ANNUAL REPORT

October 2023 to September 2024

SEM committee

Contents

		Page
1.	Foreword from the SEM Committee	4
2.	The Year in Summary	6
3.	How the SEM works	8
4.	Market performance	14
5.	Interconnectors	24
6.	Forwards market	26
7.	Capacity Remuneration Mechanism	30
8.	System Services and DS3	34
9.	Market Operation	36
10.	Report on FWP projects 2023/24	44
11.	Glossary	

1. Foreword from the SEM Committee

The focus of the Single Electricity Market Committee (SEMC) during 2023/2024 was on providing a wholesale electricity market that operates in the best interests of consumers across the island of Ireland.

The impact of higher energy prices on consumers, largely driven by international fuel prices, remained a key issue. Falls in wholesale fuel prices continued into 2023/2024. Prices in the Day Ahead Market were 27% lower compared to the same period last year. Interconnector flows between Ireland and Great Britain had a positive impact on prices. While the fall in prices is welcome, consumer prices remain above historic levels, and we continue to pro-actively consider, in line with our powers, how we can make the SEM as competitive as possible.

Business and household consumers expect that we also will ensure that the SEM delivers a reliable and secure electricity supply. Securing new generation capacity continues to be of paramount importance. In a dynamic market environment with the challenge of net zero and changes to the profile of the generation fleet, new generation must come forward to ensure supply is maintained.

Fourteen capacity auctions have now been run in total. Following an undersubscribed T-4 2027/2028 auction in October 2023, we worked with industry – including holding a workshop in January 2024 – to plan a way forward on future auctions. This led to us progressing a T-4 2028/2029 auction with early delivery incentives. Intermediate Length contracts for generation were also introduced that de-risked investment in refurbishment for existing capacity. We will continue to pro-actively take steps to ensure upcoming auctions are a success.

The need to improve the approach to assessing the reliability of evolving power systems on the island of Ireland saw further engagement with the TSOs on the development of the first National Resource Adequacy Assessment (NRAA). The NRAA will evolve the existing Generation Capacity Statement methodology and will support signalling future system outlook and requirements of the market.

Our work continued to optimise the operation of the SEM to help facilitate the integration of more renewables onto the system. Significant progress was made towards introducing a competitive framework for the delivery of system services, this work will continue into 2024/2025.

In an exceptionally busy year, we completed or partially completed 77% of the projects we set out to achieve across this year. We took steps to enhance how our teams work introducing, for example, new programme management arrangements for the resourcing requirements of All-Island programme workstreams. The demands of the past year and the expansive nature of the work carried out by our teams, illustrates the commitment, professionalism and responsiveness of our Regulatory Authority teams, for which the SEMC is immensely grateful. We also thank Aoife McEvilly and Bill Emery, longstanding SEMC members, who both stood down from SEMC during the year for their tremendous contribution over the years and wish them well for the future.

Finally, we recognise the co-operation of our partners in government departments in Ireland and Northern Ireland, market participants and other key stakeholders as we work to achieve our common goals. Their contribution is critical to ensuring the effective operation of the SEM both now and into the future.

Dr. Tanya Harrington

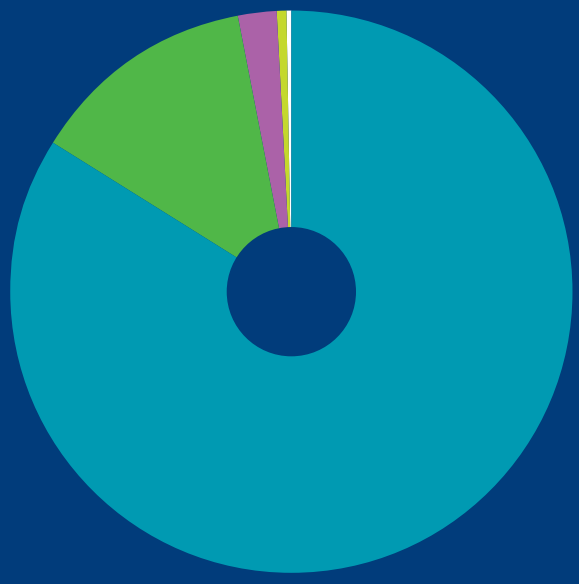
SEM Committee Chairperson

2. The Year in Summary

KEY HIGHLIGHTS

- A reduction in the price of wholesale gas has seen prices in the day-ahead market fall by 27%
- The day-ahead market is worth over €6 billion
- Over 82% of ex-ante volumes were traded through the day-ahead market
- Gas prices were 30% lower and the six-month forward gas price was 48% lower compared to the year prior
- The total average availability of conventional generation was 77.2% and DSU total average availability was 20.4%
- Three capacity auctions ran across the year for delivery of capacity one and four years in advance

Ex-ante market share by volume



- DAM - 81.81%
- IDA1 - 15.54%
- IDA2 - 1.99%
- IDA3 - 0.63%
- IDC - 0.04%

DS3

Progression of SNSP increased from 50% to 75% since 2015

Interconnectors

94%

of interconnector flows, when flowing in the right direction, flow from the lower to the higher price zone.

