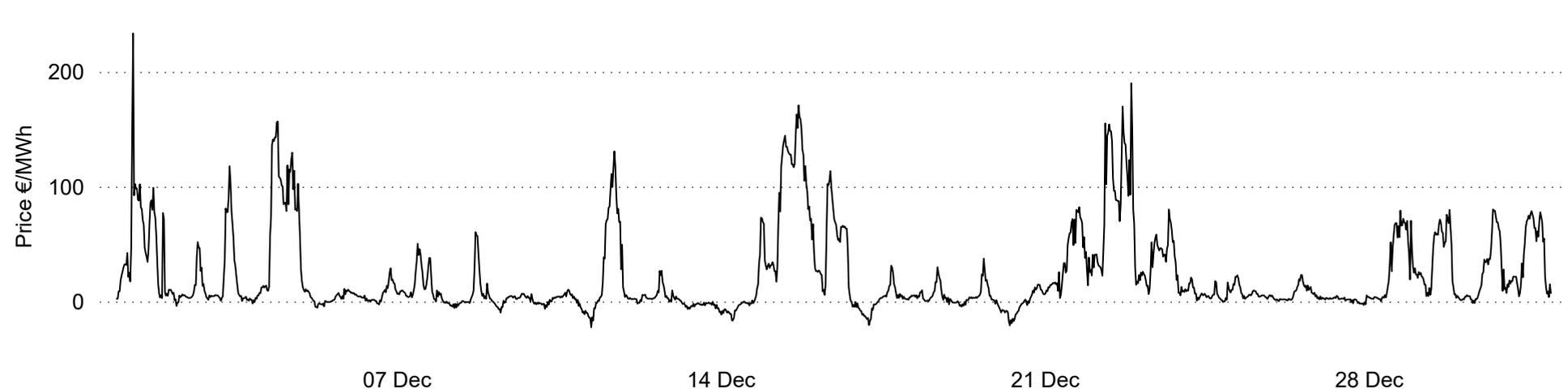
The charts show that the SEM and GB prices appear to follow the same general trend. Significant spreads can be observed on several occasions.

Periods of significant spreads between the two markets are generally correlated with periods of very low wind in the SEM, such as the 14th December.

SEM & GB DAM Prices



SEM & GB DAM Prices Spread



SEM Interconnectors

December 2025

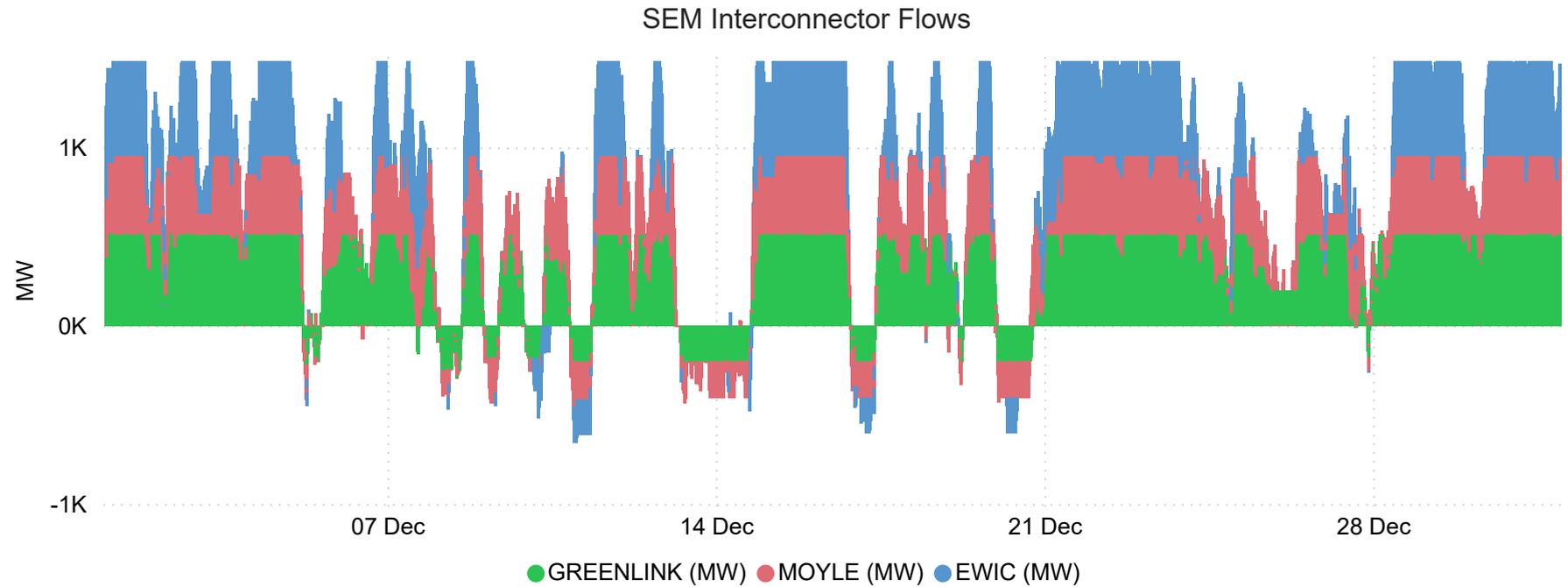
Interconnectors were predominantly importing power across the month. This reflects the predominantly higher prices in the SEM compared with GB.

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

Outages:

EWIC

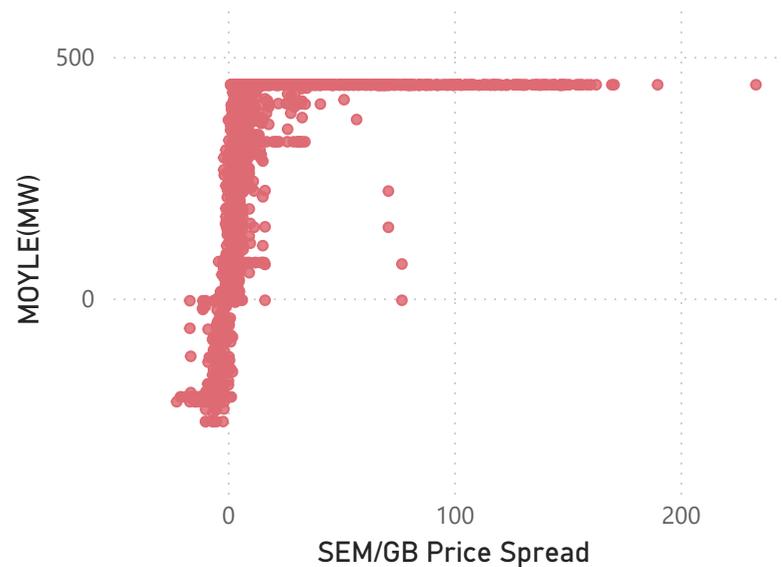
Start Time	End Time	Capacity
27/12/25 01:52	27/12/25 03:23	250 MW



