



Energy Market Monitoring Report

September 2025

Market Results

Summary Dashboard

Monthly Averages	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24	Jan-25	Feb-25	Mar-25	Apr-25	May-25	Jun-25	Jul-25	Aug-25	Sep-25
DAM (€/MWh)	100.44	112.73	122.9	146.14	136.99	167.51	140.85	131.8	111.11	108.64	95.21	99.61	96.38	94.47
% Change from previous month	-9%	12%	9%	19%	-6%	22%	-16%	-6%	-16%	-2%	-12%	5%	-3%	-2%
% Change from previous year	-6%	1%	-2%	19%	54%	68%	66%	52%	26%	1%	-12%	-10%	-4%	-16%
Actual System Demand (MW)	4255	4467.8	4671	5085	5020	5256	5194	4951	4594	4254	4413	4356	4305	4493
% Change from previous month	-1%	5%	5%	9%	-1%	5%	-1%	-5%	-7%	-7%	4%	-1%	-1%	4%
% Change from previous year	2%	3%	3%	4%	3%	2%	5%	2%	0%	-2%	5%	2%	1%	1%
Actual Wind Generation (MW)	1437	1263	1668	1448	2040	1948	2509	1615	1278	933	1306	1057	1169	1567
% Change from previous month	63%	-12%	32%	-13%	41%	-5%	29%	-36%	-21%	-27%	40%	-19%	11%	34%
% Change from previous year	3%	-9%	22%	-20%	-17%	5%	25%	-22%	-15%	4%	22%	20%	-19%	24%
Actual Solar Generation (MW)	-	-	-	-	-	-	-	-	-	-	-	-	194	149
% Change from previous month	-	-	-	-	-	-	-	-	-	-	-	-	-1%	-24%
% Change from previous year	-	-	-	-	-	-	-	-	-	-	-	-	52%	94%
Gas Price p/therm	84.71	86.94	99.04	111.00	111.22	122.85	123.04	100.94	84.72	81.82	86.38	80.69	79.25	79.23
% Change from previous month	13%	3%	14%	12%	0%	10%	0%	-18%	-16%	-3%	6%	-7%	-2%	0%
% Change from previous year	2%	-5%	-6%	6%	32%	64%	94%	48%	18%	7%	6%	7%	-6%	-9%
Carbon Price (€/Tonne)	70.12	64.86	63.51	67.15	67.05	75.87	76.08	68.39	63.96	71	73.14	71.03	71.81	76.23
% Change from previous month	5%	-8%	-2%	6%	0%	13%	0%	-10%	-6%	11%	3%	-3%	1%	6%
% Change from previous year	-17%	-21%	-22%	-12%	-7%	16%	36%	18%	1%	0%	7%	6%	2%	18%
EWIC % Import Periods	85.29%	81.53%	71.32%	78.30%	67.64%	67.88%	43.01%	55.18%	27.15%	78.36%	68.26%	45.83%	57.22%	60.45%
EWIC % Export Periods	7.56%	5.52%	10.31%	9.03%	11.49%	10.18%	13.91%	2.66%	1.81%	0.77%	2.05%	1.31%	4.57%	3.92%
EWIC % Not Flow Periods	7.15%	12.95%	18.37%	12.67%	20.87%	21.94%	43.08%	42.16%	71.04%	20.87%	29.69%	52.86%	38.21%	35.63%
Moyle % Import Periods	80.71%	91.98%	81.08%	82.47%	81.55%	78.53%	64.62%	79.24%	78.16%	93.88%	78.85%	57.29%	79.03%	80.24%
Moyle % Export Periods	10.44%	7.60%	18.65%	17.50%	18.41%	21.27%	22.43%	6.16%	6.08%	6.08%	16.70%	24.33%	20.90%	19.72%
Moyle % Not Flow Periods	8.84%	0.42%	0.28%	0.03%	0.03%	0.20%	12.95%	14.60%	15.76%	0.03%	4.44%	18.38%	0.07%	0.03%
Greenlink % Import Periods	NA	NA	NA	NA	NA	NA	68.97%	88.63%	80.17%	93.78%	90.76%	91.23%	88.68%	85.69%
Greenlink % Export Periods	NA	NA	NA	NA	NA	NA	25.04%	9.49%	10.35%	5.58%	7.36%	7.83%	10.08%	11.25%
Greenlink % Not Flow Periods	NA	NA	NA	NA	NA	NA	5.99%	1.88%	9.48%	0.64%	1.88%	0.94%	1.24%	3.06%

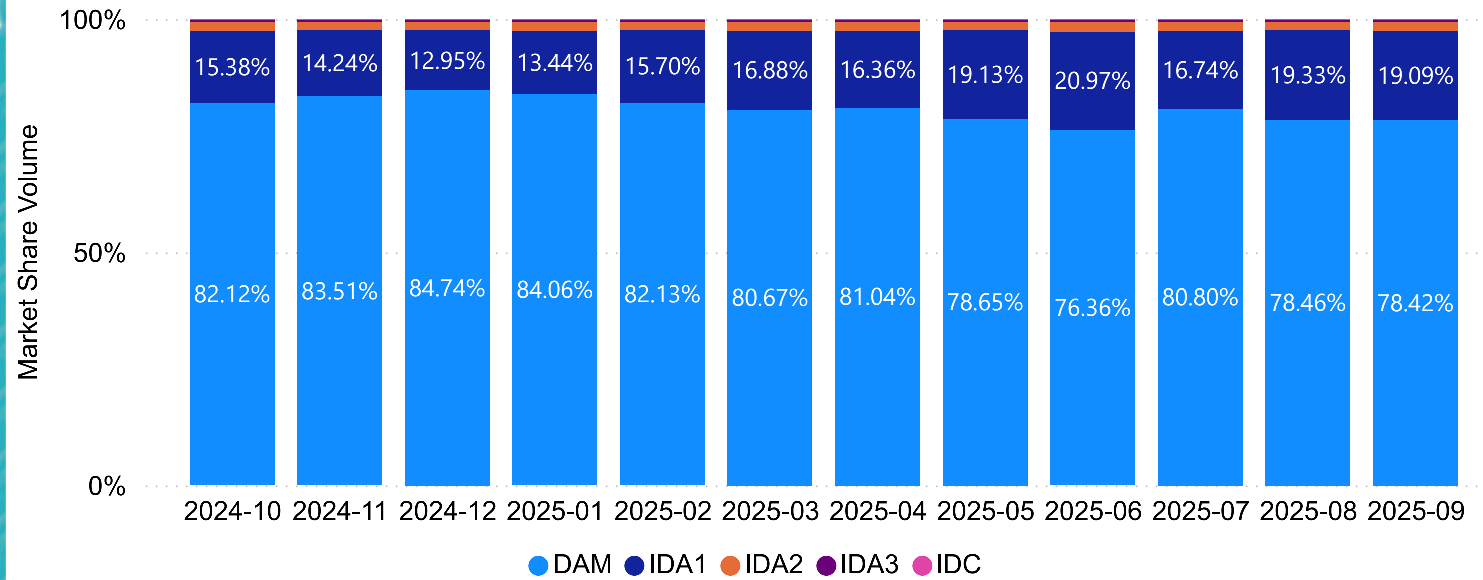
Market Volumes September 2025

Daily Average Volume	MWh
DAM	116,066
IDA1	28,185
IDA2	2,919
IDA3	712
IDC	59

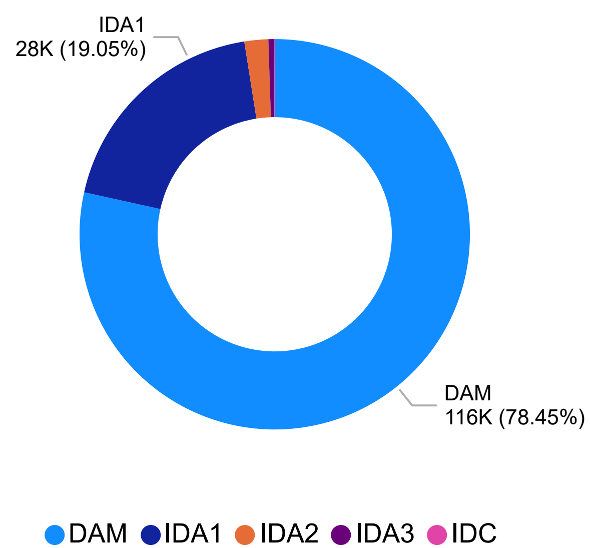
Total Monthly Volume	MWh
DAM	3,481,970
IDA1	845,561
IDA2	87,572
IDA3	21,373
IDC	1,531
Total	**4,438,007**

Total Market Value	€
DAM	€ 336,264,599
IDA1	€ 81,751,292
IDA2	€ 8,813,678
IDA3	€ 2,573,015
IDC	€ 192,775
Total	**€ 429,595,359**

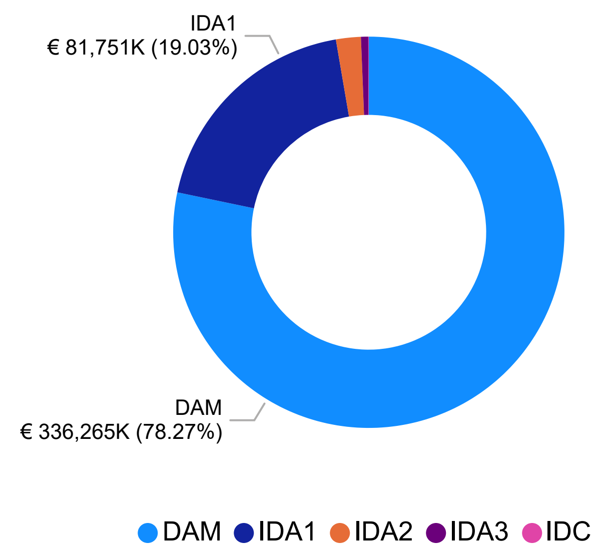
Ex-Ante Monthly Volume by Market



Ex-Ante Volumes (MWh)



Ex-Ante Values (€)



SEM committee

Market Volumes and Values

The Day Ahead Market is, by far, the largest market in the SEM, circa 80-85% of all transactions are cleared in this market. The distribution of volumes across the SEM markets have been broadly constant since the introduction of these trading arrangements in October 2018.

Generally, in power markets, market participants will prefer to lock 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.