PRICES

Prices in the day-ahead market were down by 27%

The total value for each market is:
€851 million in IDA1;
over €110 million in IDA2; €39 million in the IDA3;
and over €2.3 million in the IDC market.

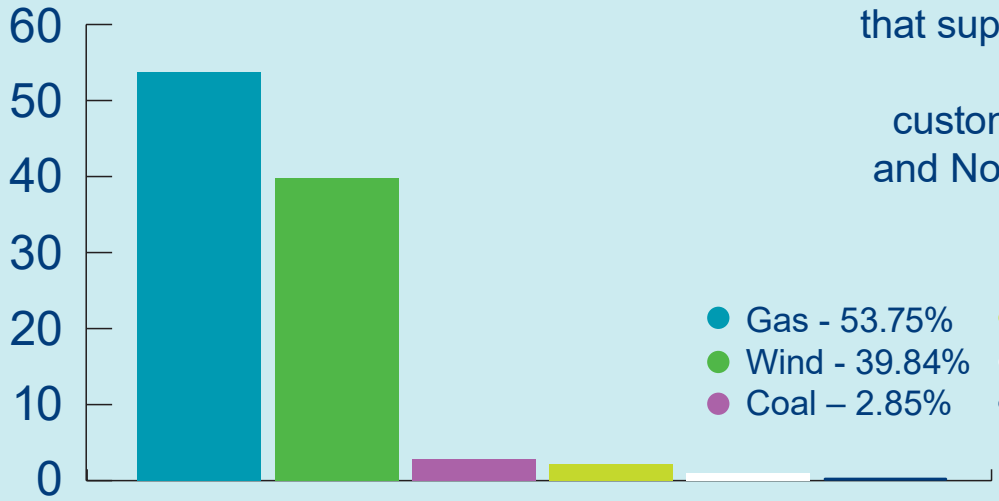
CRM

One auction completed this year:

T-1 2024/2025

Procured 784.971 MW of capacity
Total cost circa €116million

Fuel Mix in the DAM



The fuel mix illustrates the type of generation that supplies business and domestic customers in Ireland and Northern Ireland.

- Gas - 53.75%
- Wind - 39.84%
- Coal – 2.85%
- Hydro - 2.13%
- Peat - 1.03%
- Oil - 0.4%

3 How the SEM works

The SEM is the wholesale market on the island of Ireland where electricity generators and suppliers trade the power used by homes and businesses across the island of Ireland.

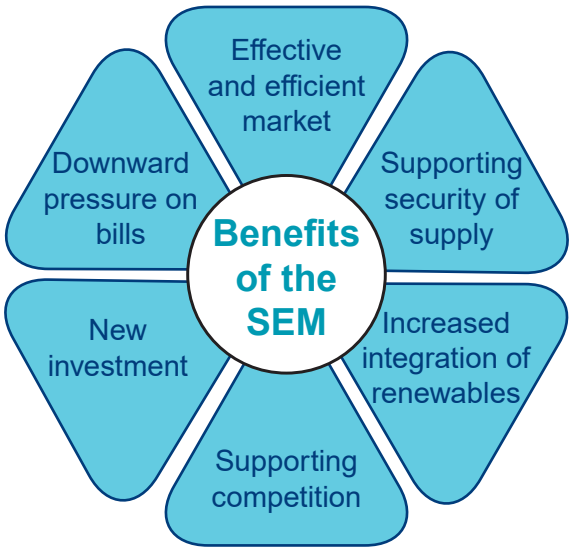
Much has changed since the SEM was established in 2007, not least the significant increase of renewable generation, introduction of new technologies and the increased advantages to be gained from interconnection with other markets.

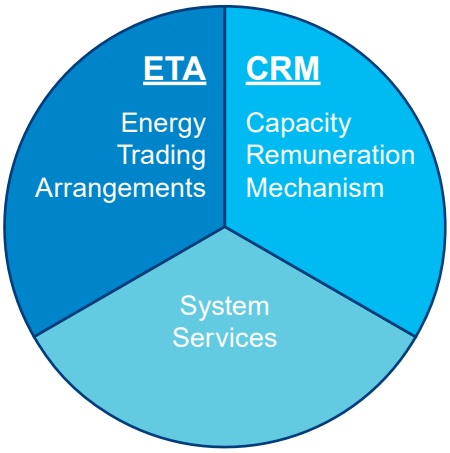
To take advantage of new opportunities and to improve the efficiency, competitiveness and operation of the market, new operational arrangements were put in place from 1 October 2018. This project, known as ISEM, sought to make best use of all the power on the system and ensure that interconnectors operate in the most efficient way. Compliance with the EU target model and alignment of cross border trading arrangements within the region was also at the core of the project.

Benefits of the SEM

The SEM brings significant benefits for all consumers. It provides trading opportunities for generators, suppliers and investors while delivering an efficient and competitive electricity market.

The market is designed to support competition, allow increased renewables on the system, encourage new investment and support security of supply, all while placing a downward pressure on prices.