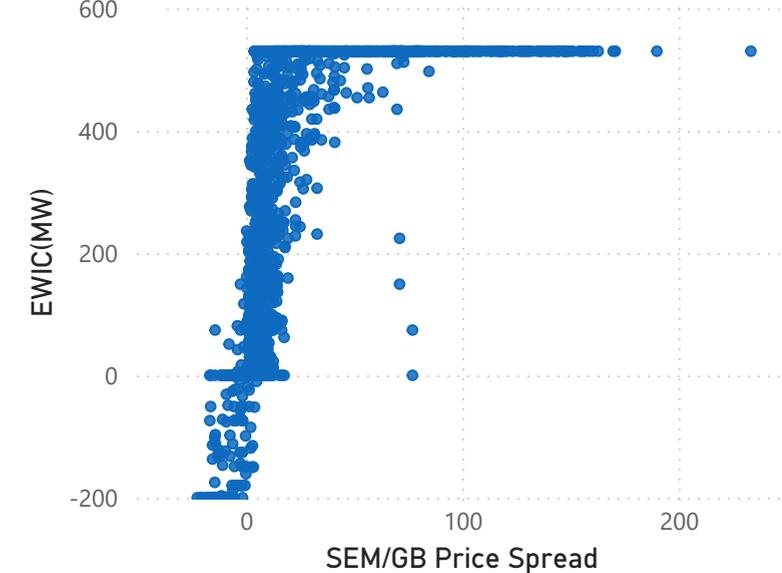
Greenlink Flows vs SEM/GB Price Spread



Moyle Flows vs SEM/GB Price Spread



EWIC Flows vs SEM/GB Price Spread

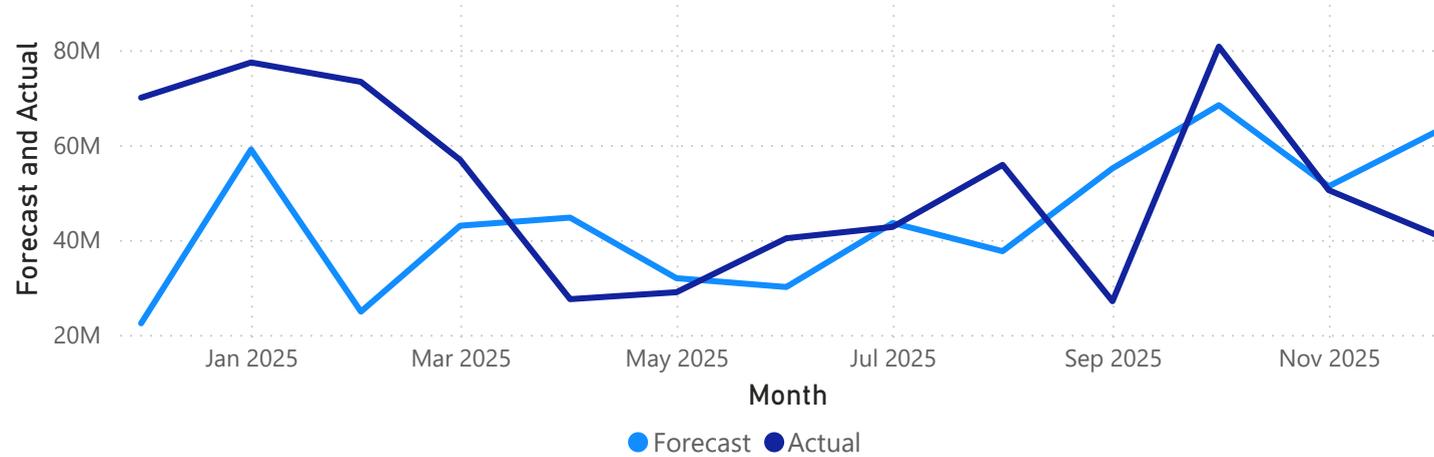


Balancing Market December 2025

Where power stations are run differently from the market schedule, it is termed "constraint". Subject to the Trading and Settlement Code and Firm Access, Constraint payments keep generators financially neutral for the difference between the market schedule and what actually happened when generating units were dispatched.

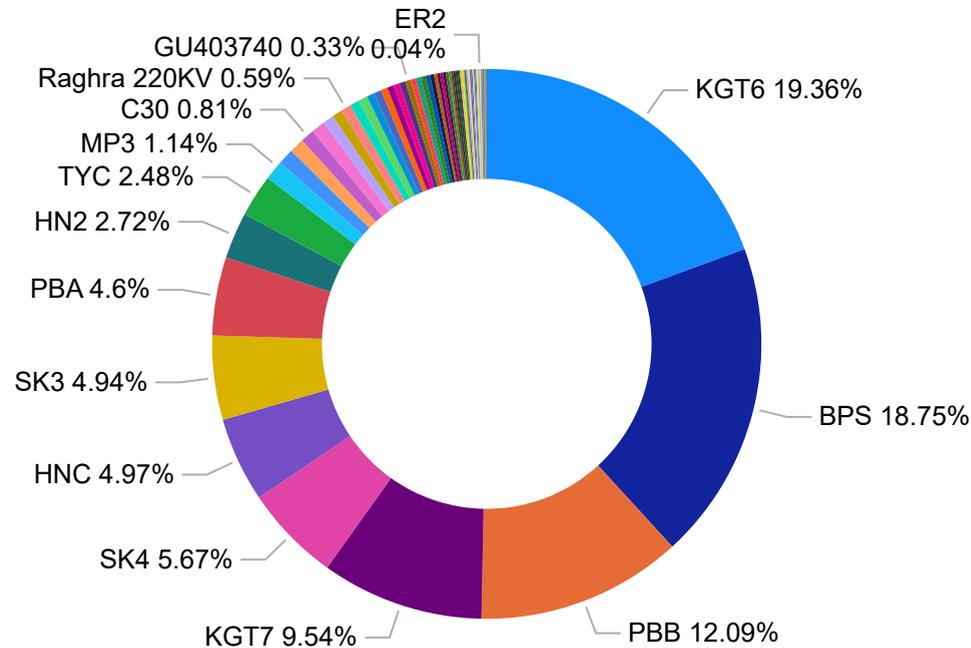
Generators can be constrained 'on' or 'up' if the market schedule indicated they were to be run at lower levels than actually happened. Or they could be constrained 'down' or 'off' if they were to be run at a higher level than happened in reality. There is always an overall net cost to the system associated with constraints.

Imperfection Costs - Forecast vs Actual



Determinant Name	Value €
CABBPO	3,547.88
CAOOPO	335,957.32
CCURL	-1,827,807.45
CDISCOUNT	13,004,141.08
CFC	8,366,682.00
CIMB	-629,538.65
CPREMIUM	22,072,392.30
CTEST	-140,594.59
CUNIMB	-670,232.25
Total	40,514,547.63

Market Share per Unit (CFC, CPREMIUN, CDISCOUNT)



Constraints Payments

This charts illustrates the distribution of selected Constraint Payments, to specific power plants. KGT6 (EPNIE) was the largest receiver of these payments for this month followed by BPS (EP Ballylumford).

A 20% reduction in constraint payments was observed versus Nov-25 partly driven by Coolkeeragh's (C30) return from an extended outage on the 19th Dec.