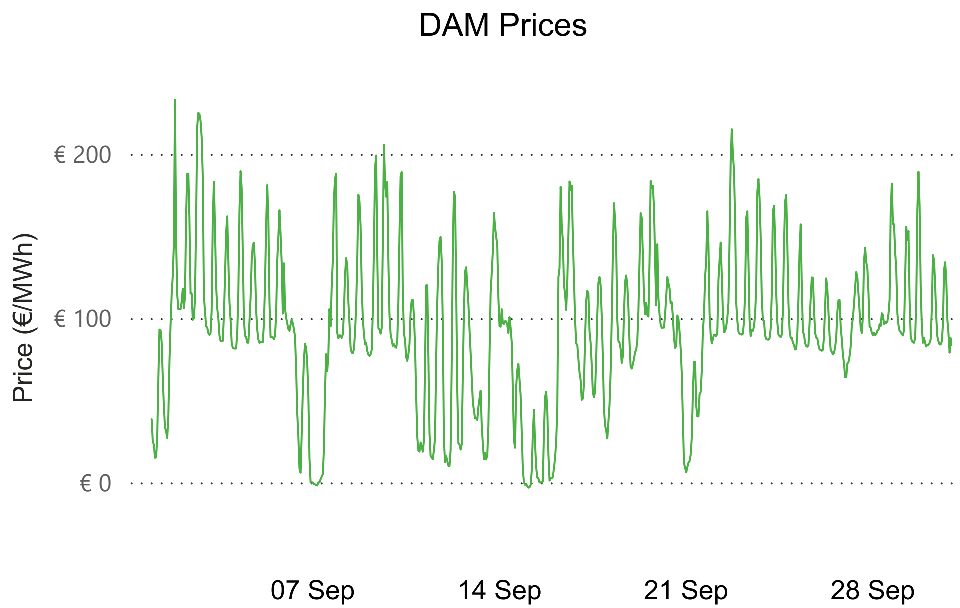
Day Ahead Market September 2025

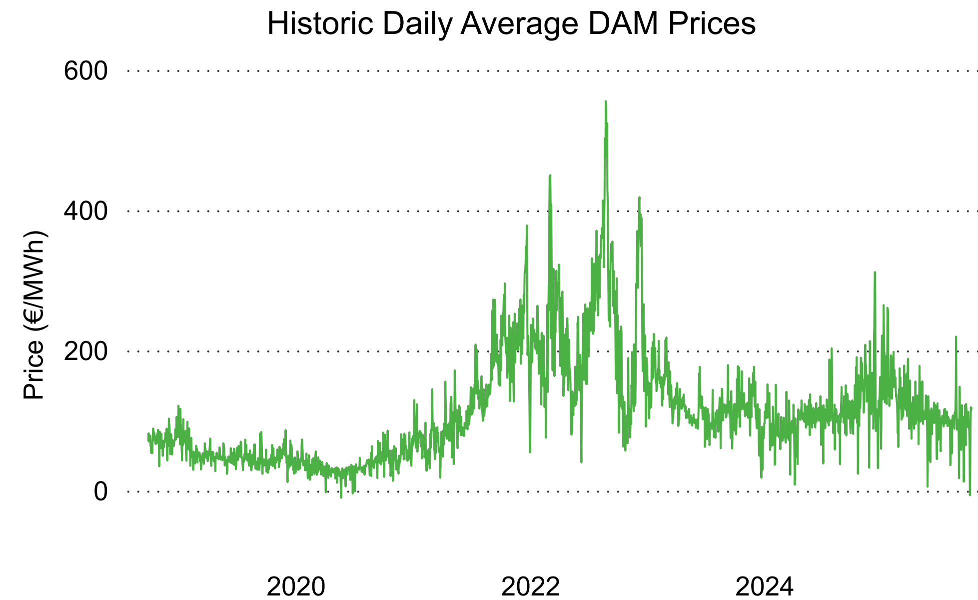
€ 94.47
Average DAM Price

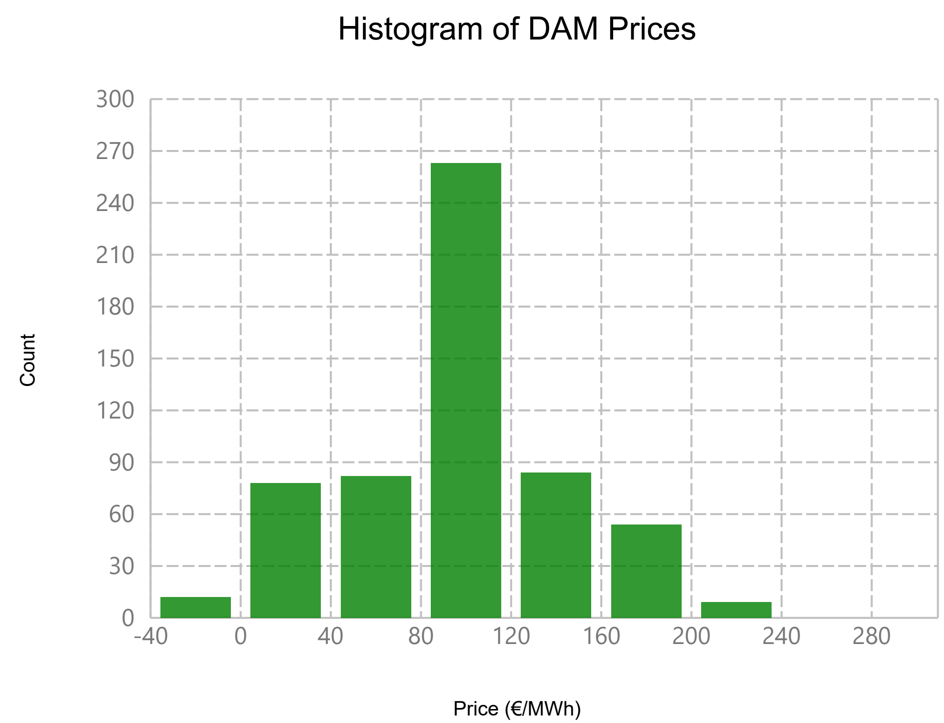
-€ 3.19
Min DAM Price

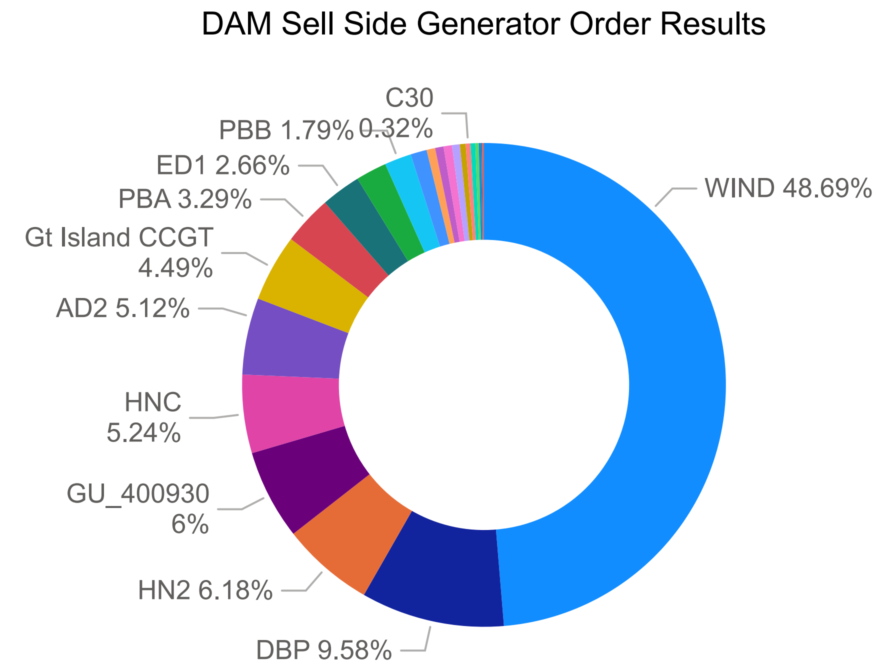
€ 232.89
Max DAM Price

The most frequent price range for the month was between €80 and €120.