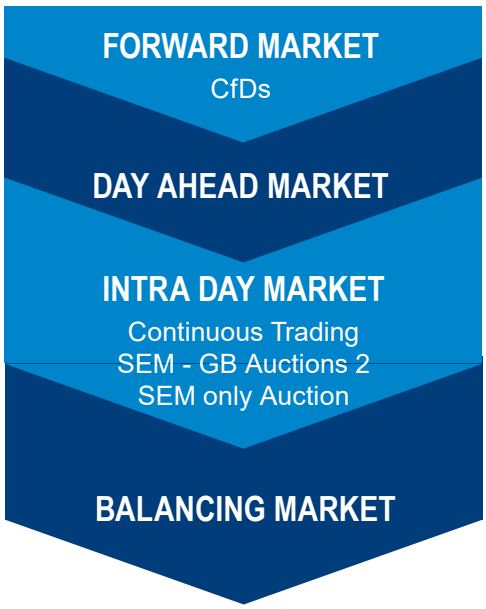


The SEM comprises three distinct areas that provide revenue streams relating to the services provided by market participants. The Energy Trading Arrangements (ETA), Capacity Remuneration Mechanism (CRM) and System Services make up the three main pillars of the market.

Energy Trading Arrangements (ETA)

The ETA are the activities comprising wholesale energy trading, which make up the major portion of revenue and cost for the majority of market participants. A key principle of the SEM is the flexibility it offers for those who wish to sell and purchase power. A number of markets each spanning different trading time frames, have been designed to enable increasing levels of competition that place a downward pressure on prices whilst ensuring that the supply of power matches demand.

The SEM Energy Markets are broken down between forward, Day Ahead, Intraday and Balancing.



Forwards market

To manage wholesale electricity price risk and achieve longer-term certainty, forward contracts allow generators and suppliers to contract publicly via Contract for Differences (CfDs). This allows generators to sell a fixed volume for an agreed upon price covering a specific period of time which provides both generators and suppliers with more wholesale price certainty. In the SEM there are regulated and unregulated forward contracts.

Day Ahead Market

	Market Opening	Market Close	Delivery Periods	Coupling
Day Ahead Market (DAM)	11:00 (D-19)	11:00 (D-1)	23:00 - 23:00 (24 * 1 hr.)	SEM Only

The day ahead market (DAM) is the largest ex-ante market by volume and value. Bids and offers can be submitted 19 days before the market closes at 11am the day before delivery. An algorithm, called Euphemia (the acronym for Pan European Hybrid Electricity Market Integration Algorithm), determines the market price and position for all participants on an hourly basis.

Participation in the DAM is not mandatory, but it is the only way of achieving a day-ahead position in the SEM that will minimise exposure in the balancing market. Participants have opportunities to adjust their position by trading in the intraday market.

Intraday Market

Market Name	Order Book Opening	Order Book Closing	Delivery Periods	Coupling
IDM Continuous Trading	11:45 (D-1)	1hr before real time (t-1)	48 * ½ hours	SEM only
IDA-1	23:00 (D -19)	17:30 (D-1)	23:00 - 23:00 (48* 1/2hrs)	SEM – GB
IDA-2	23:00 (D -19)	08:00 (D)	11:00 - 23:00 (24* 1/2hrs)	SEM – GB
IDA-3	23:00 (D -19)	14.00 (D)	17:00 - 23:00 (12* 1/2hrs)	SEM auction only

The intraday market (IDM) allows participants to adjust their physical positions closer to the time power is delivered. The IDM runs right up to one hour before trading and takes account of up to date market information including, for example, unscheduled plant outages or congestion on interconnectors.

The market consists of three daily auctions with IDA-1 and IDA-2 coupled with the GB market via the interconnectors. The third Intraday Auction (IDA-3) is a local SEM auction that is not coupled with the GB bidding area.

Balancing Market

Market Name	Market Opening	Market Close	Delivery Periods	Coupling
Balancing Market	13.30 (D-1)	1hr before real time (t-1)	23:00 – 23:00 (48*1/2 hrs)	I-SEM only

The Balancing Market (BM) is different from the other markets in that it reflects actions taken by the TSO to keep the system balanced and secure. Unlike the other ex-ante markets, participation in the Balancing Market is mandatory.

The BM trading day is divided into 48 (30 minute) imbalance settlement periods, within which are six (five minute) imbalance pricing periods. The submission window for market data opens 19 days ahead of the trading day and closes one hour before the start of each 30-minute imbalance settlement period. The imbalance prices for each five minute imbalance pricing period are used to calculate the imbalance settlement price for each 30-minute imbalance settlement period.

A rules-based, flagging-and-tagging process is used to determine the initial imbalance price in each five minute imbalance pricing period. The flagging-and-tagging process prevents bids and offers that are scheduled due to a system constraint, or where units are operating at a unit constraint, from influencing the imbalance price.

Capacity Market

The Capacity Remuneration Mechanism (CRM) allows generators to recover their fixed costs. It also helps to ensure there is enough capacity to meet demand and that this capacity is purchased at a competitive price via an auction.

Auctions for capacity required four years before delivery help to encourage new investment by providing a clear and pre-determined revenue stream. By promoting competition between market participants, it ensures payments more closely reflect the value provided by the capacity

Those generators that do not deliver the capacity when needed are subject to a financial penalty.

Governance arrangements and market structure

The SEM Committee are the decision making authority for all Single Electricity Market matters. Established in 2007 following the introduction of the SEM, legislation required the establishment of SEM governance in the form of a SEM Committee.