Balancing Market December 2025

30 Minutes Imbalance Price

€ 93.48

Average Price

-€ 24.09

Lowest Price

€ 491.86

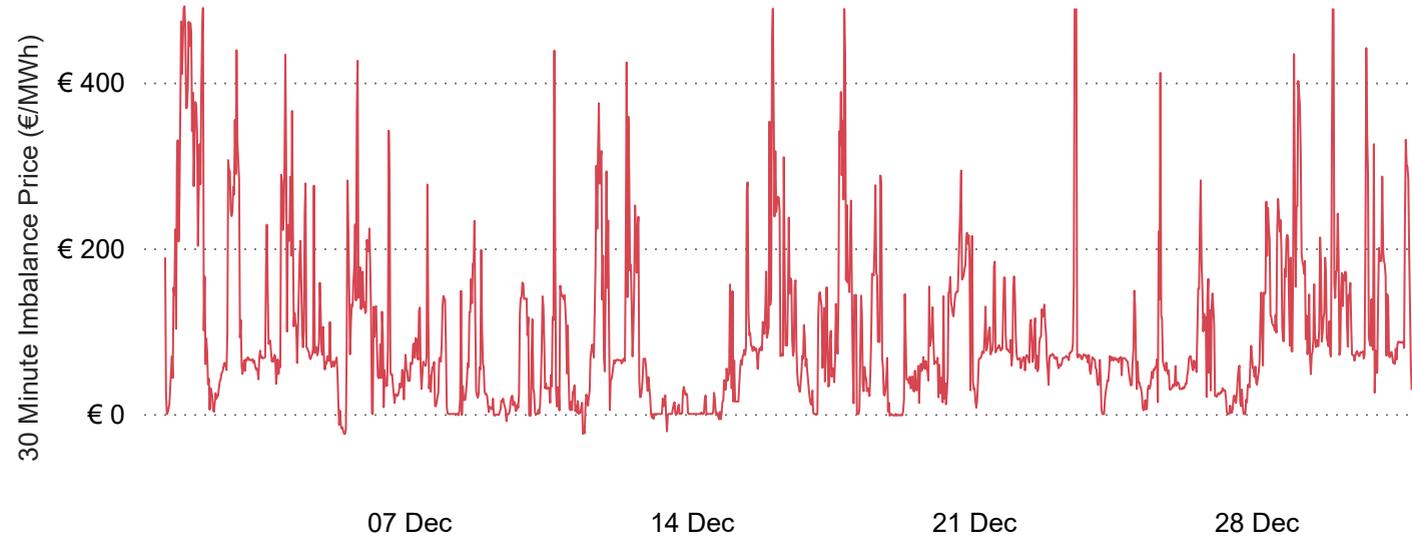
Highest Price

Imbalance Price & Volumes

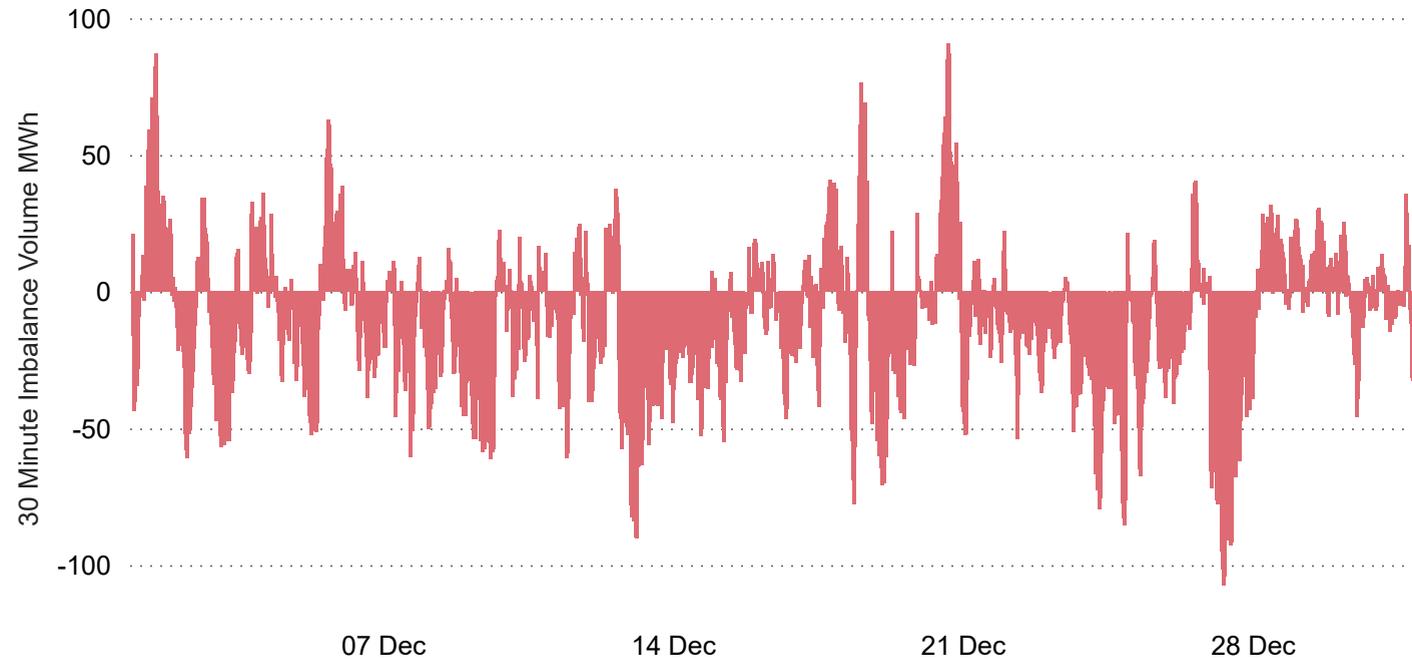
The average Imbalance (BM) Price this month was lower than the Day Ahead Price. Also, the Balancing Market prices has exhibited a much higher range of prices indicating a higher level of volatility compared to Day Ahead Market Prices. This is an expected characteristic of the Balancing Market.

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

30 Minute Imbalance Prices



30 Minute Imbalance Volume



Demand and Generation Mix



Demand December 2025

SEM Demand

5,221.10	5,020.18
SEM Average 2025	SEM Average 2024
4,032.00	3,824.74
SEM Min 2025	SEM Min 2024
6,368.77	6,166.10
SEM Max 2025	SEM Max 2024

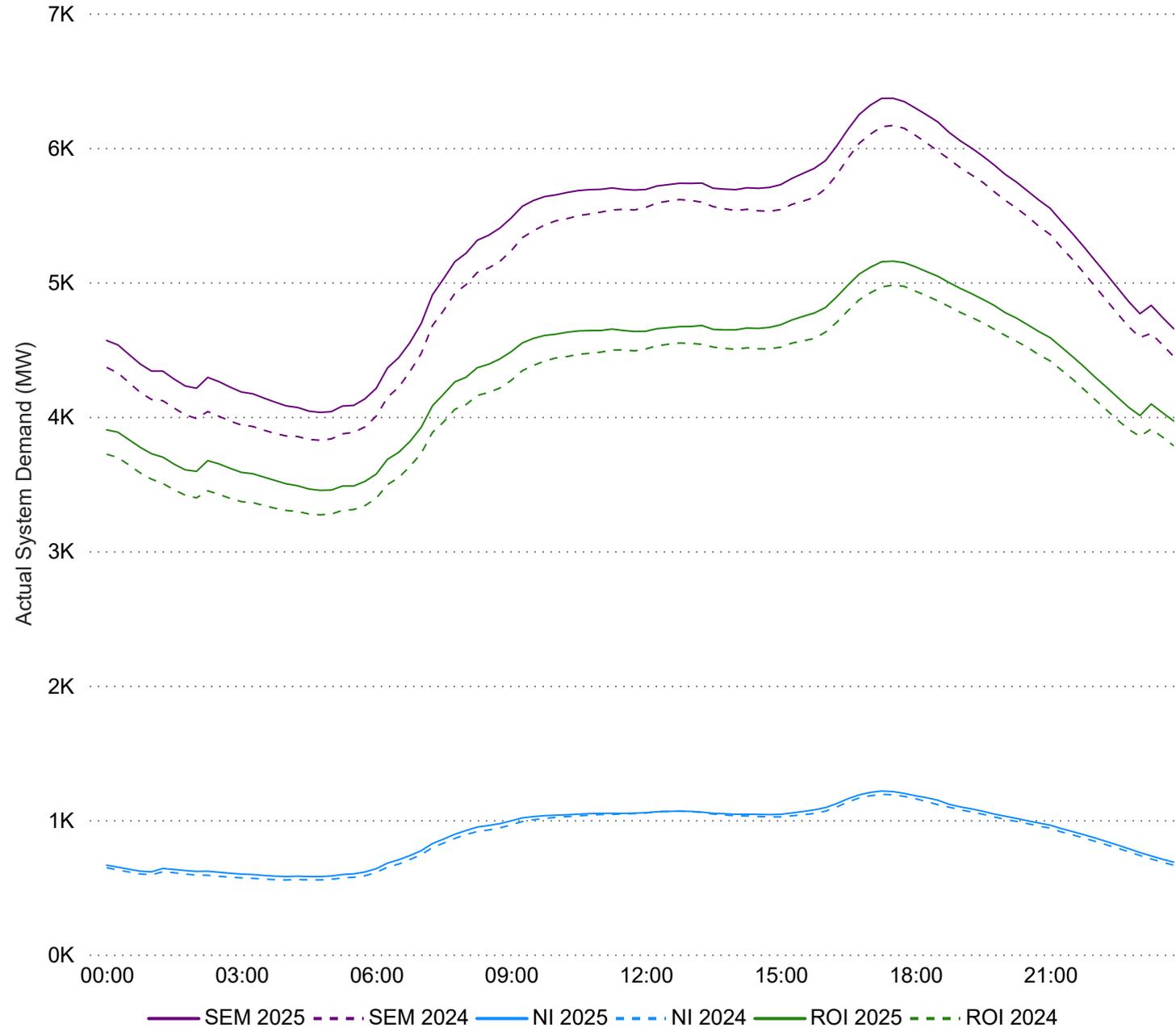
NI Demand

896.10	874.42
NI Average 2025	NI Average 2024
579.55	553.94
NI Min 2025	NI Min 2024
1,215.77	1,191.52
NI Max 2025	NI Max 2024

ROI Demand

4,324.99	4,145.76
ROI Average 2025	ROI Average 2024
3,452.13	3,270.19
ROI Min 2025	ROI Min 2024
5,156.81	4,978.65
ROI Max 2025	ROI Max 2024

Monthly Average Hourly Demand Curves



SEM Demand

The graph indicates a 4% increase in all-island demand compared to the same period last year.

ROI demand rose by 4.32% compared to the same period last year, while NI demand increased by lower amount of 2.48% compared to the same timeframe.