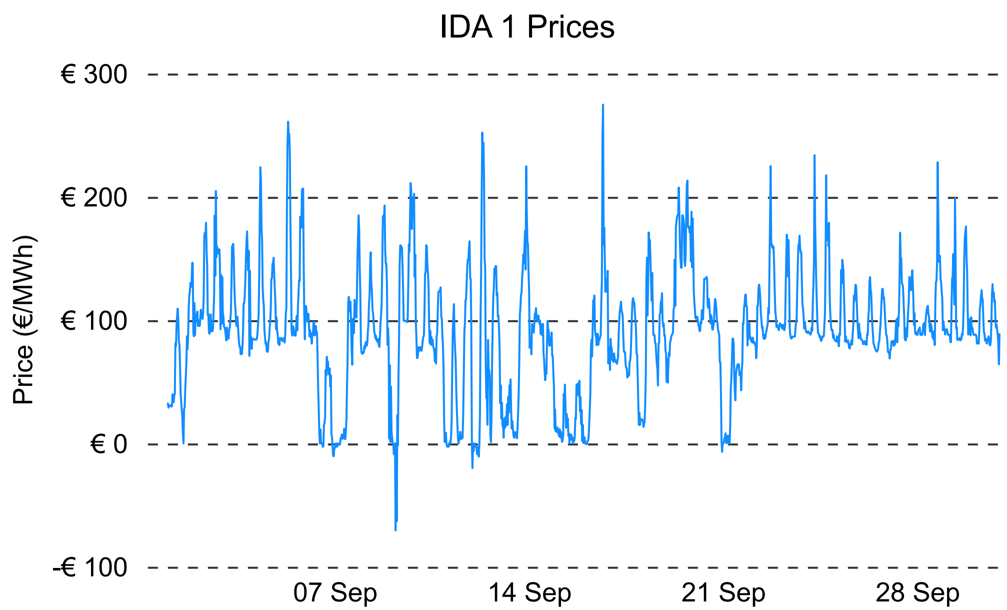
Intraday Market September 2025

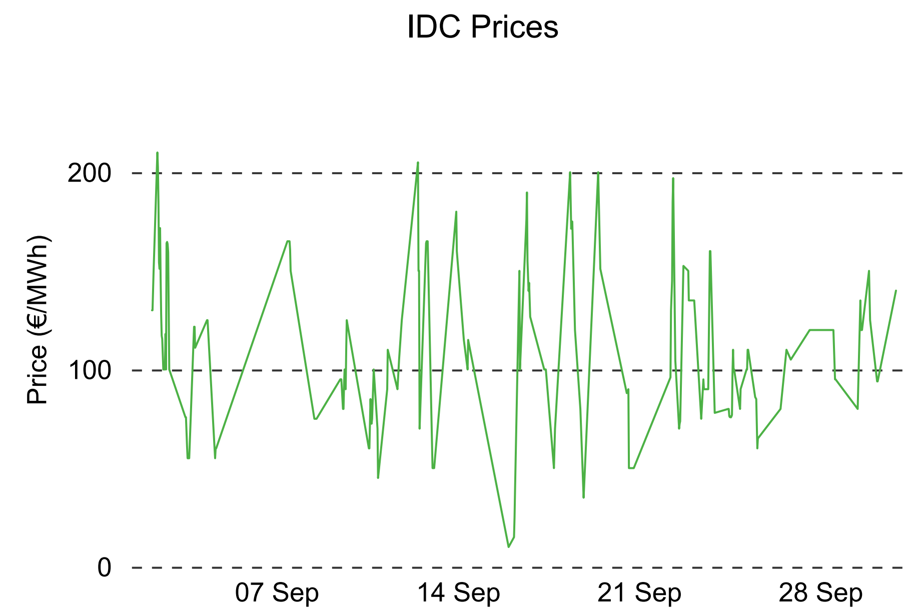
€ 90.65
Average IDA1 Price

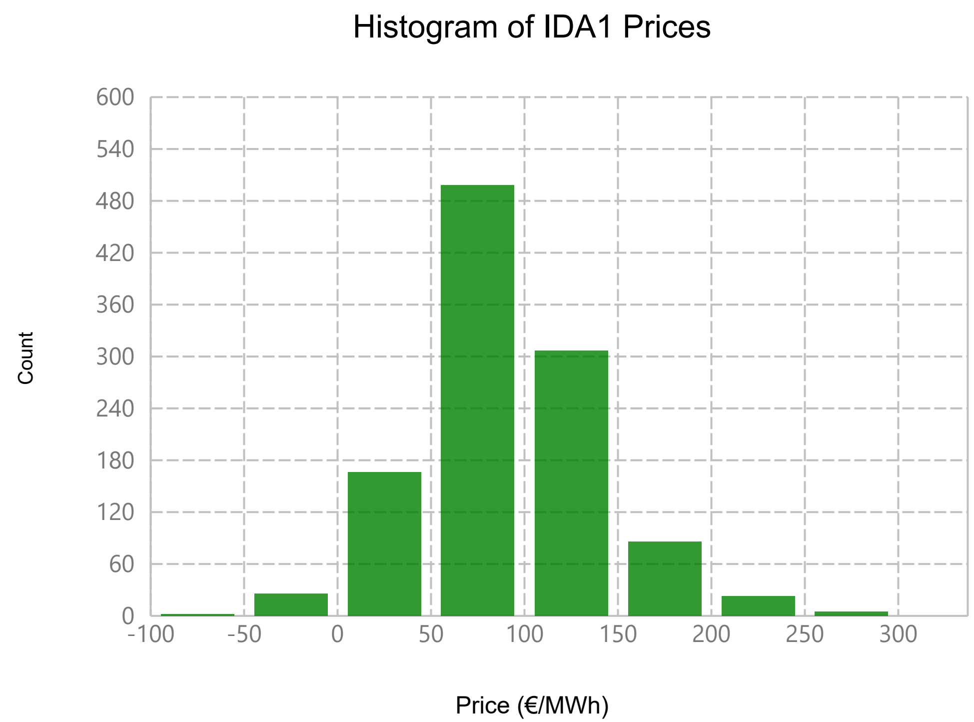
-€ 70.54
Min IDA1 Price

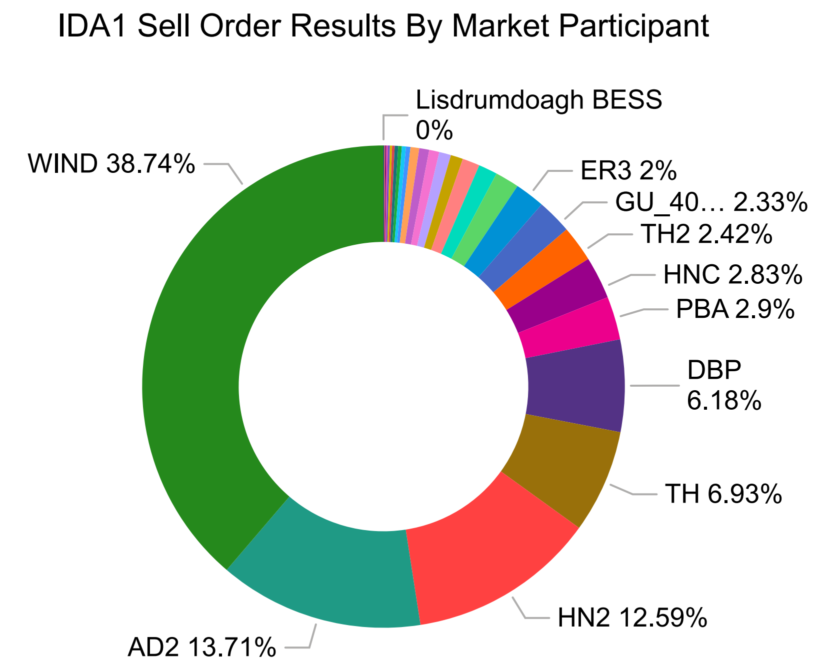
€ 274.80
Max IDA1 Price

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









SEM vs GB DAM September 2025

SEM Day Ahead Price

€ 94.47
Average DAM Price

-€ 3.19
Min DAM Price

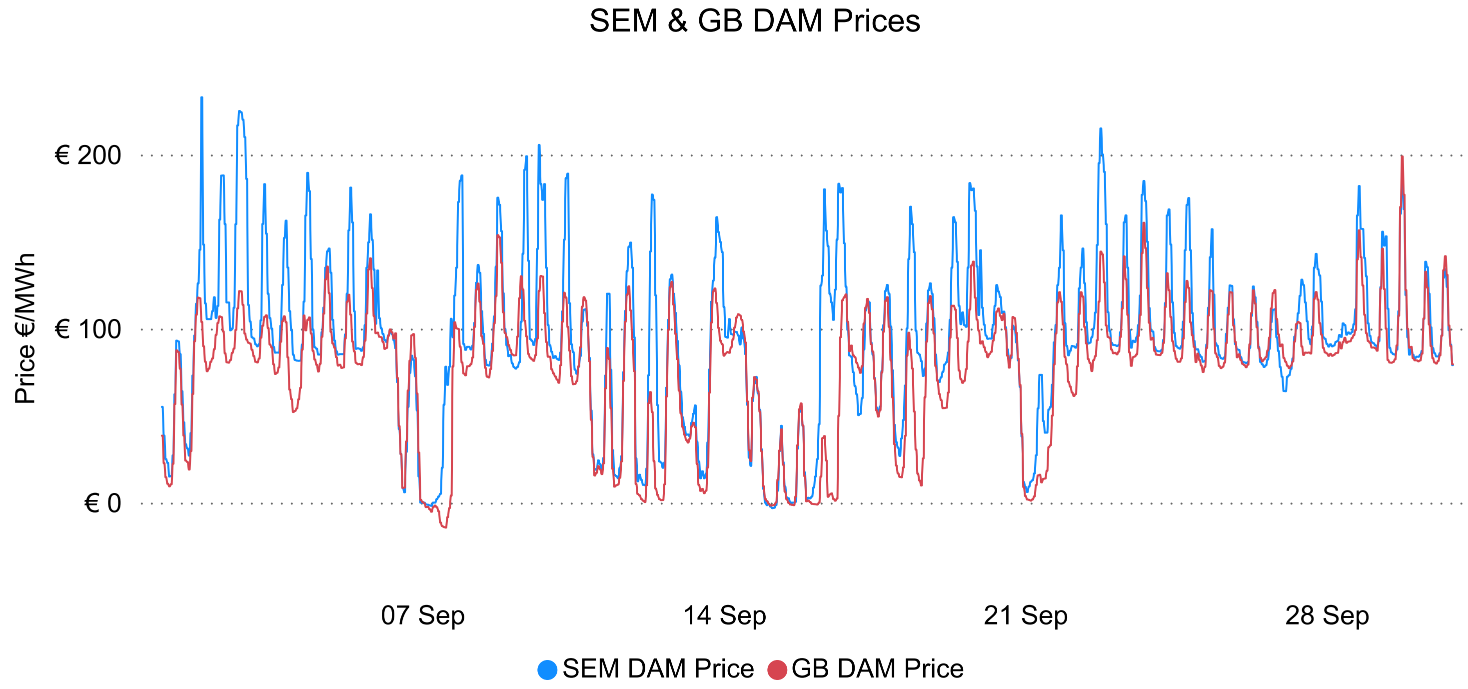
€ 232.89
Max DAM Price

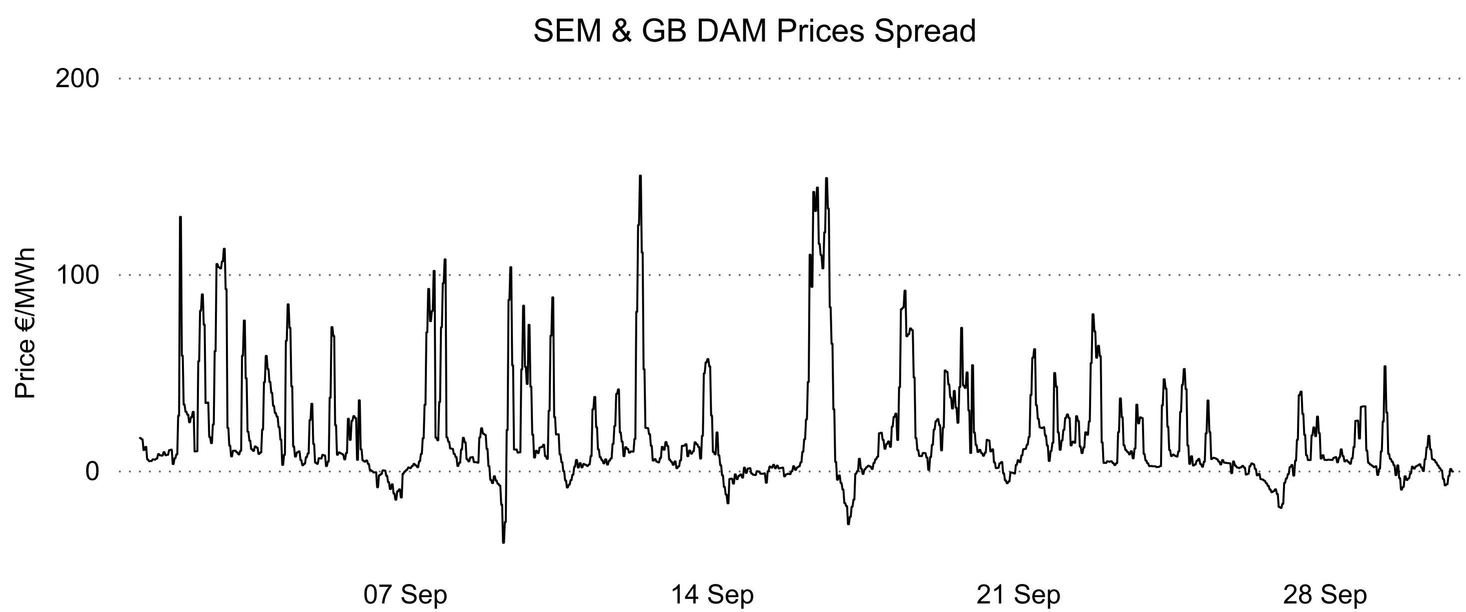
GB Day Ahead Price

€ 76.82
Average Price

-€ 14.34
Min Price

€ 198.89
Max Price





SEM-GB Price Differential

The charts show that the SEM and GB prices appear to follow the same general trend. However significant spreads are observed on several occasions.

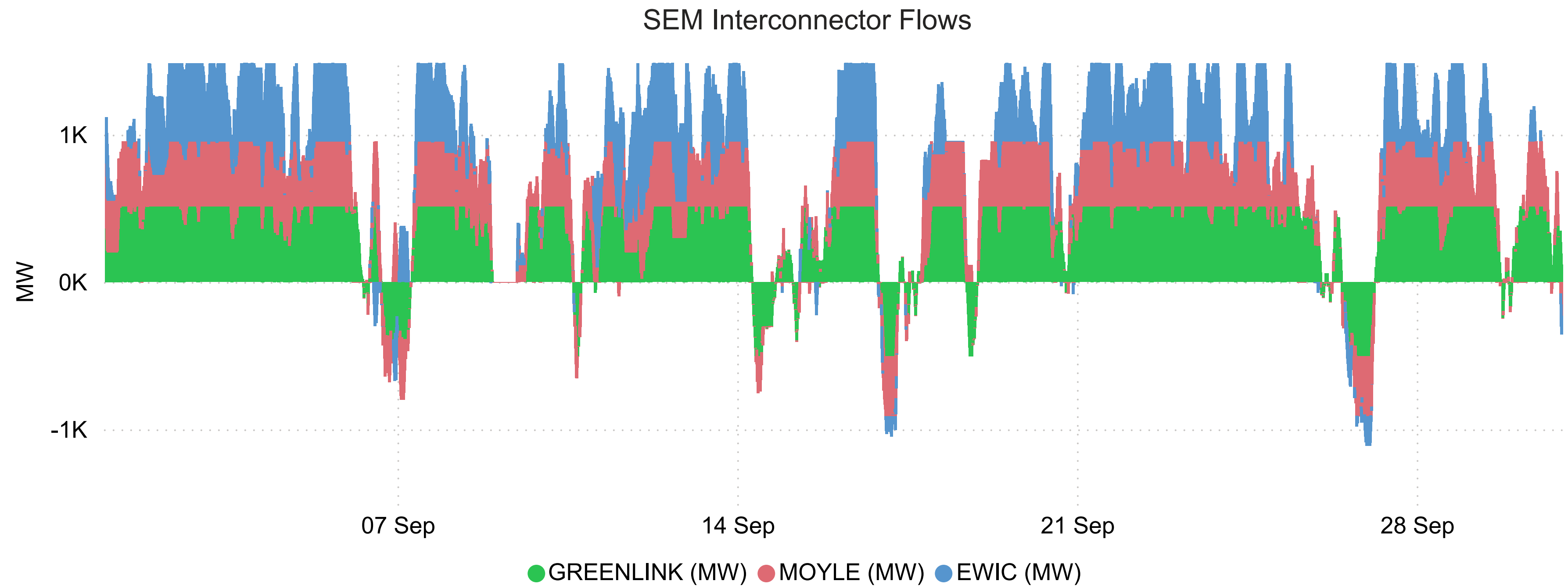
A wide spread was observed on 16th September, driven by unplanned generator outages and high unavailability.

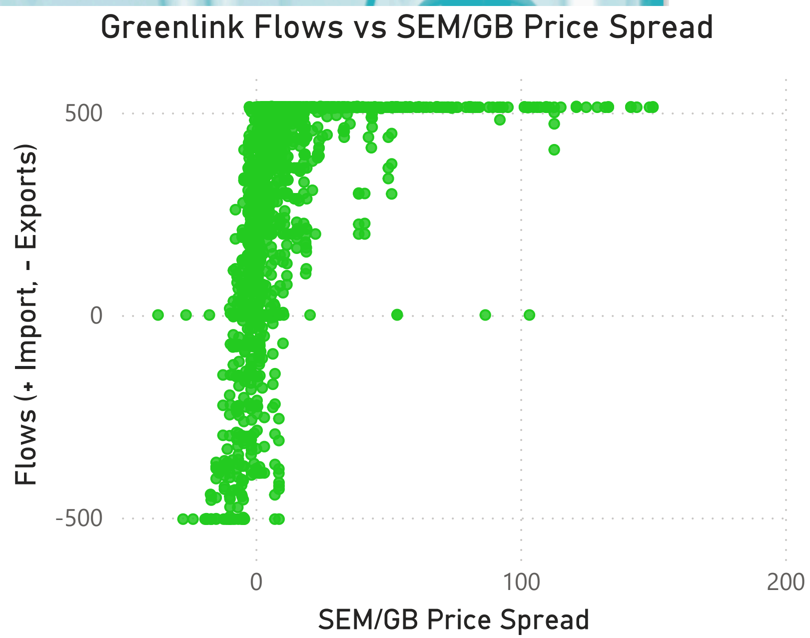
SEM Interconnectors September 2025

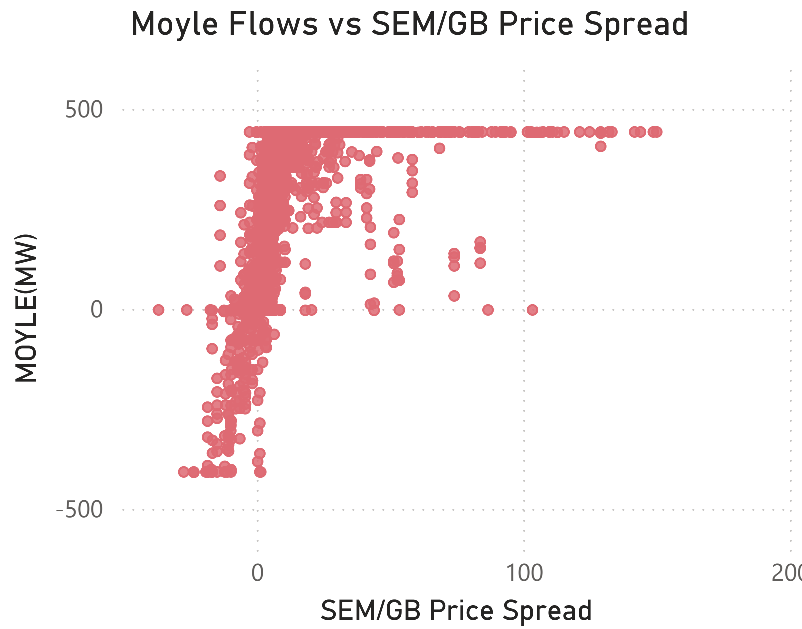
As illustrated, the profile of interconnector flows were predominantly importing power across the month. This reflects the predominantly higher prices in the SEM compared with GB.

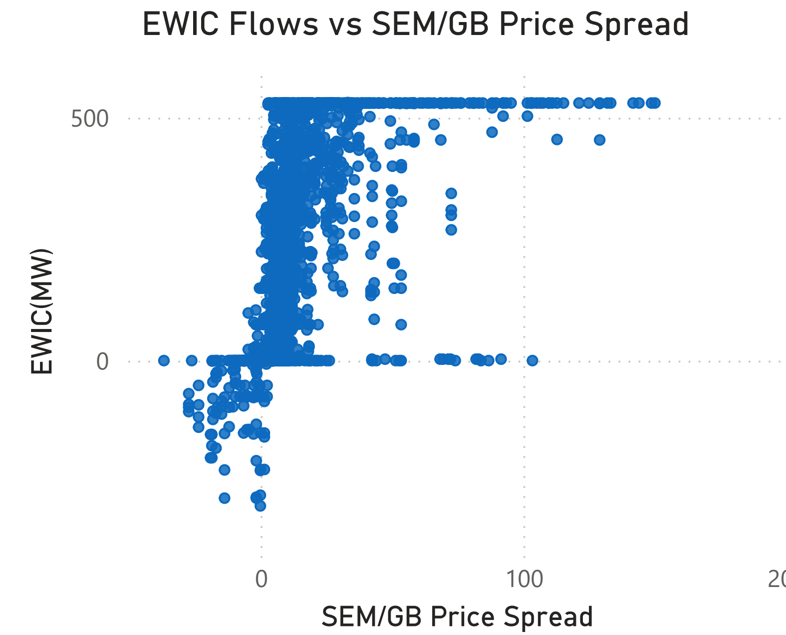
Export flows on interconnectors were also observed occasionally when strong wind output resulted in oversupply in the SEM.