The Committee consists of three Commission for Regulation of Utilities (CRU) (currently only two) and three Utility Regulator (UR) representatives along with an independent and a deputy independent member appointed jointly by the Department for the Economy and Department of the Environment, Climate and Communications.

On 25th February 2014 the UR and CRU signed a Memorandum of Understanding that outlines how the two organisations will maintain and facilitate effective and beneficial co-operation and collaboration. This signifies the ongoing commitment of both regulatory authorities to work together to ensure the effective delivery of both joint and separate statutory remits and for the customers of the energy and water sectors they regulate. They are separately responsible for the licensing of market participants, implementation of market codes as well as the regulation of the network operators.

The SEM is operated by the Single Electricity Market Operator (SEMO). This is a joint venture between the transmission system operators in Ireland (EirGrid) and Northern Ireland (SONI). EirGrid and SONI are also the Nominated Electricity Market Operators (NEMOs) for Ireland and Northern Ireland respectively. The NEMO is designated a responsible for the day-ahead and intraday market coupling in each national or regional bidding zone.

Detailed market rules and procedures govern the SEM with market behaviour scrutinised by the Regulatory Authorities (RAs) market monitoring unit.


Translink
www.translink.co.uk
DW SPORTS STORES

4 Market Performance

The SEM ex-ante markets are traded via several auctions at the day ahead and intraday stage. These auctions are complemented by continuous intraday trading. For each trading day, there are four auctions: Day Ahead (DAM), Intraday 1 (IDA1), Intraday 2 (IDA2) and Intraday 3 (IDA3).

The DAM and IDA3 are local auctions in the sense that only orders originated by market participants established in the SEM are matched. The IDA1 and IDA2 are coupled auctions, which means that orders originated in the SEM and GB are matched. Because of the coupling process, the capacity of the SEM interconnectors is allocated in these two auctions. Interconnector flows are allocated in the direction of the higher price zone.

The SEM Trading Day starts at 23:00 (GMT) D-1 and ends at 23:00 (GMT) D. The SEM DAM and IDA1 take place in the day ahead of the delivery while the IDA2 and IDA3 take place within the day of the delivery and clear volumes for the remaining hours within the day D.

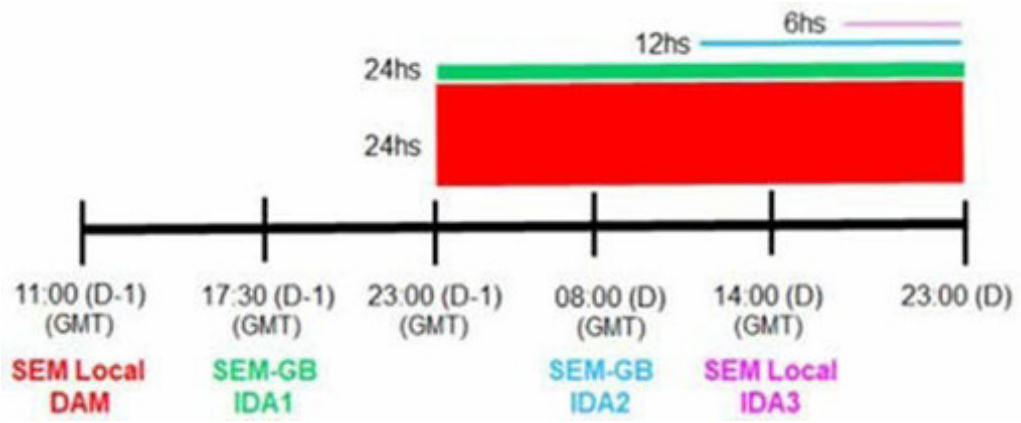


Figure 1: Timeframes and approximate volumes traded in SEM ex-ante markets

Figure 2. provides a snapshot of the overall market outcomes across the year. Explained in more detail across this report, this year saw significant volatility in wholesale gas costs, peaking in Oct and Nov-23 at 104.9p/therm and dropping to a monthly low of 63.37p/therm in Feb-24. This corresponds to peak monthly DAM prices in October of €125.54/MWh and monthly DAM low price of €84.6/MWh.