Duration Curves December 2025

Price Duration

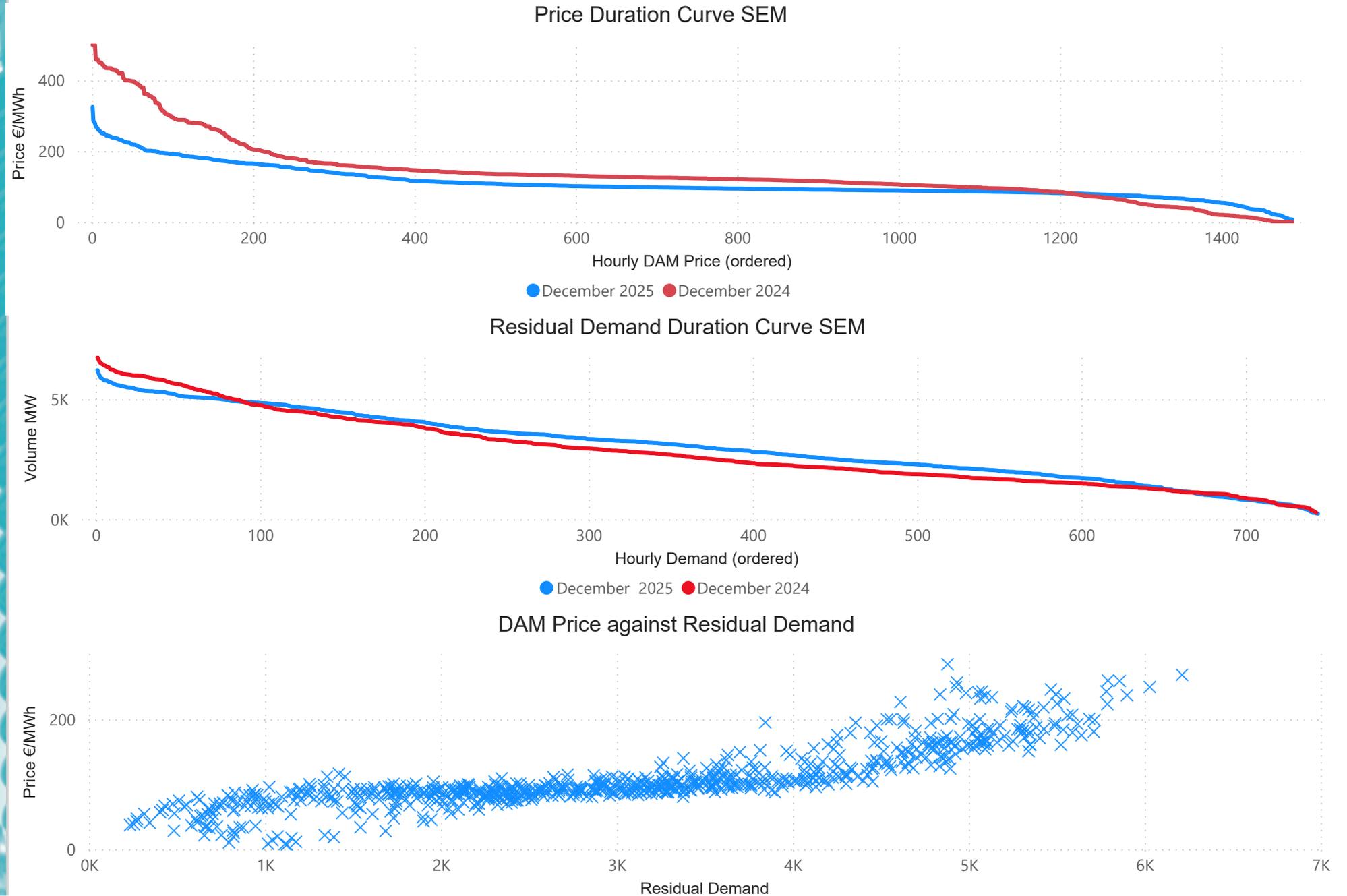
The price duration curve shows the hourly DAM prices across the month ordered from the largest to the smallest.

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.



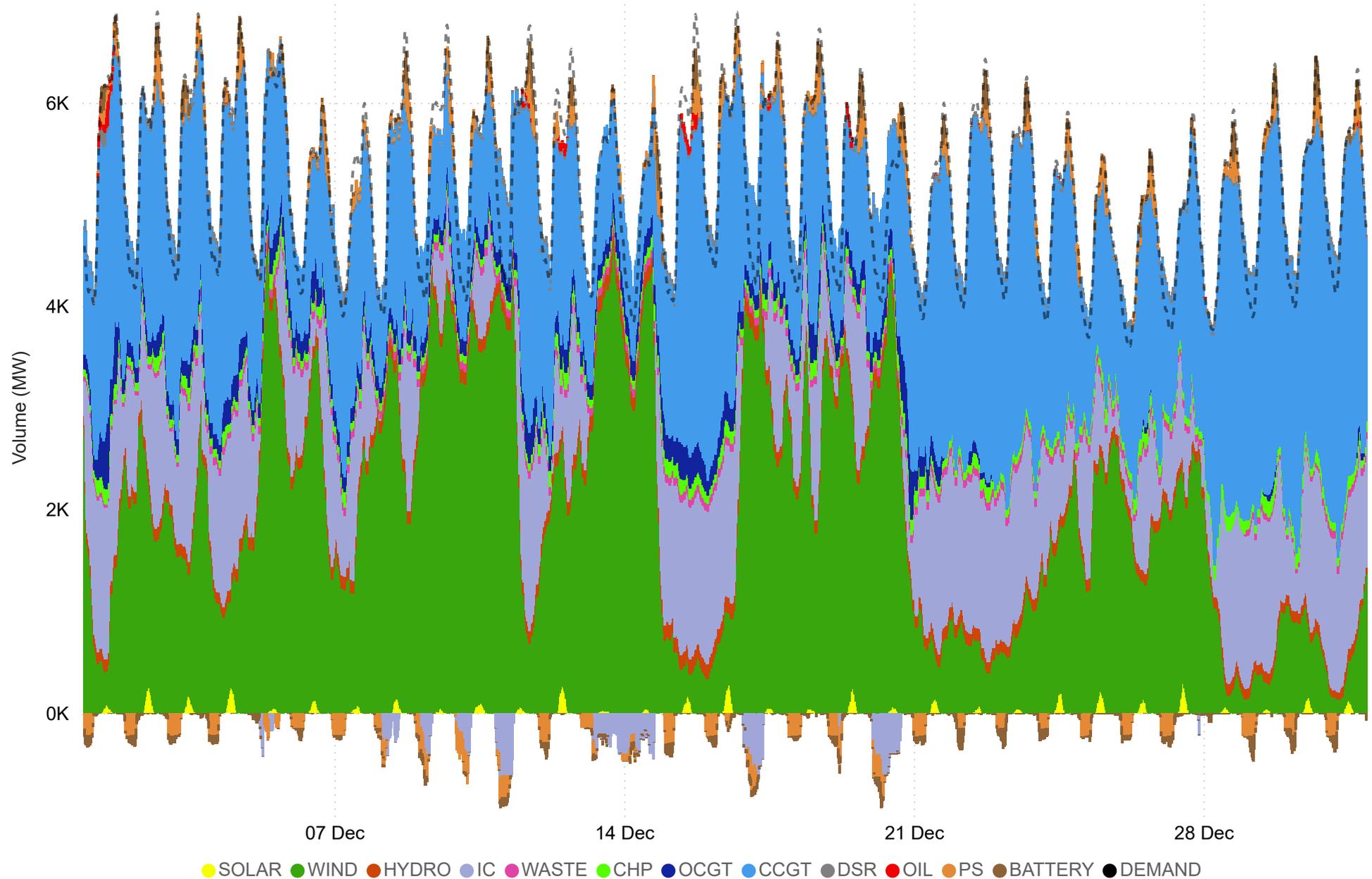


Fuel Mix December 2025

Fuel Type	Avg Monthly	Per. Monthly
WIND	2050	39.1%
CCGT	1817	34.7%
INTERCONNECTORS	823	15.7%
OCGT	131	2.5%
HYDRO	123	2.4%
CHP	99	1.9%
WASTE	70	1.3%
BIOMASS	64	1.2%
SOLAR	24	0.5%
DSR	23	0.4%
OIL	4	0.1%
BATTERY	-6	-0.1%
PUMPED STORAGE	-16	-0.3%

Fuel Type	Max Monthly	Min Monthly
WIND	4675	128
CCGT	3573	643
INTERCONNECTORS	1508	-650
OCGT	644	0
BATTERY	430	-256
SOLAR	324	-5
OIL	311	0
PUMPED STORAGE	292	-301
CHP	166	64
DSR	160	0
HYDRO	154	65
BIOMASS	127	14
WASTE	80	0