Outages on Interconnectors:
EWIC - Unplanned - 18/09/25 6AM to 19/09/25 10PM - 0MW Availability
Greenlink - Planned - 08/09/25 10PM to 09/09/25 10AM - 0MW Availability





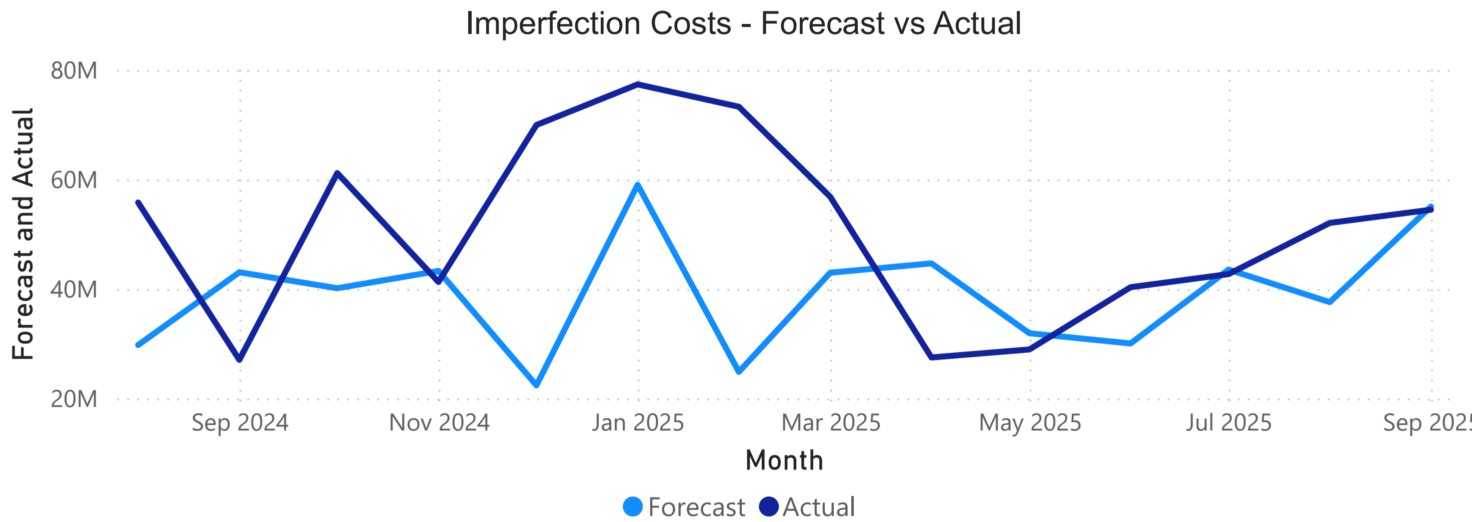




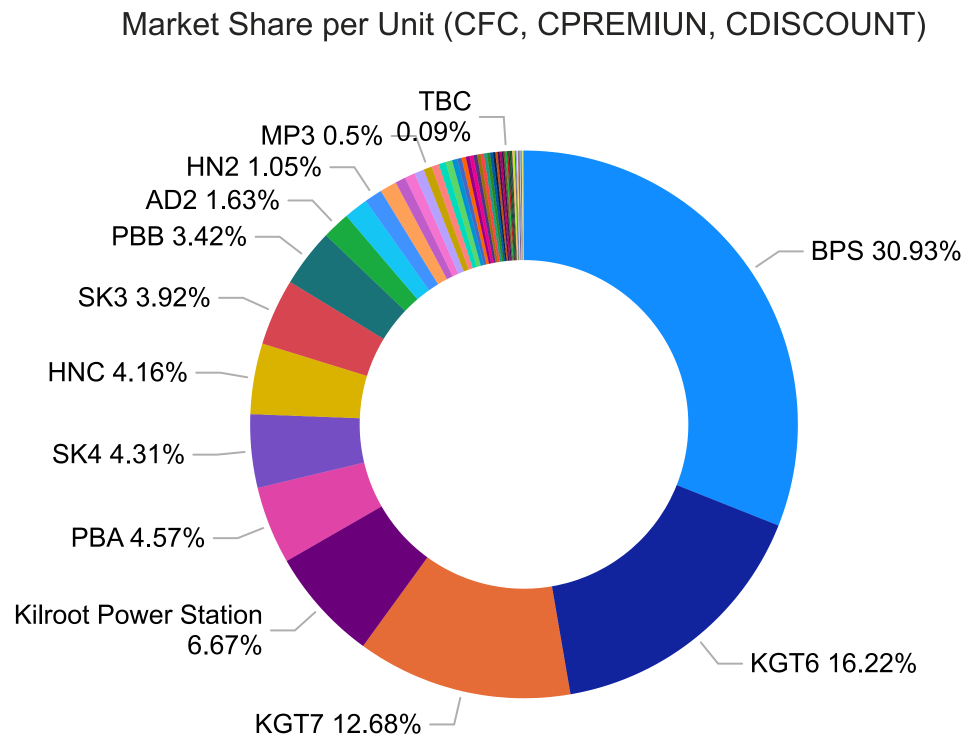
Balancing Market September 2025

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.



Determinant Name	Value €
CABBPO	1,087.25
CAOOPO	107,023.80
CCURL	-1,073,891.97
CDISCOUNT	12,882,291.06
CFC	21,012,415.70
CPREMIUM	22,327,596.24
CTEST	-3,025.51
CUNIMB	-773,880.92
Total	**54,479,615.65**



Constraints Payments

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

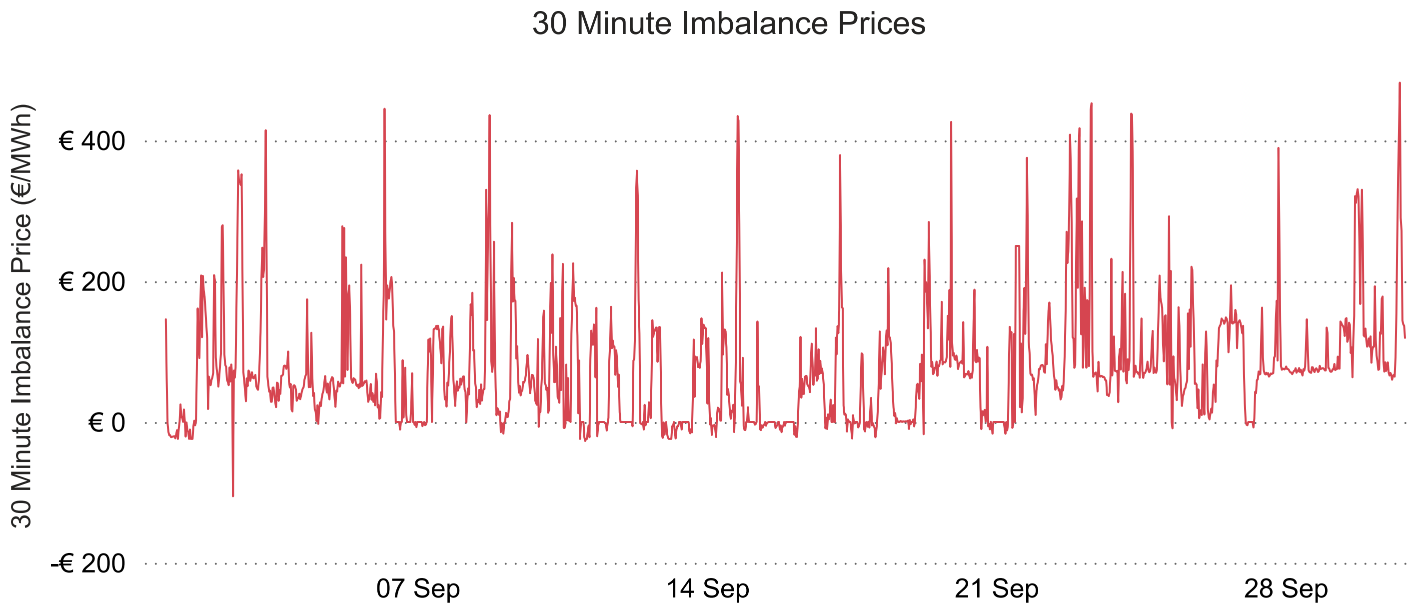
Balancing Market September 2025

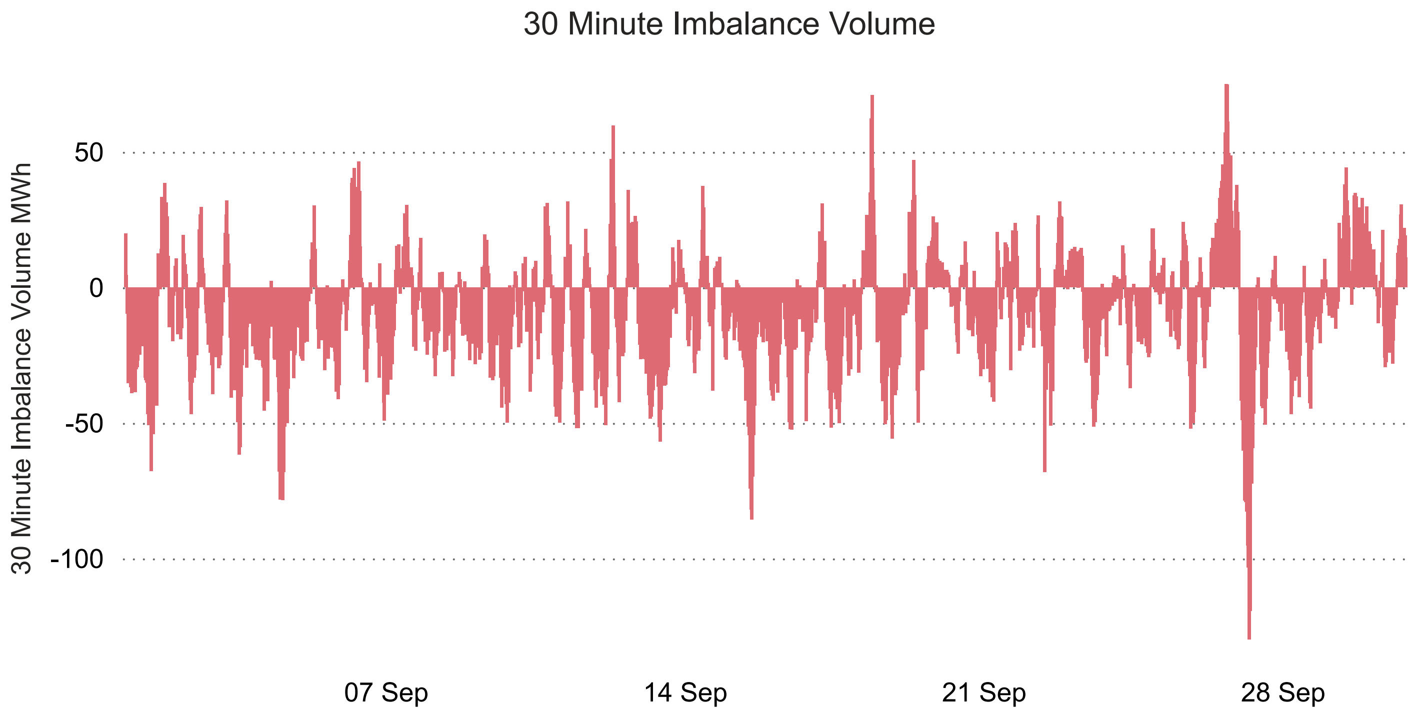
30 Minutes Imbalance Price

€ 75.63
Average Price

-€ 105.52
Lowest Price

€ 482.03
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.

Demand and Generation Mix

Demand September 2025

SEM Demand

4,493.28 SEM Average 2025	4,467.76 SEM Average 2024
3,620.34 SEM Min 2025	3,477.29 SEM Min 2024
5,168.67 SEM Max 2025	5,161.42 SEM Max 2024