Monthly Averages	Oct-23	Nov-23	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24
DAM (€/MWh)	125.54	122.9	88.97	99.9	84.6	86.67	88.52	107.75	107.74	110.94	100.44	112.73
% Change from previous month	12%	-2%	-28%	12%	-15%	2%	2%	22%	0%	3%	-9%	12%
% Change from previous year	-8%	-14%	-68%	-38%	-47%	-40%	-30%	2%	-8%	15%	-6%	1%
Actual System Demand (MW)	4516	4873	4862	5151	4946	4833	4610	4356	4193	4279	4255	4467.76
% Change from previous month	4%	8%	0%	6%	-4%	-2%	-5%	-6%	-4%	2%	-1%	5%
% Change from previous year	4%	5%	0%	5%	3%	0%	3%	2%	0%	4%	2%	3%
Actual Wind Generation (MW)	1363	1811	2446	1854	2000	2072	1496	894	1072	883	1437	1263
% Change from previous month	-2%	33%	35%	-24%	8%	4%	-28%	-40%	20%	-18%	63%	-12%
% Change from previous year	-33%	-19%	49%	-7%	-1%	19%	-3%	1%	22%	-33%	3%	-9%
Gas Price p/therm	104.88	104.97	84.2	74.87	63.37	68.18	71.69	76.69	81.51	75.07	84.71	86.94
% Change from previous month	15%	0%	-20%	-11%	-15%	8%	5%	7%	6%	-8%	13%	3%
% Change from previous year	3%	-19%	-68%	-52%	-53%	-39%	-29%	6%	5%	6%	2%	-5%
Carbon Price (€/Tonne)	81.10	76.25	71.79	65.52	55.79	57.94	63.25	70.90	68.29	67.00	70.12	64.86
% Change from previous month	-1%	-6%	-6%	-9%	-15%	4%	9%	12%	-4%	-2%	5%	-8%
% Change from previous year	15%	1%	-16%	-18%	-39%	-35%	-30%	-16%	-20%	-23%	-17%	-21%
Coal Price ($/tonne)	131.80	122.16	118.31	107.65	96.84	111.78	118.13	106.15	109.54	105.93	121.36	114.96
% Change from previous month	9%	-7%	-3%	-9%	-10%	15%	6%	-10%	3%	-3%	15%	-5%
% Change from previous year	-52%	-43%	-51%	-38%	-29%	-17%	-14%	-11%	-3%	-5%	5%	-5%
EWIC % Import Periods	86.90%	68.78%	56.38%	69.76%	69.10%	63.78%	81.94%	84.98%	85.90%	94.59%	85.29%	81.53%
EWIC % Export Periods	2.99%	9.11%	20.36%	14.78%	11.00%	11.32%	4.86%	0.67%	3.72%	1.11%	7.56%	5.52%
EWIC % Not Flow Periods	10.11%	22.11%	23.25%	15.46%	19.90%	24.90%	13.19%	14.35%	10.38%	4.30%	7.15%	12.95%
Moyle % Import Periods	92.31%	83.47%	67.81%	78.16%	79.59%	79.00%	87.40%	94.96%	92.47%	96.77%	80.71%	91.98%
Moyle % Export Periods	7.66%	16.50%	32.16%	21.81%	20.34%	20.83%	12.50%	5.27%	7.53%	3.23%	10.44%	7.60%
Moyle % Not Flow Periods	0.03%	0.03%	0.03%	0.03%	0.07%	0.17%	0.10%	0.03%	0.00%	0.00%	8.84%	0.42%

Figure 2: Market overview

Day-ahead market

In total, the value of the DAM market for the year was over €4.3 billion and the volumes and prices traded are illustrated in **Figure 3**.

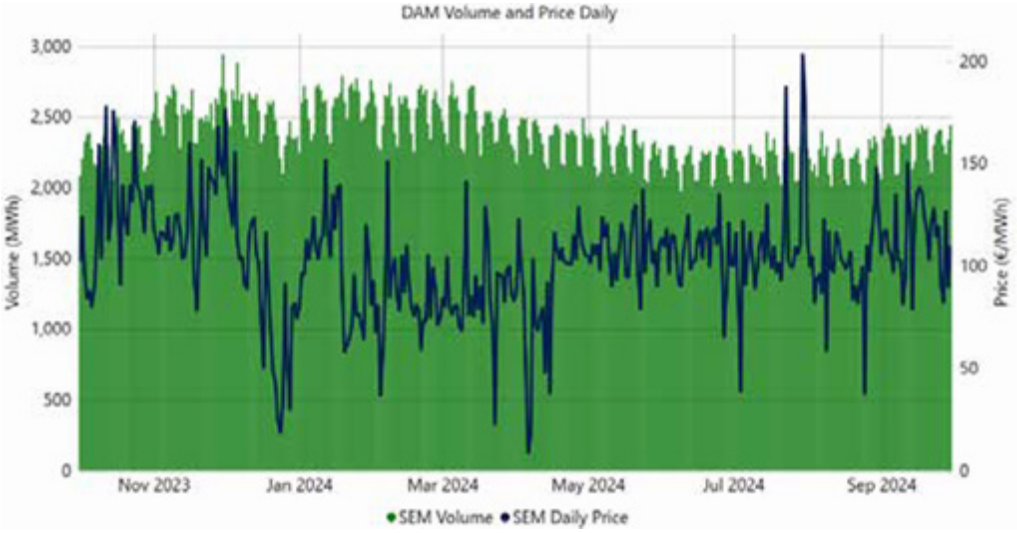


Figure 3: DAM Volume and Price Daily

The average daily price in the DAM was €103.11/MWh during the period from October 2023 to September 2024. The lowest price recorded in an hourly period was -€10.19/MWh and the maximum price recorded in a single period was

€304.36/MWh. Prices in the DAM are 27% lower compared to the same period last year from October 2022 to September 2023. The reduction in energy prices can be largely attributed to a substantial decline in wholesale gas prices, which are predominant in thermal generation within the SEM. In Q1-2024, gas prices decreased by approximately 50% compared to the same period in 2023. This decline was driven by a diversification of gas supply sources, enhanced gas storage capacity, and milder winter weather in early 2024, which reduced heating demand. However, during the period from May 2024 to October 2024, a slight increase in gas prices was noted.