SEM 30 Minute Fuel Mix

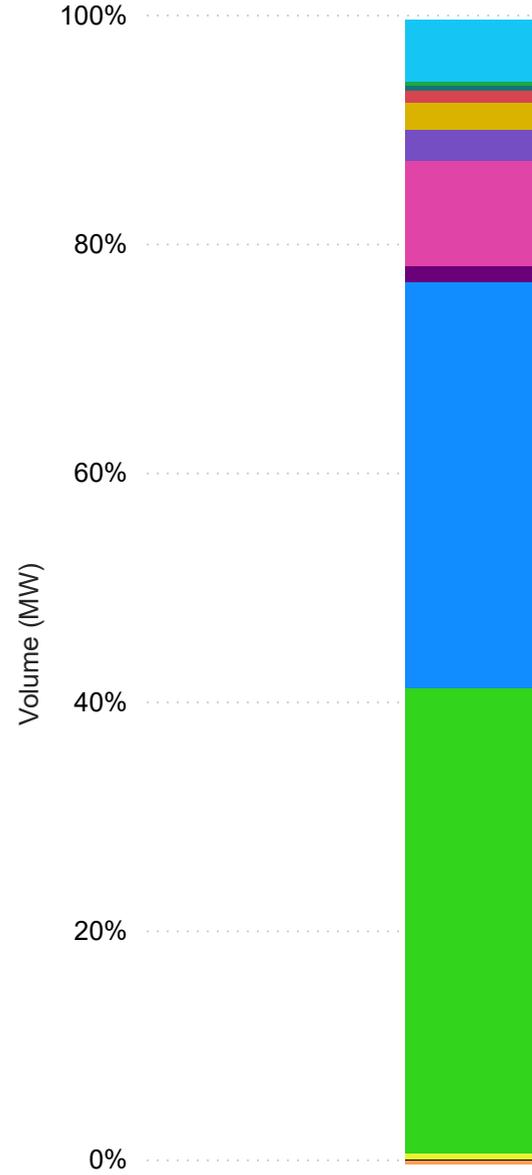


● SOLAR ● WIND ● HYDRO ● IC ● WASTE ● CHP ● OCGT ● CCGT ● DSR ● OIL ● PS ● BATTERY ● DEMAND

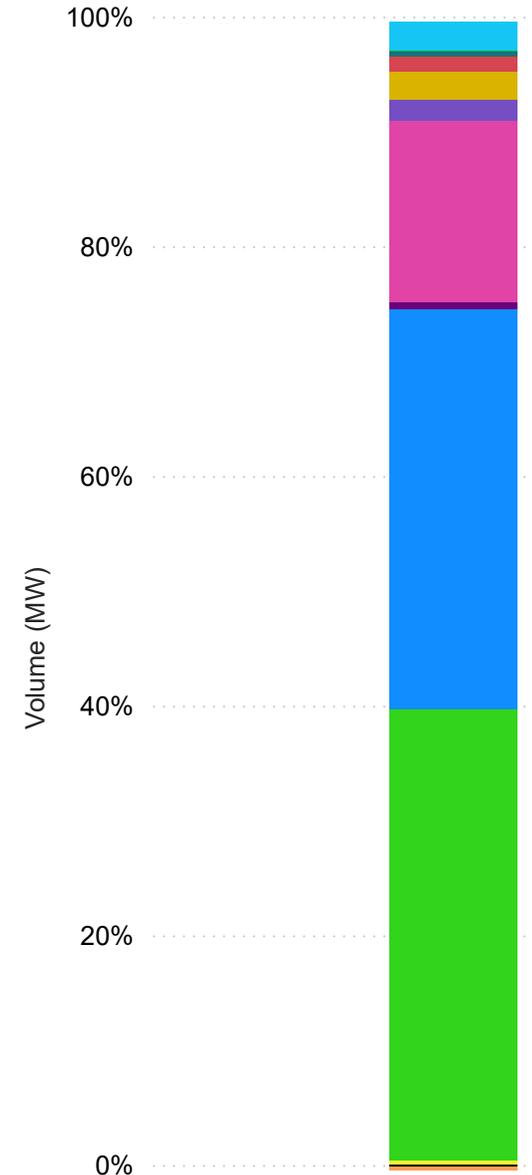
Fuel Mix Comparison December 2024 & 2025