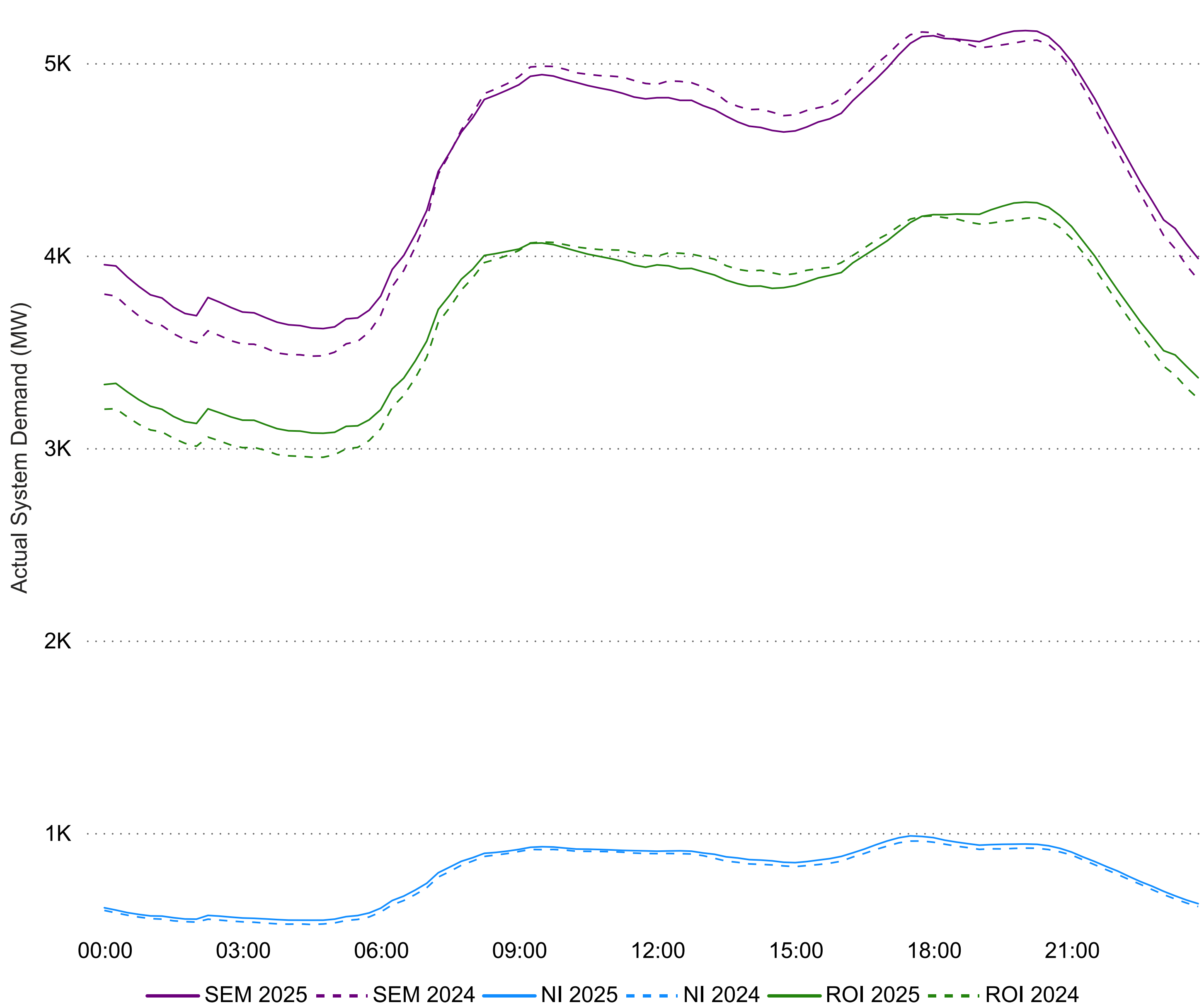
NI Demand

791.52 NI Average 2025	773.10 NI Average 2024
546.73 NI Min 2025	524.58 NI Min 2024
984.80 NI Max 2025	958.26 NI Max 2024

ROI Demand

3,733.67 ROI Average 2025	3,694.65 ROI Average 2024
3,076.72 ROI Min 2025	2,951.97 ROI Min 2024
4,277.51 ROI Max 2025	4,205.97 ROI Max 2024

Monthly Average Hourly Demand Curves



SEM Demand

The graph indicates a 1% increase in all-island demand compared to the same period last year but 4% higher than last month, reflecting seasonal consumption trends.

ROI demand increased by 1.05% relative to the same period last year. Due to increased solar adoption, ROI's demand now exhibits a midday dip (Commonly referred to as the 'duck curve' effect).

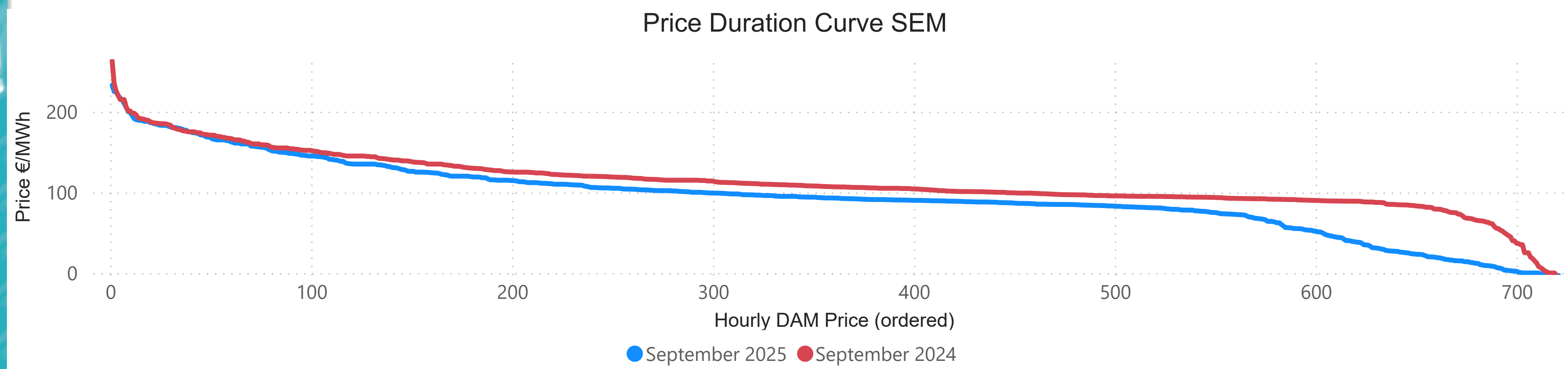
NI demand also experienced a 2.38% increase compared to the same period last year.

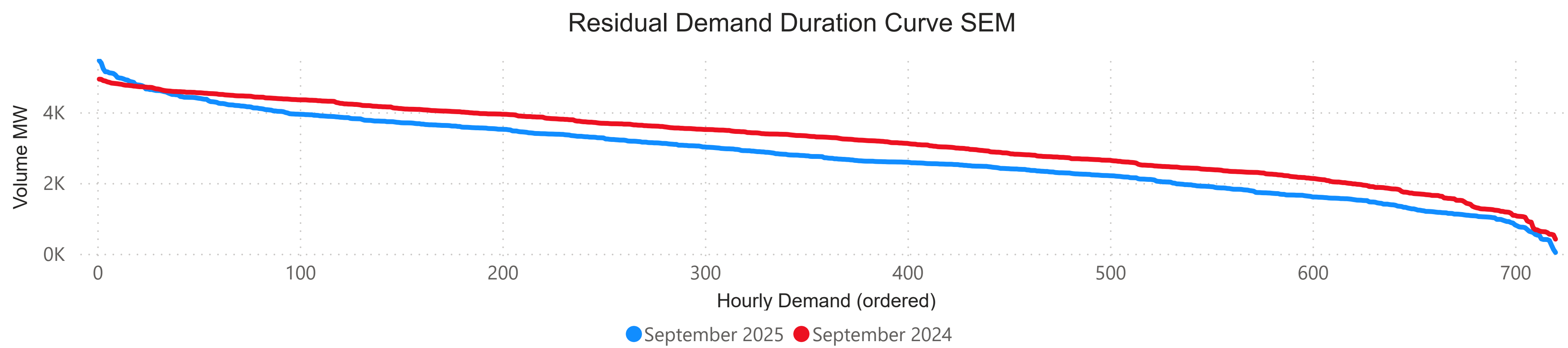
Duration Curves September 2025

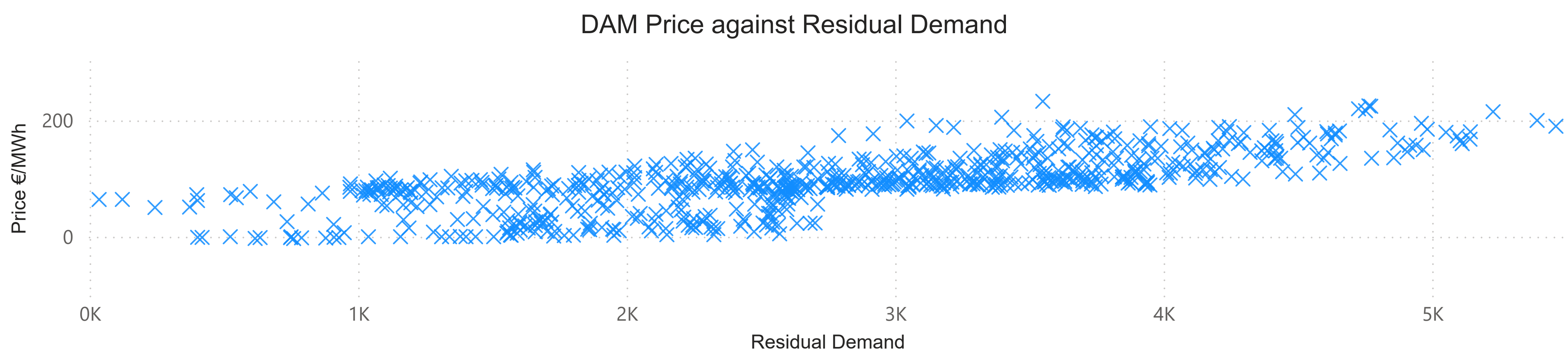
Price Duration
The price duration curve shows the hourly DAM prices across the month ordered from the largest to the smallest.

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.