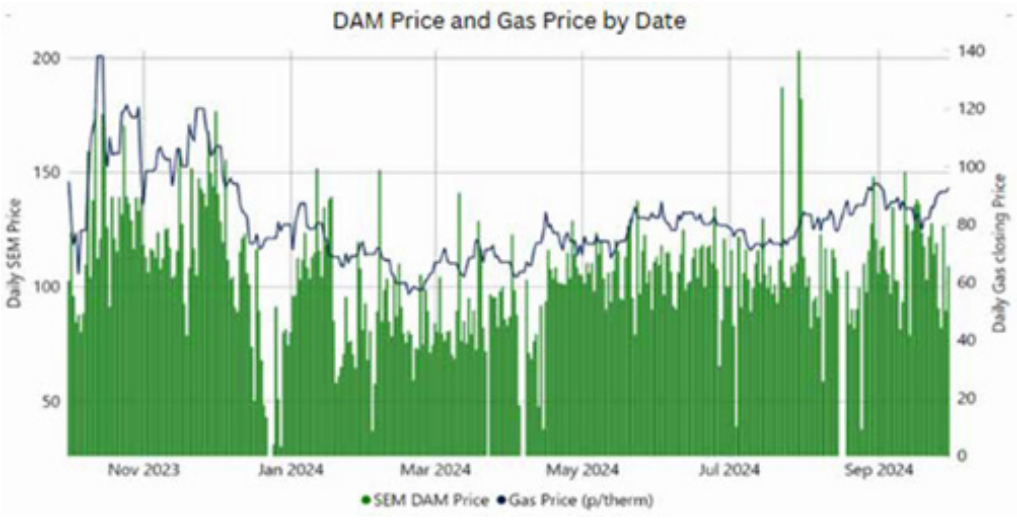


Figure 4: DAM Prices and Gas Price by Date

Figure 5 below illustrates the average volume and price across each hourly period in the Day-Ahead Market (DAM), highlighting the correlation between higher prices and peak demand. Average gas prices from October 2023 to September 2024 were 30% lower compared to the equivalent period last year, with six-month forward prices also reflecting a 48% decrease relative to the previous year.

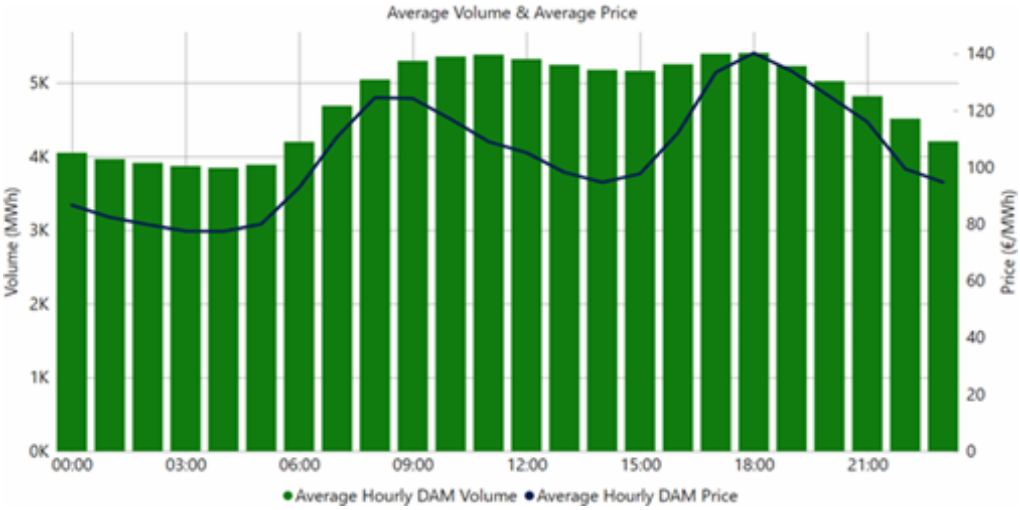


Figure 5: Average Volume and Average DAM Price in Each Hourly Period

The concentration of trading in the DAM, compared to the other markets before final balancing of supply and demand in the balancing market, has meant that over 81% of ex-ante volumes were traded through the DAM across October 2023 to September 2024, remaining comparable from the period October 2022 to September 2023 (84%). This is illustrated in **Figure 6**, which shows the total daily volumes in each ex-ante market and **Figure 7** translates this into a market share %.