- SOLAR
- WIND
- CCGT
- COAL
- INTERCONNECTORS
- CHP
- HYDRO
- WASTE
- DSR
- OIL
- OCGT
- BATTERY
- PUMPED STORAGE

SEM Fuel Mix December 2024



SEM Fuel Mix December 2025



North-South Tie Line December 2025

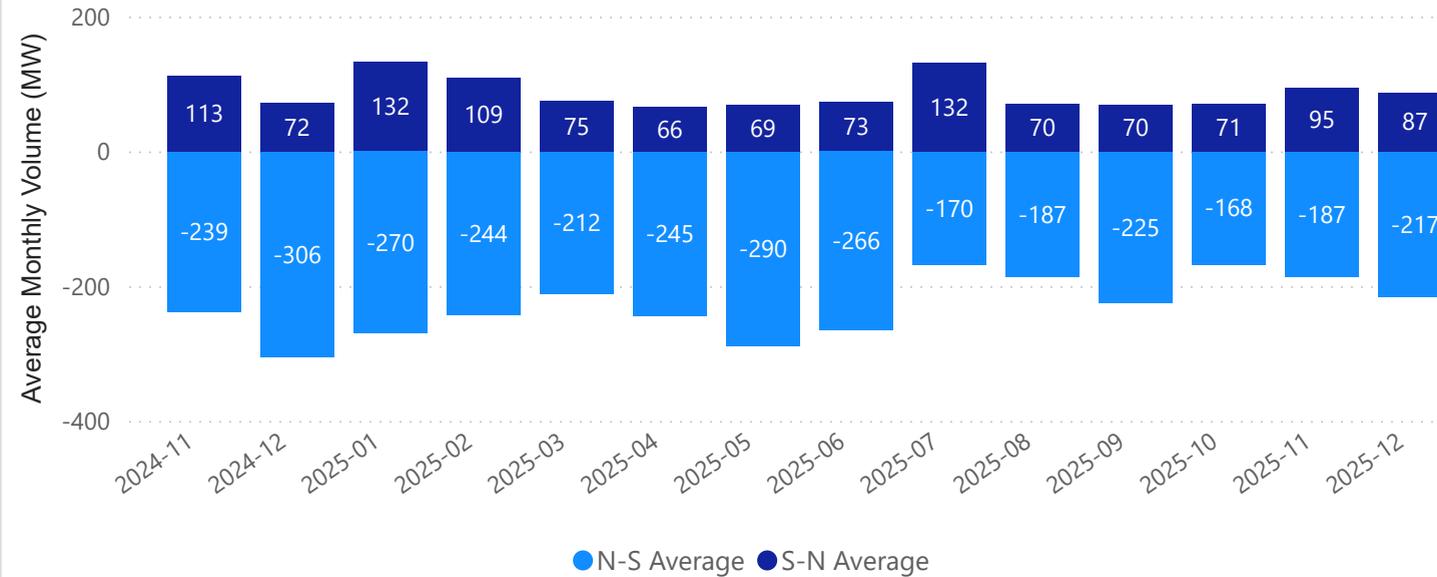
Average Flow NI to ROI (MW)
-216.75

Average Flow ROI to NI (MW)
87.47

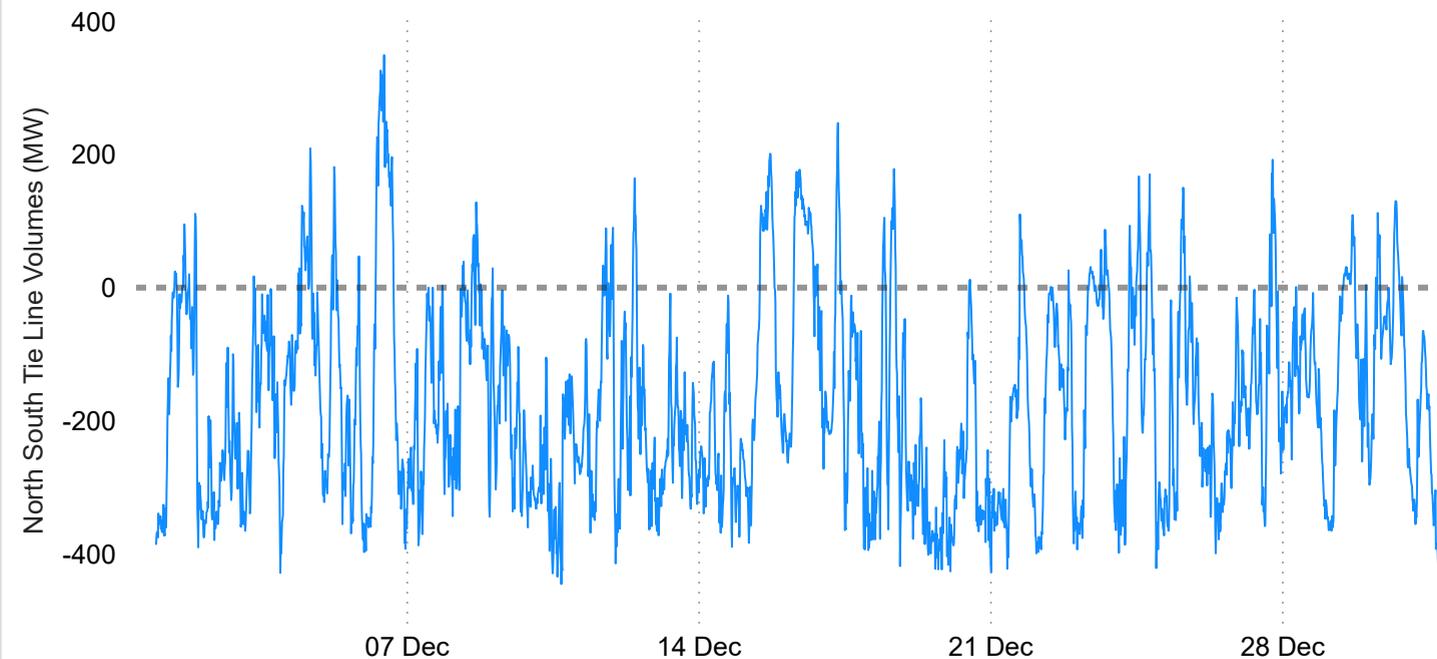
Average Net Flow NI to ROI (MW)
-173.56

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

Average Flows N-S Tie Line Long Term Trend



North South Tie Line Volumes 15 minute periods



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.

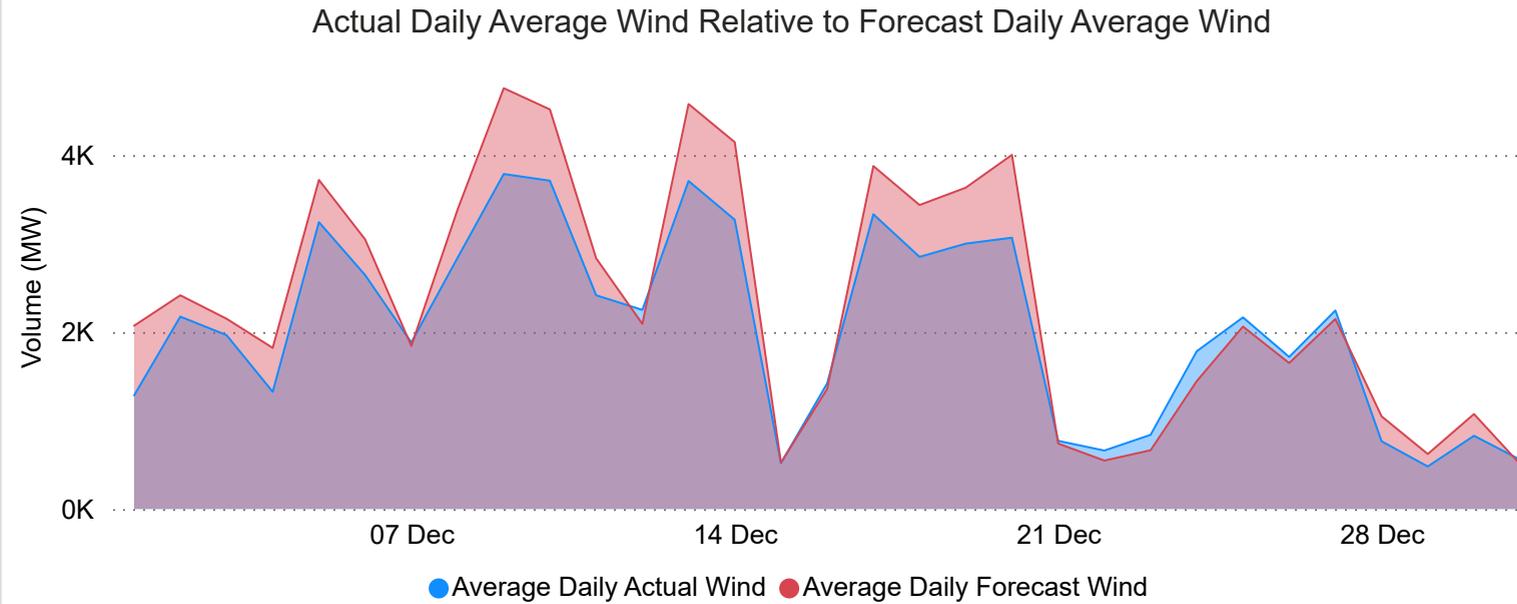
Wind Generation December 2025

Average Daily Actual Wind (MW)
2,048

Average Daily Forecast Wind (MW)
2,345

Wind Generation

Average wind output increased by 12% from the previous month but no change is seen compared to the same period of the previous year



SNSP

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



Min SNSP%
28.01

Max SNSP%
76.46

CO₂ December 2025

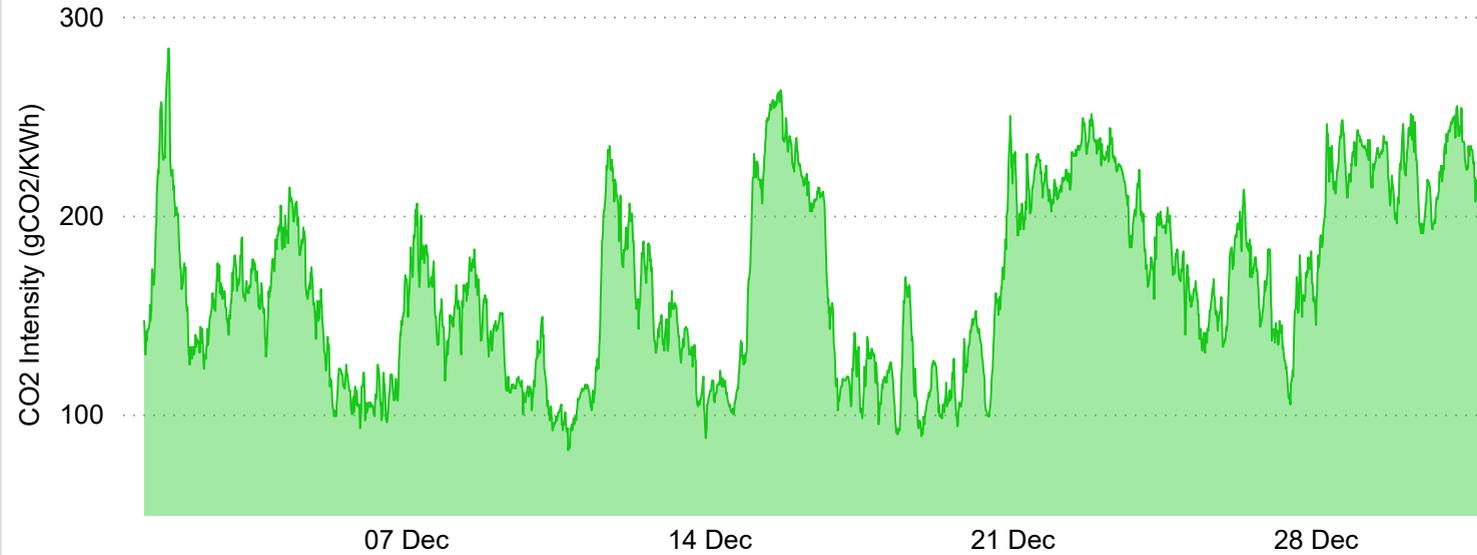
CO₂ Intensity (gCO₂/kWh)