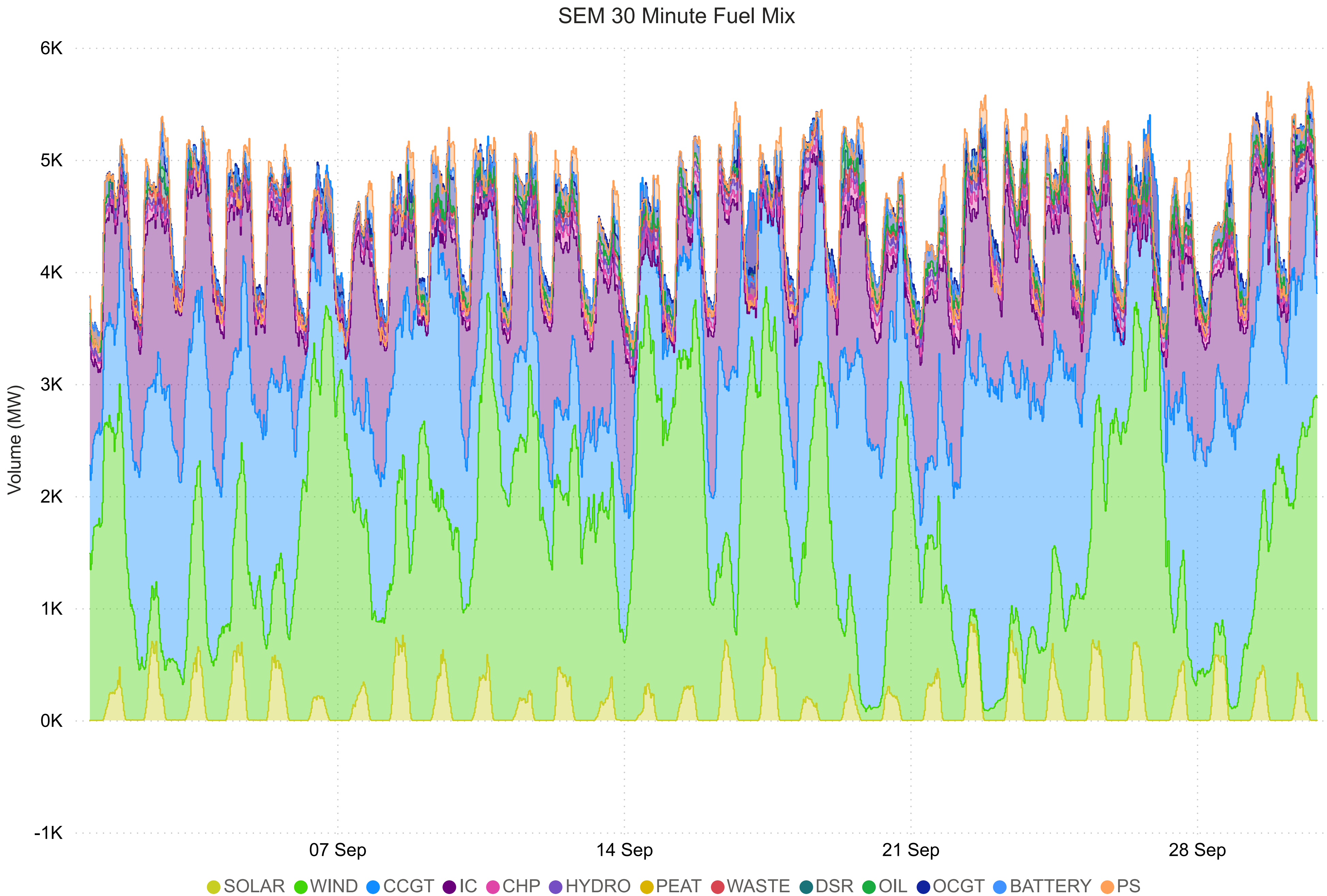




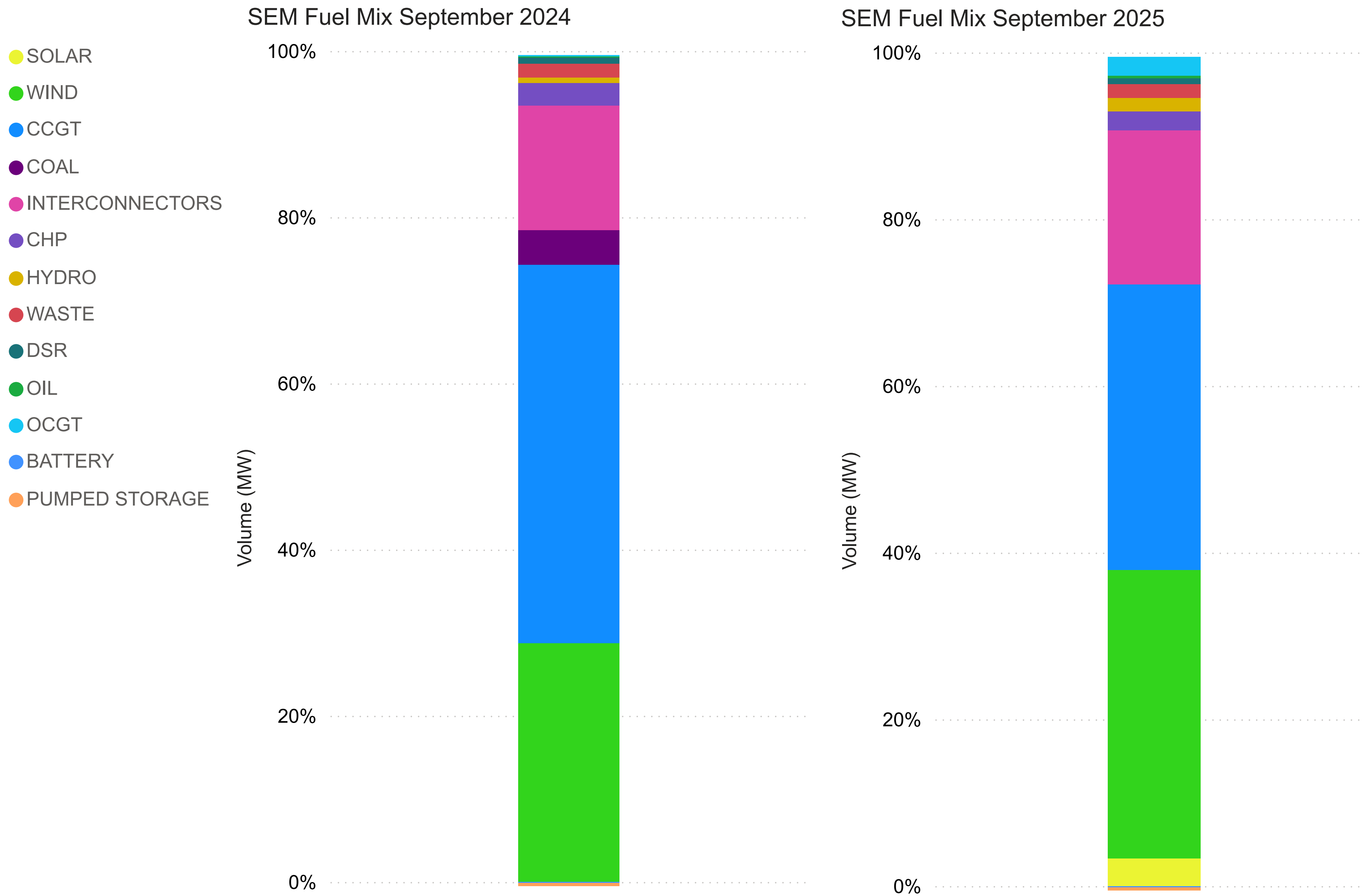
Fuel Mix
September 2025

Fuel Type	Avg Monthly	Per. Monthly
WIND	1566	35.0%
CCGT	1549	34.6%
INTERCONNECTORS	835	18.7%
SOLAR	149	3.3%
CHP	103	2.3%
OCGT	101	2.3%
WASTE	77	1.7%
HYDRO	72	1.6%
DSR	30	0.7%
OIL	15	0.3%
PEAT	0	0.0%
BATTERY	-7	-0.2%
PUMPED STORAGE	-17	-0.4%

Fuel Type	Max Monthly	Min Monthly
WIND	3866	78
CCGT	3093	672
INTERCONNECTORS	1503	-1105
SOLAR	877	-2
OCGT	413	0
PUMPED STORAGE	291	-301
BATTERY	284	-91
OIL	270	0
DSR	206	0
CHP	168	41
HYDRO	106	19
WASTE	80	30
PEAT	0	0



Fuel Mix Comparison September 2024 & 2025



North-South Tie Line September 2025

Average Flow NI to ROI (MW)

-225.27

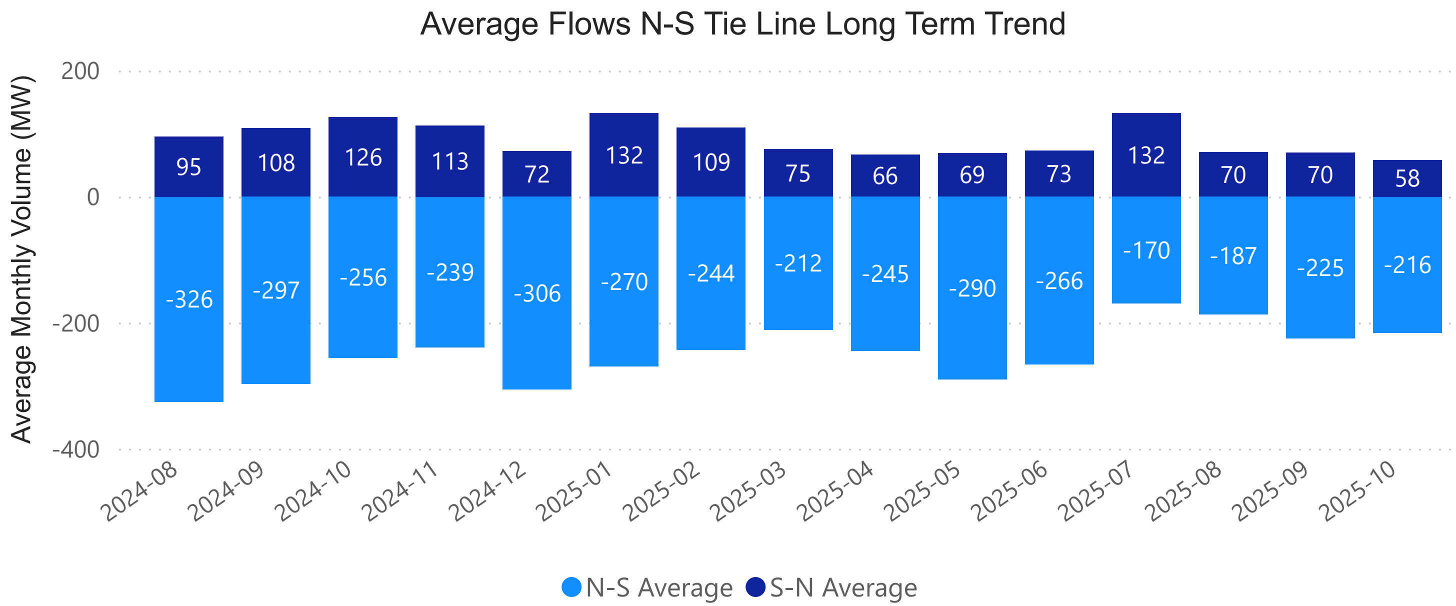
Average Flow ROI to NI (MW)

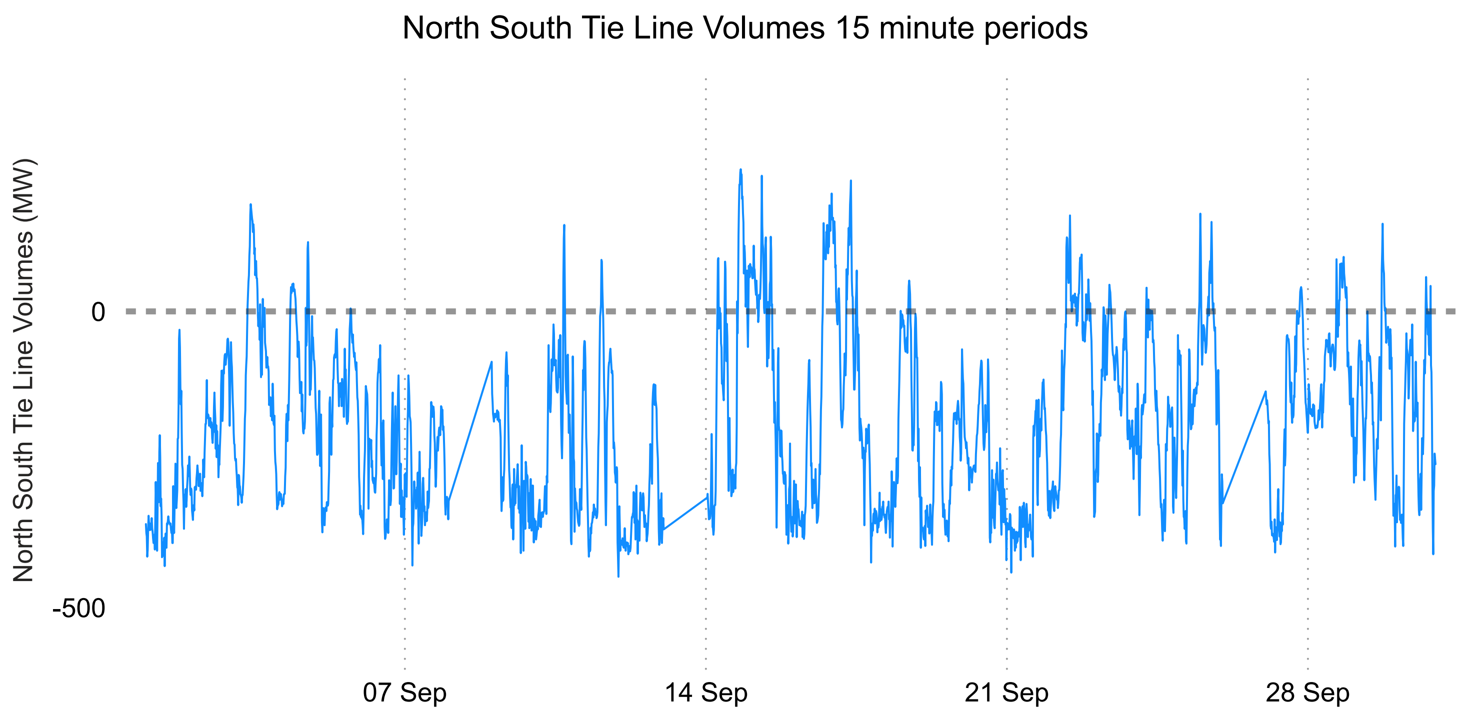
69.53

Average Net Flow NI to ROI (MW)

-190.31

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





SEM committee

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.