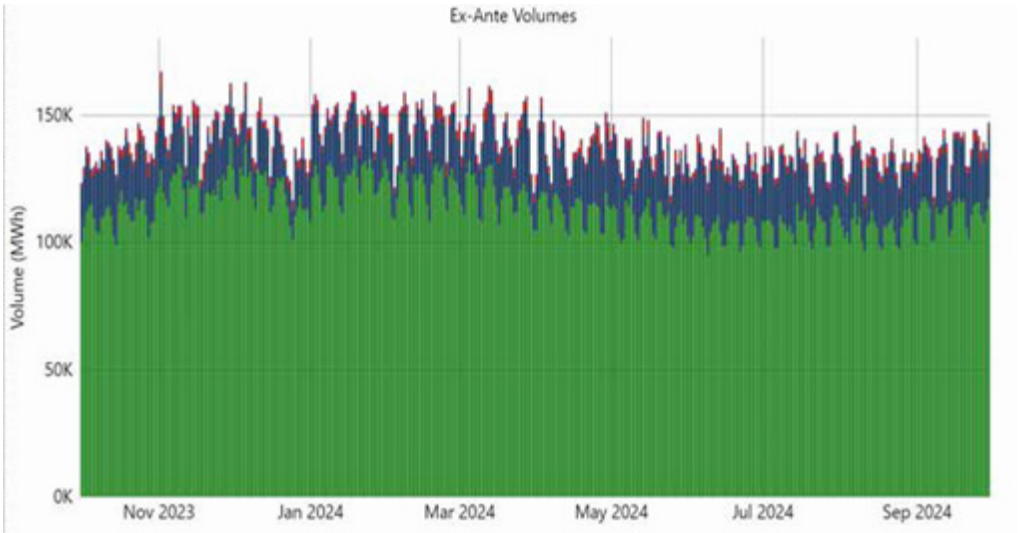


Figure 6: Daily Market Volume

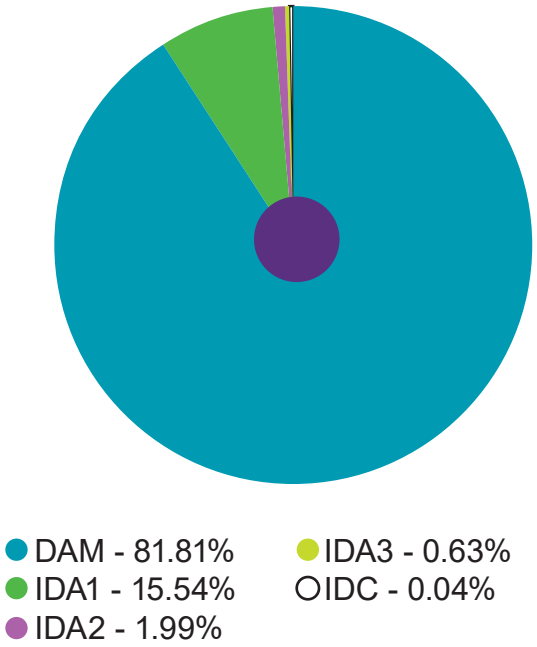


Figure 7:
Market Share by Volume

Wind and the Day Ahead Market

DAM prices are significantly impacted by the level of wind on the system and the wind forecast at the day ahead stage. Figure 8 shows that the level of wind can vary significantly over the year, having an important influence on the fuel mix and price formation.

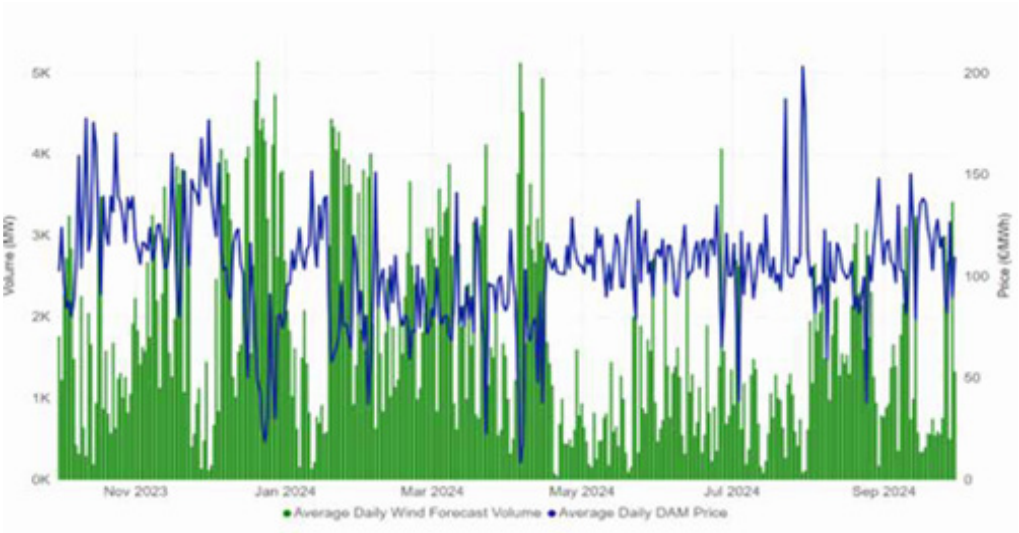


Figure 8:
Average Daily Wind Forecast and Average Daily DAM Price

Lower prices can be directly correlated with high wind, while higher prices can be observed in periods when the level of wind is reduced. **Figure 9** illustrates the relationship between prices the wind volume across the year, highlighting the highest and low prices observed in the day-ahead market during the year.