167.35
Average
82
Lowest
284
Highest

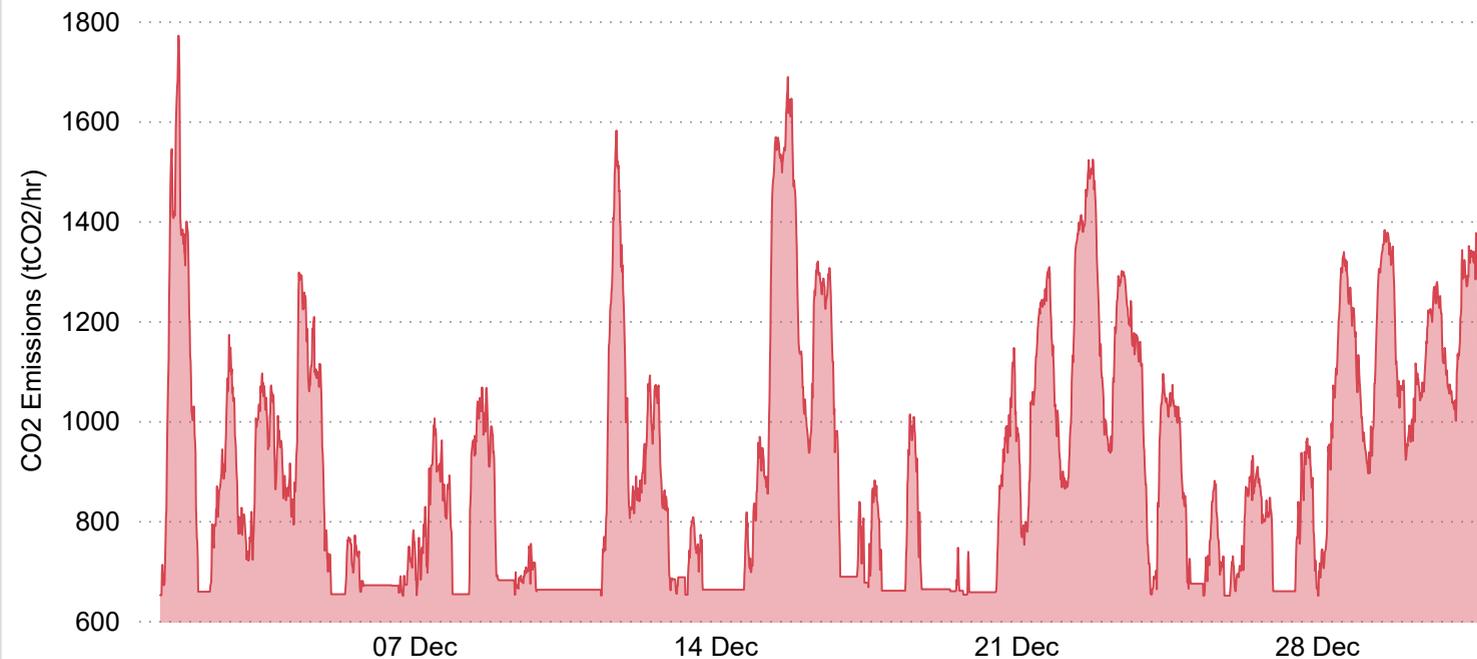
CO₂ Emissions (tCO₂/hr)

901.67
Average
650
Lowest
1771
Highest

CO₂ Intensity



CO₂ Emissions



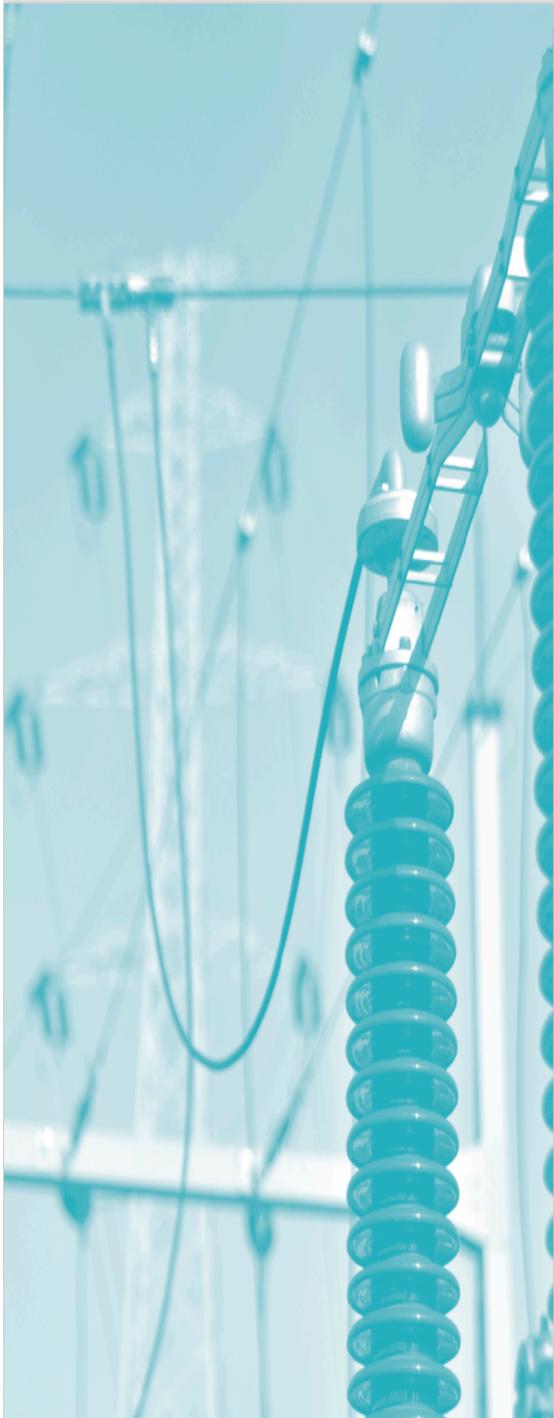
CO₂ Intensity

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.