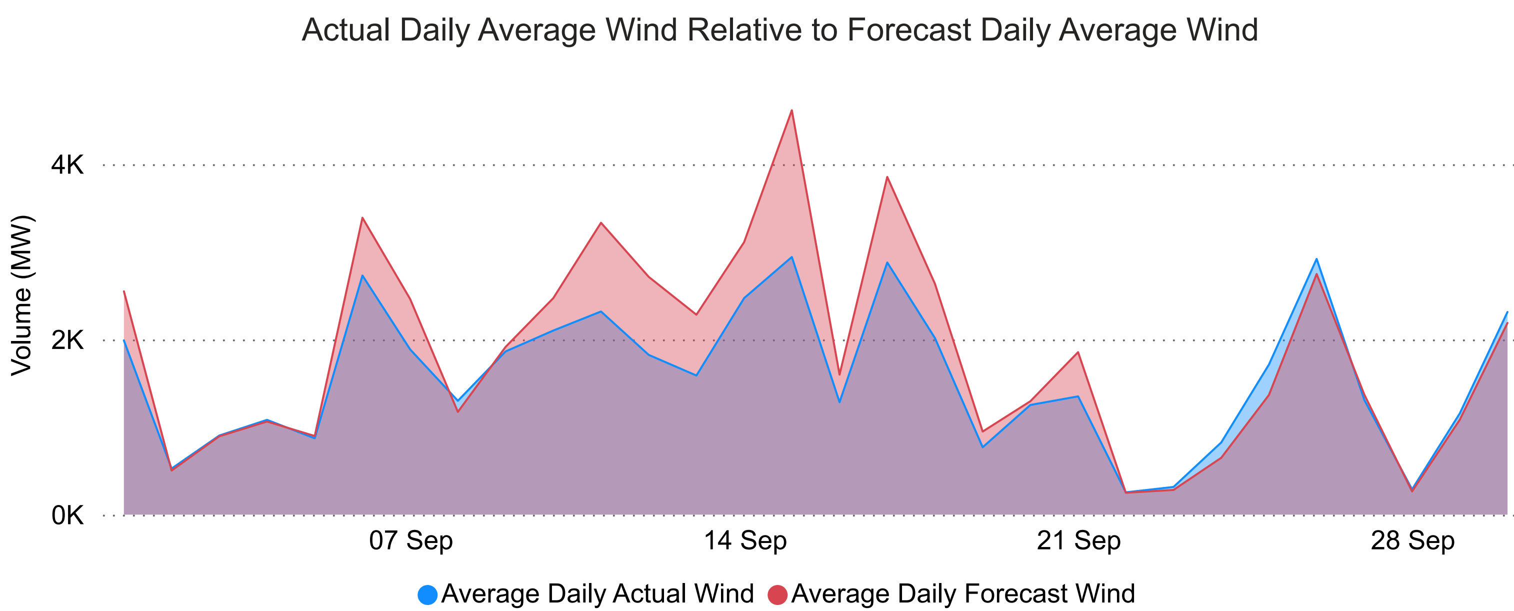
Wind Generation September 2025

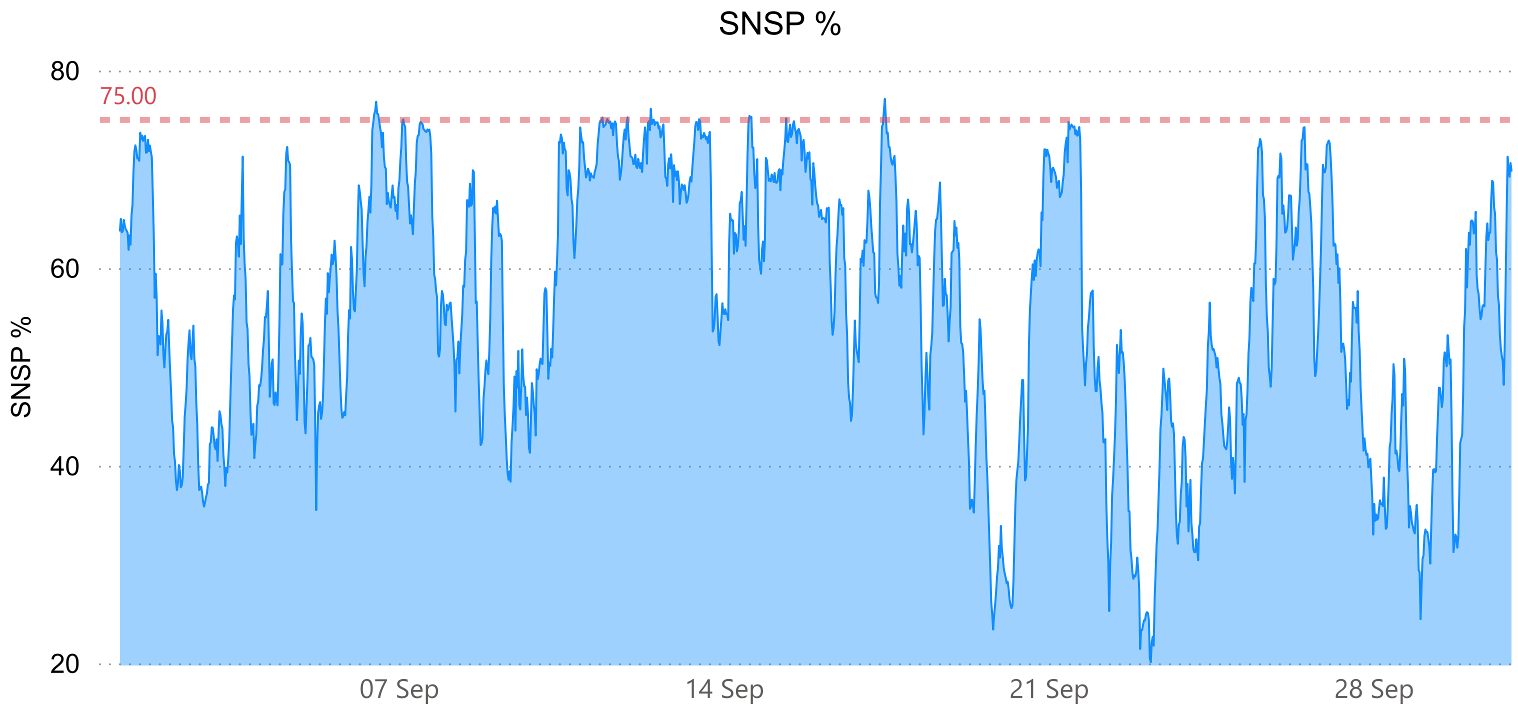
Average Daily Actual Wind (MW)
1,567

Average Daily Forecast Wind (MW)
1,858

Min SNSP%
20.11

Max SNSP%
77.13





Wind Generation

Average wind output increased by 34% from last month and increased by 24% 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 September 2025

CO2 Intensity (gCO2/kWh)

173.47
Average

24
Lowest

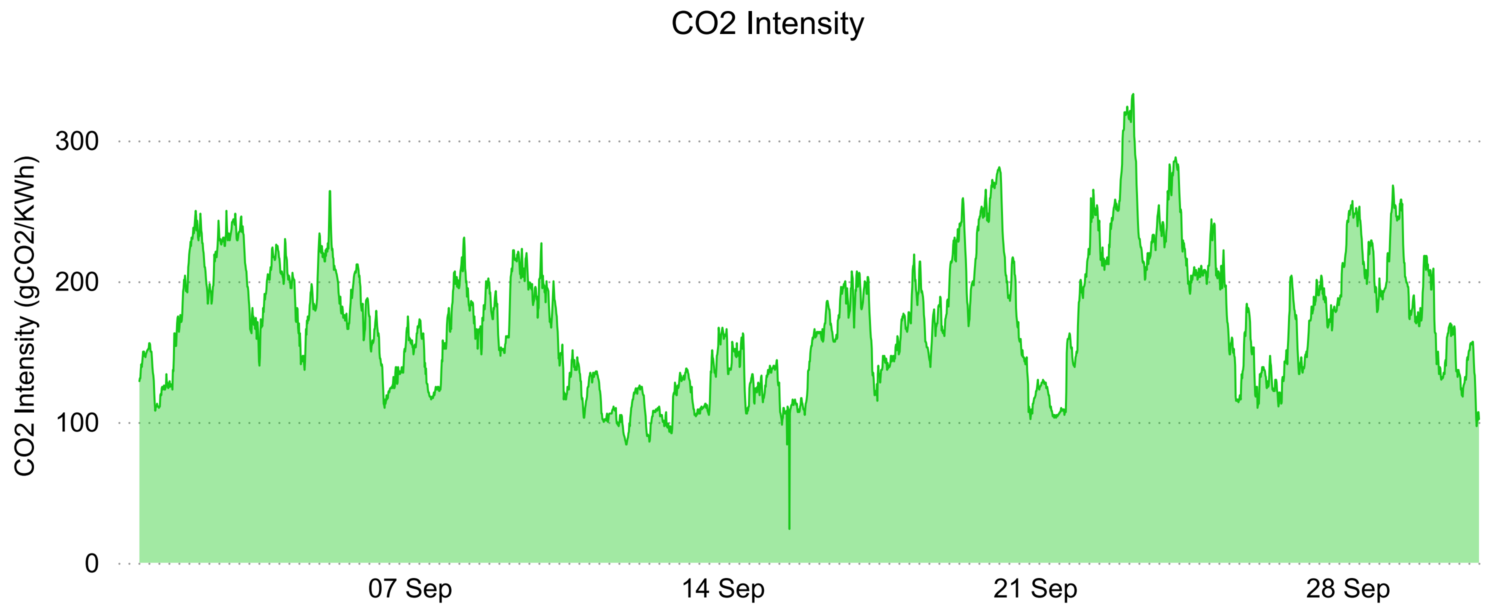
333
Highest

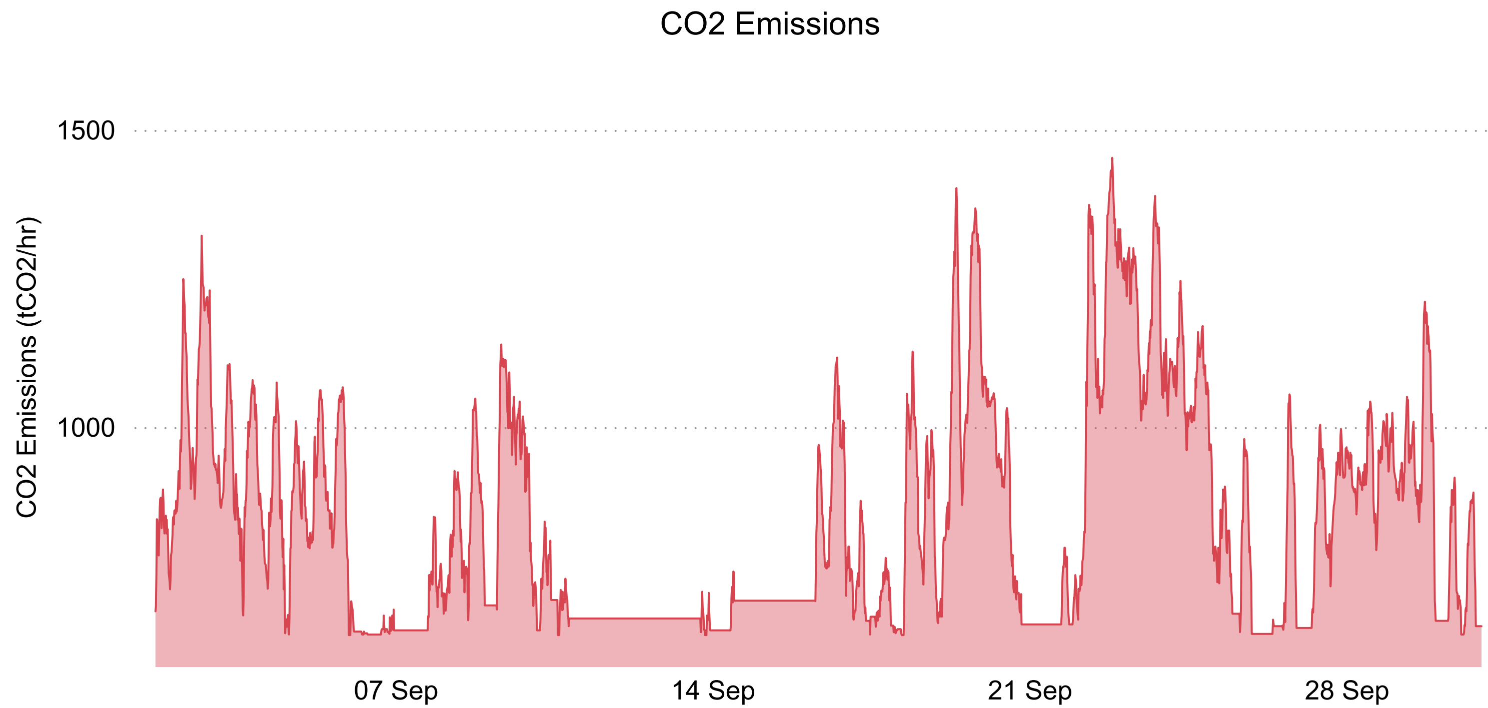
CO2 Emissions (tCO2/hr)

840.98
Average

650
Lowest

1453
Highest





SEM committee

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.

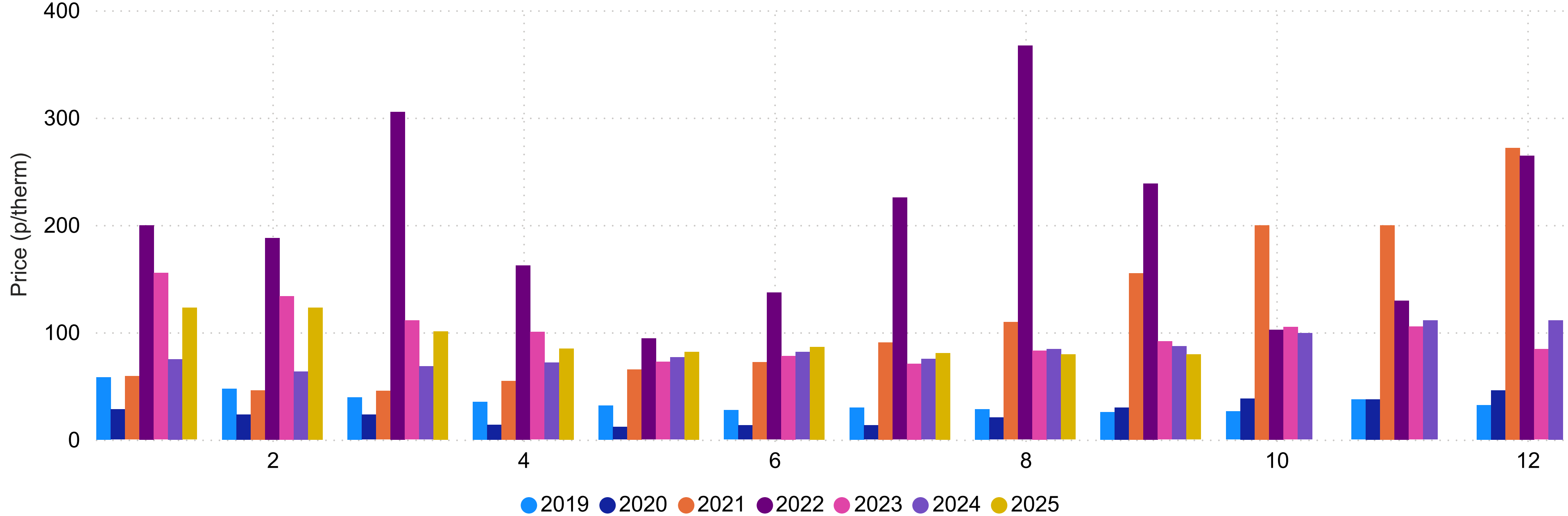
Fuel Costs and Spreads

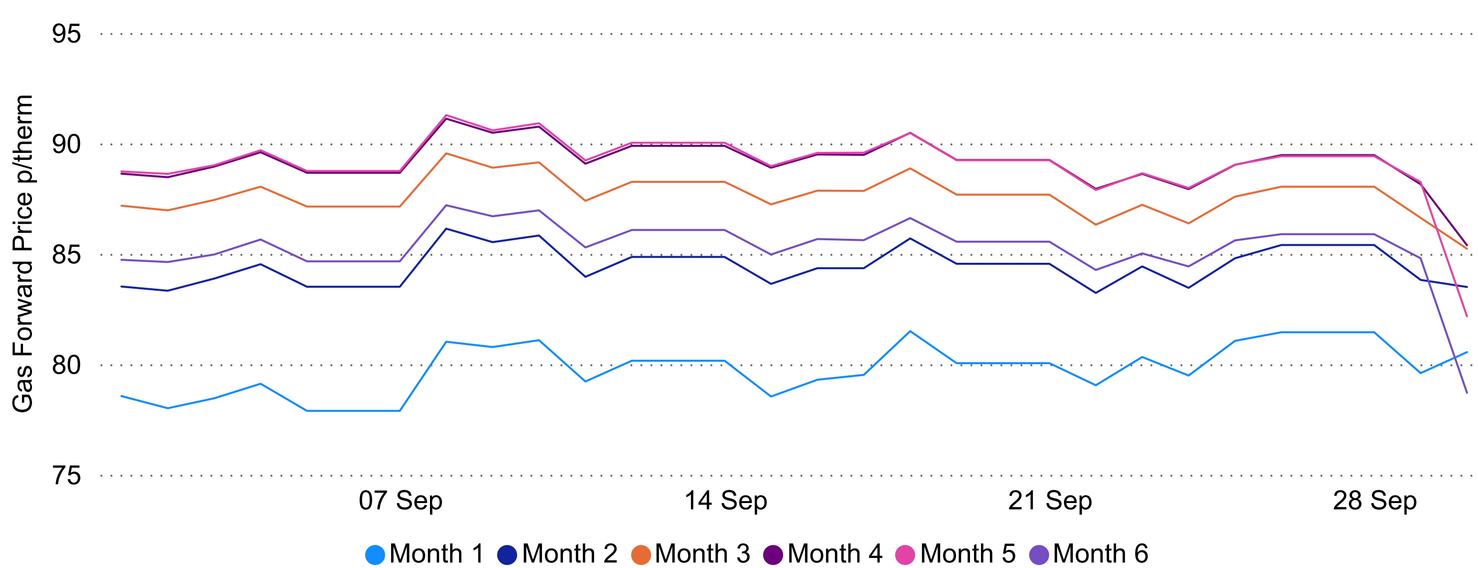
Gas Price September 2025

79.23
Monthly Average (p/therm)

76.10
Monthly Low (p/therm)

81.33
Monthly High (p/therm)





Gas Prices

Gas prices remained stable once again throughout September, with the monthly average price settled at 79.23 p/therm.

Gas Forward Prices

Forward gas prices have shown an upward trend for Winter 2025 contracts, reflecting market expectations of high seasonal demand.

Carbon Price September 2025

EU Carbon Prices (€/tonne)

€ 76.23
Monthly Average

€ 73.72
Monthly Low

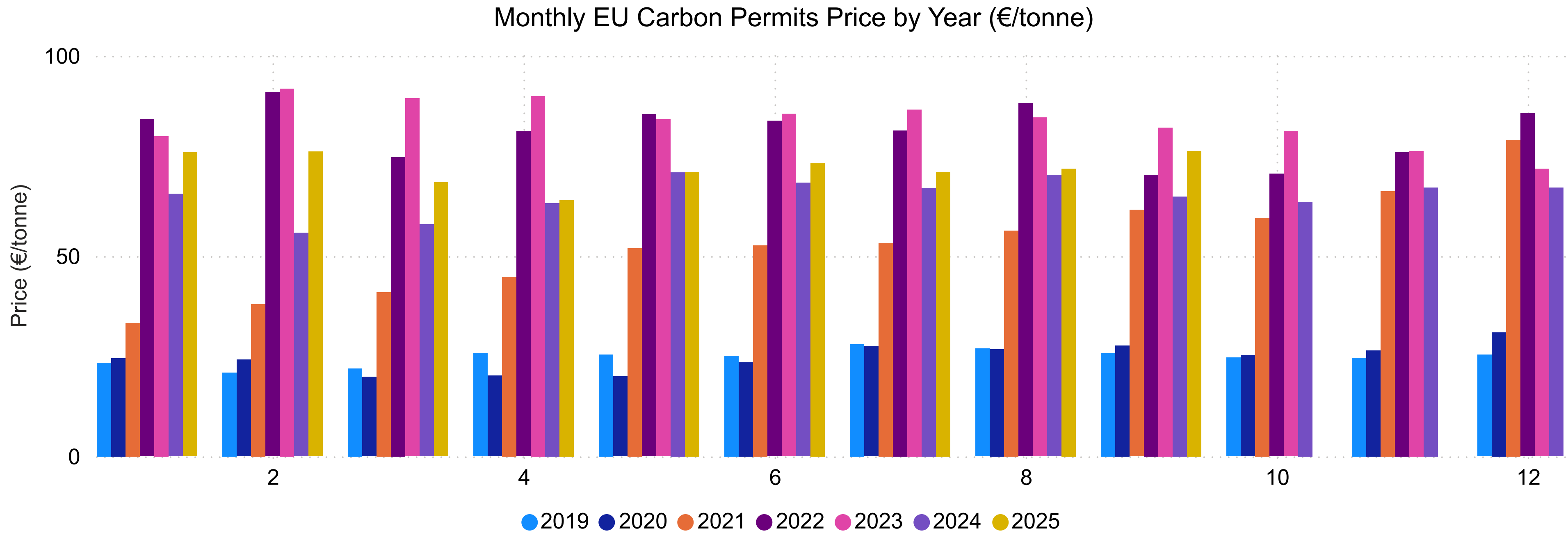
€ 77.53
Monthly High

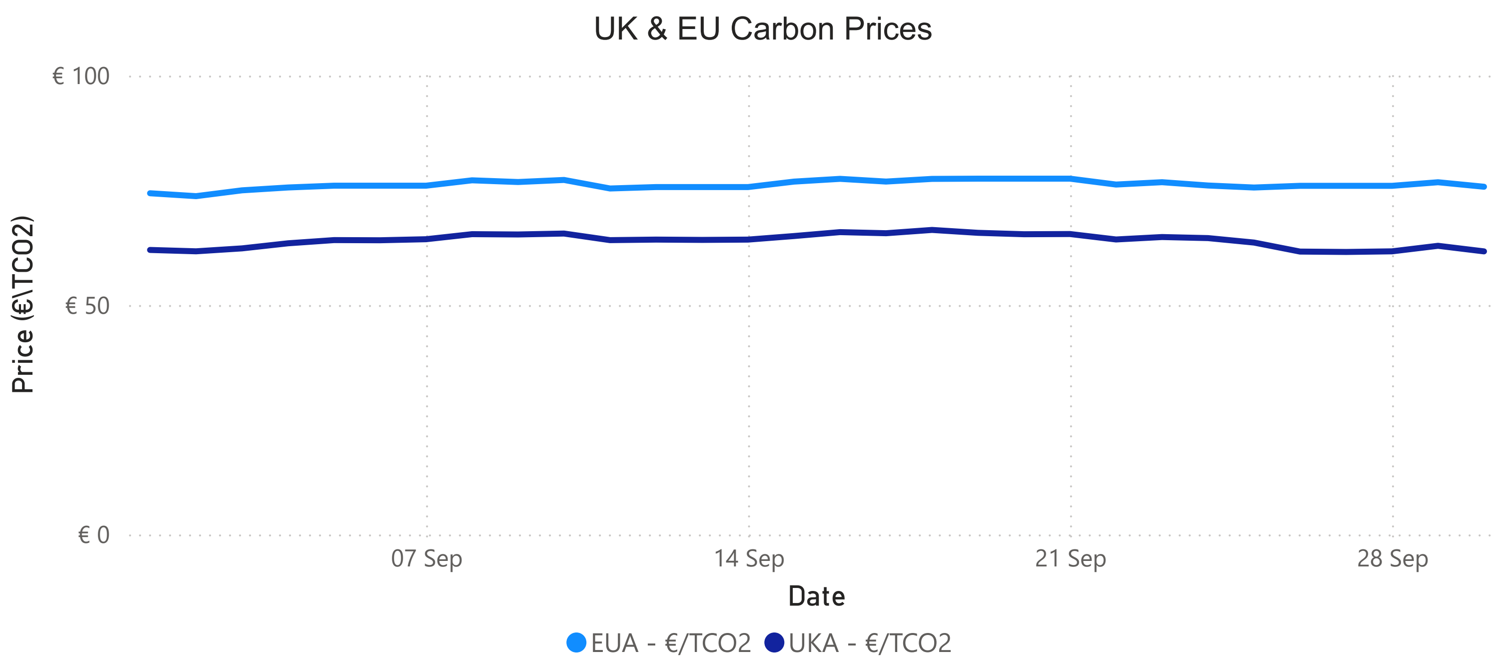
UK Carbon Prices (€/tonne)

€ 64.05
Monthly Average

€ 61.56
Monthly Low

€ 66.36
Monthly High



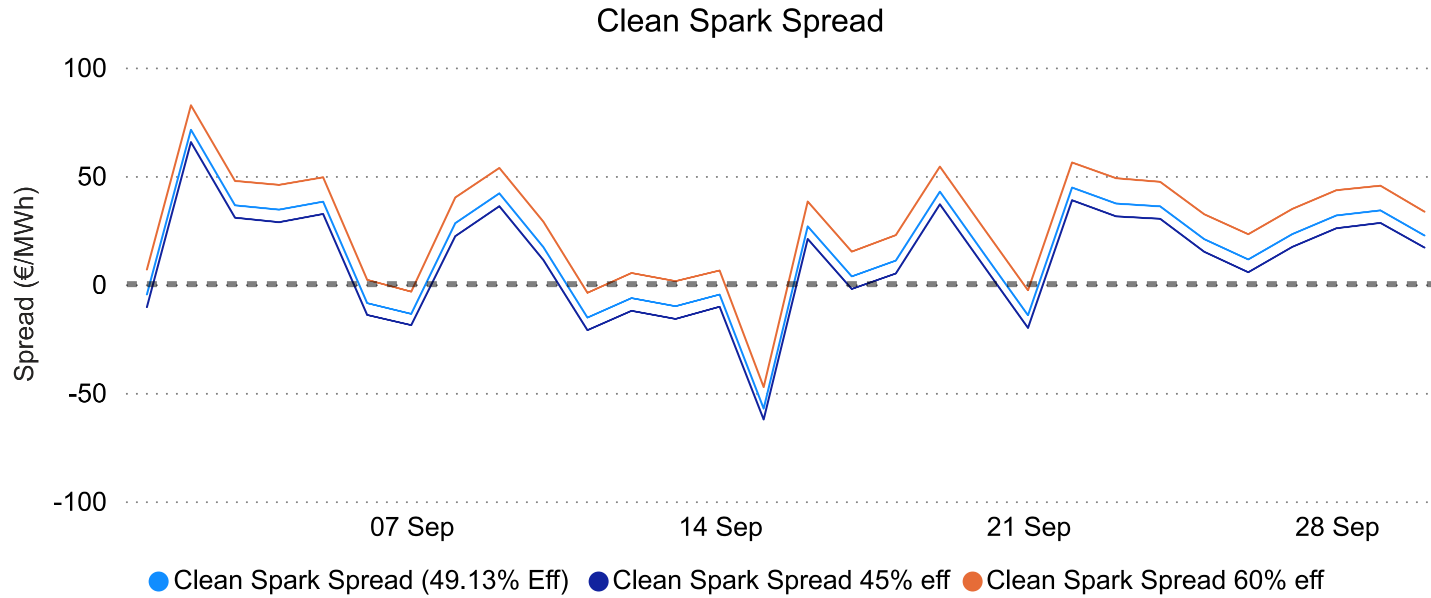


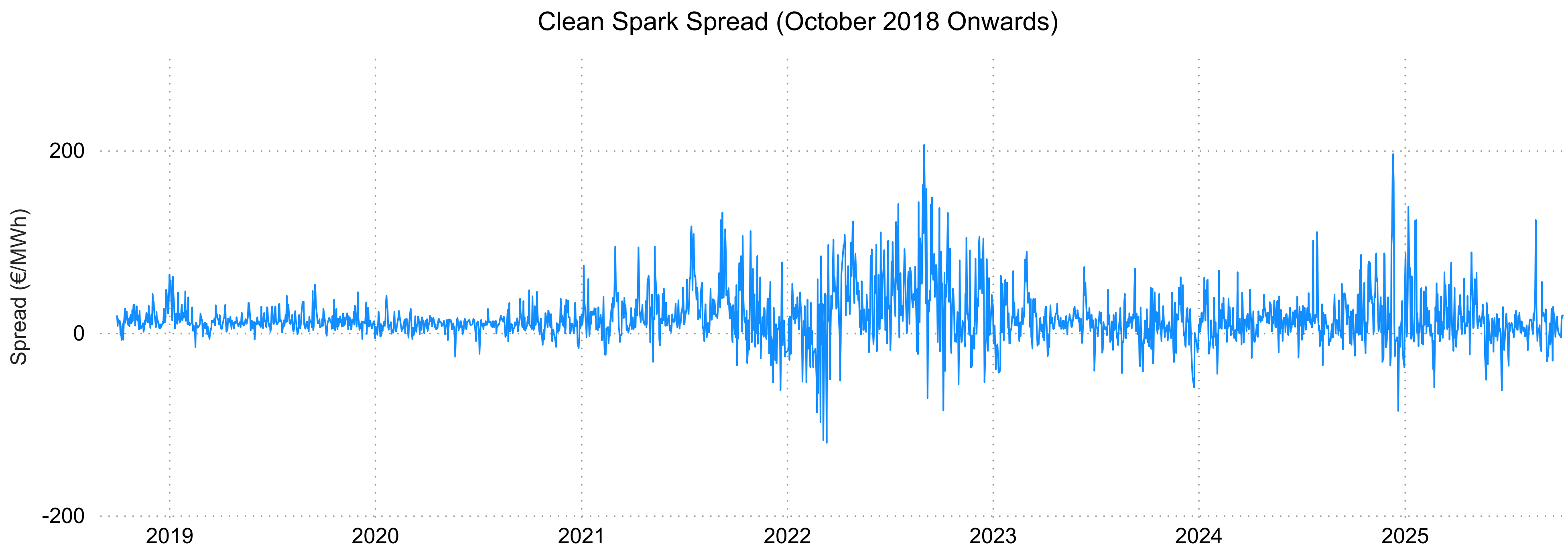
Carbon Prices

Carbon prices averaged €76.23/tonne, with a 6% increase on average from last month.

Spark Spreads
September 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

Clean Spark Spread remained generally positive throughout the entire duration. However, there were a few occurrences of negative Spark Spread, notably on 15th September. This is attributed to strong wind generation.