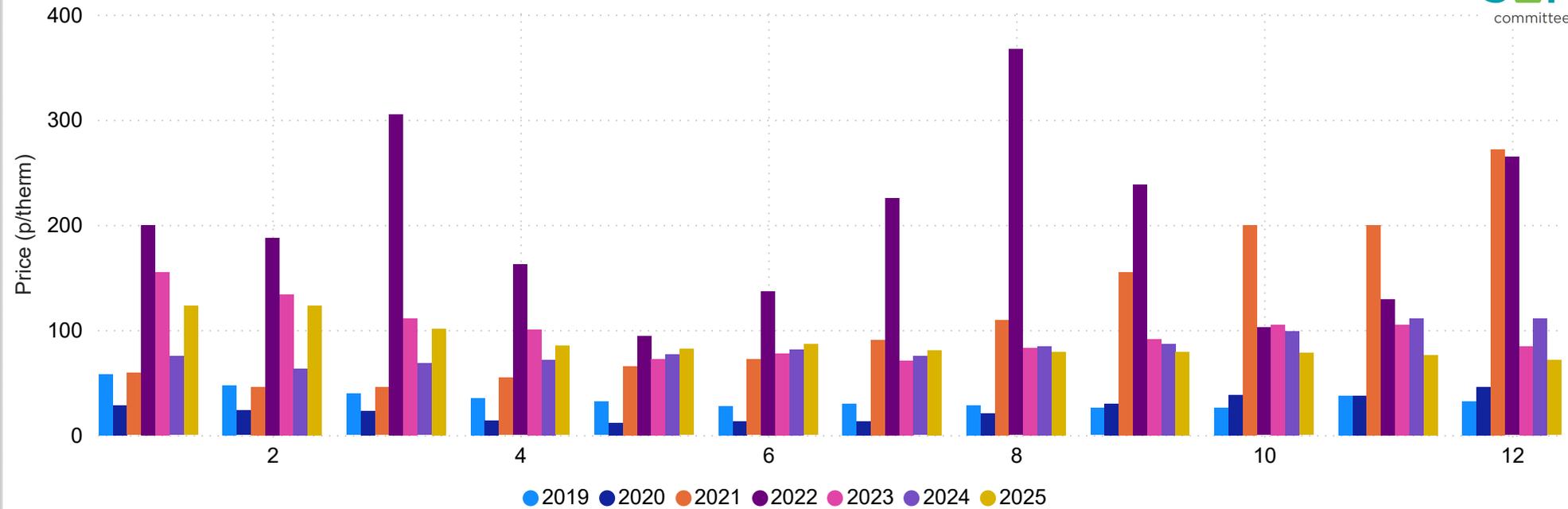
Fuel Costs and Spreads



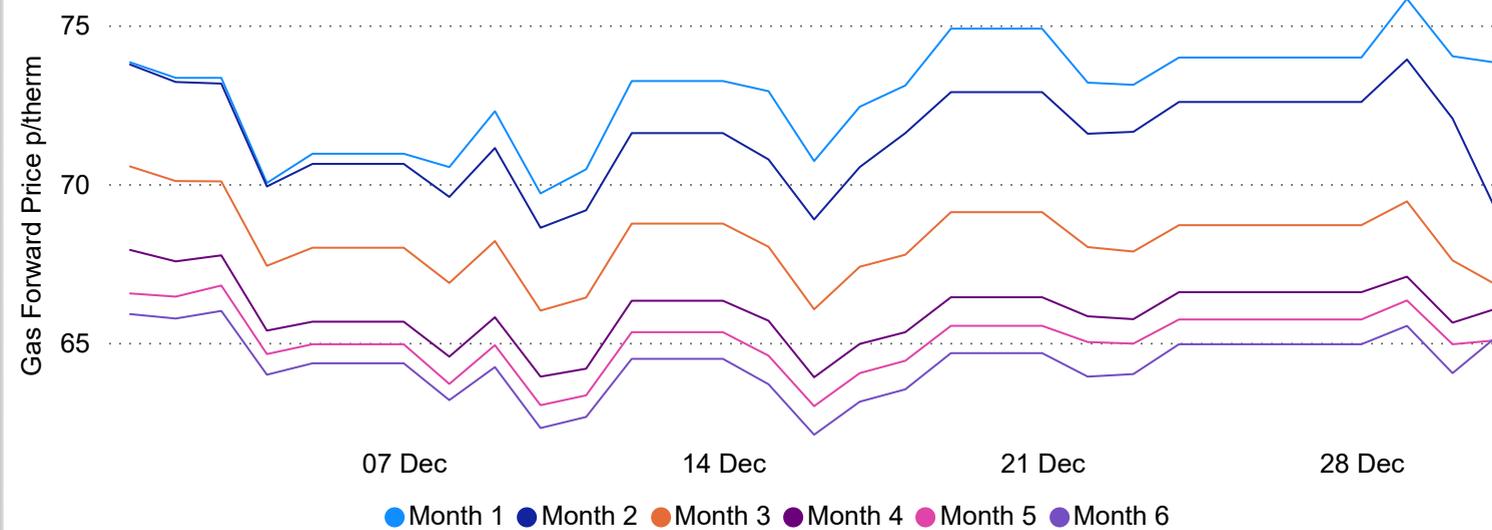
Gas Price December 2025

71.19
Monthly Average (p/therm)
66.78
Monthly Low (p/therm)
75.85
Monthly High (p/therm)

Monthly Day Ahead NBP Gas Price by Year (p/therm)



Gas Forward Prices



Gas Prices

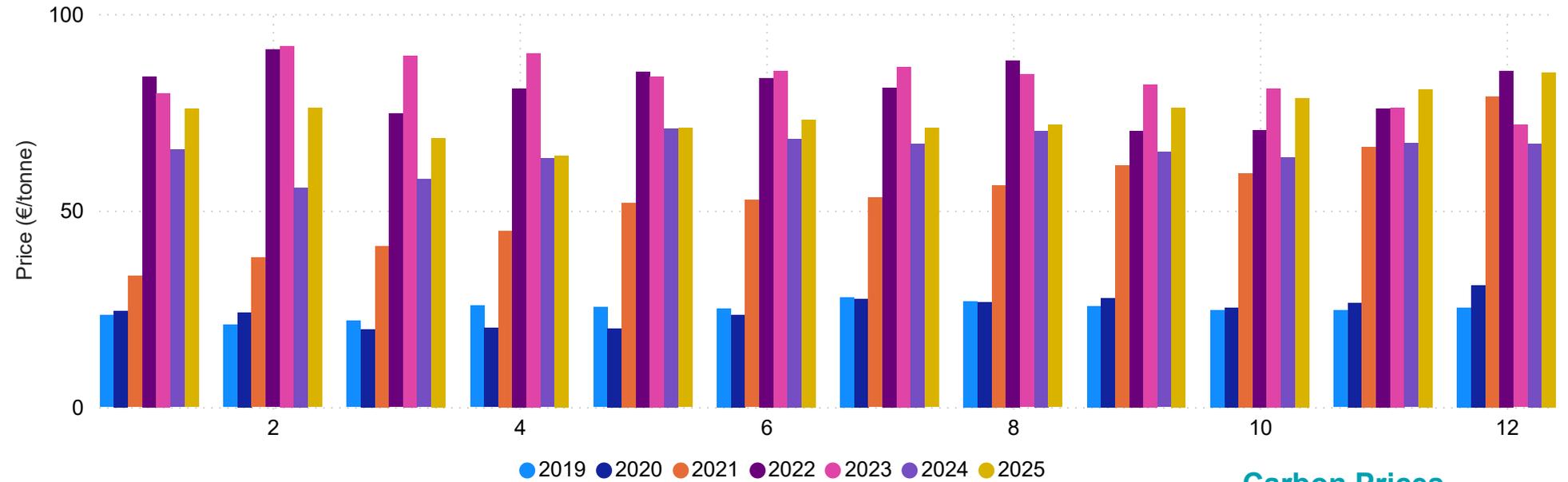
Gas prices decreased by 6% compared to the last month, with the monthly average price settling at 71.19p/therm.

Carbon Price December 2025

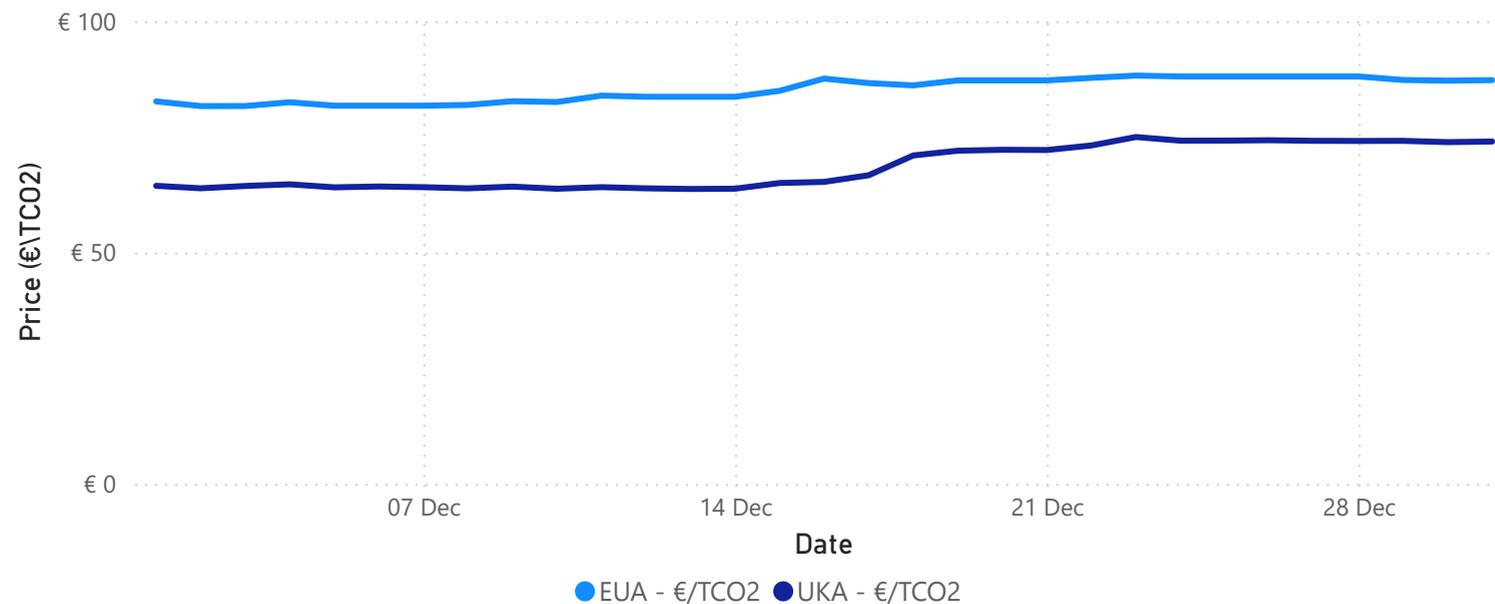
EU Carbon Prices (€/tonne)
 € 85.20
 Monthly Average
 € 81.67
 Monthly Low
 € 88.26
 Monthly High

UK Carbon Prices (€/tonne)
 € 68.49
 Monthly Average
 € 63.75
 Monthly Low
 € 74.98
 Monthly High

Monthly EU Carbon Permits Price by Year (€/tonne)



UK & EU Carbon Prices



Carbon Prices

Carbon prices averaged 85.20€/tonne, a 5% increase on average from last month.

With the new auction year and a 4.1 million reduction in carbon allowances, an upward trend is expected. Moreover, from 2026, shipping must cover 100% of verified CO2 emissions under the EU ETS (up from 70% in 2025), leading to shipping companies increasing their EUA hedging activity, leading to further upward support.

Spark Spreads December 2025

Clean Spark Spread

indicates the average revenue a gas power station can expect from generating a unit of electricity during 'baseload' operation, after fuel and carbon costs.

Clean Spark Spread remained generally positive throughout the entire month.