High Price - Low Wind				Low Price - High Wind			
Date	Time	Price (€/MWh)	Wind Forecast (MW)	Date	Time	Price (€/MWh)	Wind Forecast (MW)
15/01/2024	17:00	304.36	94	24/12/2023	05:00	-10.19	4811
15/10/2023	19:00	300.00	148	28/12/2023	04:00	-9.29	4514
15/10/2023	18:00	299.00	154	24/12/2023	04:00	-9.17	4763
24/10/2023	18:00	299.00	490	24/12/2023	03:00	-8.94	4668
23/07/2024	16:00	298.33	22	24/12/2023	06:00	-8.26	4762

Figure 9: Daily Average DAM Prices and Daily Average Wind Volumes

Figure 10 shows that highest prices are all occurring at evening peak demand with the lowest prices overnight where demand is on the system is lower.

Day Ahead Market price comparison

Many factors impact on DAM prices, including of levels of demand, wind, fuel prices, carbon prices and power plant availability. **Figure 10** compares the seven-day rolling average DAM price in 2023/2024 with the DAM price in 2022/2023. Over 2023/2024, the average DAM price has decreased (27%) compared to the same period in 2022/2023.

Figure 10: DAM Price 7 Day Rolling Average 2022/2023 and 2023/2024

Intraday Market

The intraday markets across the year have allowed market participants to refine their market position by buying or selling nearer to real time, when power is generated and consumed. This assists market participants to balance their generation or consumption with their contracted position so that any imbalance between them is not subject to potential charges in the balancing market.

Since January 2021, when the new market coupling arrangements were introduced, the IDA1 and IDA2 are the only markets coupled with GB and allocation of interconnection capacity takes place solely during these auctions.

The IDA1 auction represented 15.54% of the total ex-ante market volume, while the IDA2 auction comprised 1.99%, IDA3 accounted for 0.63%, and the Intra-Day Continuous (IDC) market contributed 0.04%. These figures follow similar trends observed in 2022/2023, with only IDA1 showing an increase of 2.37% compared to the same period last year.

Average 2023/2024 prices in the Intra-Day markets have fallen significantly from 2022/2023, as with the Day-Ahead prices, due to the falling wholesale gas prices mentioned above. Average price for IDA1 €101.90, IDA2 €110.94, IDA3 €122.47 and the IDC €115.40. The total value of these markets over the year has also decreased significantly due to the lower prices. The total value for each market is €851m in IDA1; over €110m in IDA2; €39m in the IDA3 and over €2.3m in the IDC market.

The IDC market, unlike the other intraday markets is not an auction in which all trades in a particular period are cleared at a single price. It involves buyers and sellers posting volumes and prices on an order book visible to the market that are cleared by sellers and buyers accepting the volumes and prices offered.

Prices in all markets generally move in a similar direction. **Figure 11** below shows this trend across the year.

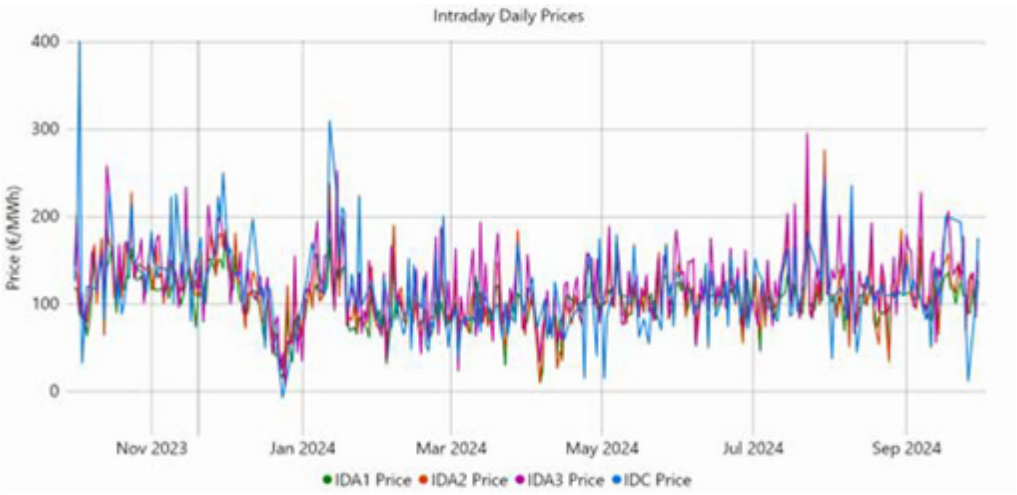


Figure 11:
Intraday Market
Average Daily Price

Balancing Market

The balancing market is designed to ensure levels of supply meet the level of demand in real time. If for example, the level of demand is higher than expected, the market operator might instruct a generator with available capacity to increase their output.

Balancing market prices show relatively higher volatility in the market in terms of prices.

Figure 12 below shows the Imbalance Settlement Price across the year.

Figure 12: Imbalance Settlement Price

Highest IB Price

Date	Imbalance Settlement Price
30/04/2024 07:00	471.88
30/04/2020 06:30	447.33
06/08/2024 07:30	441.37
07/01/2024 18:00	434.70

Lowest IB Price

Date	Imbalance Settlement Price
31/05/2024 10:30	-139.71

Yearly Average: €101.99

Fuel Mix in the DAM

The fuel mix illustrates the type of generation that supplies business and domestic customers in Ireland and Northern Ireland, including the role of renewable generation. **Figure 13** shows that gas was the predominant fuel used for generation in the SEM with 53.75% of metered generation. Wind made up 39.84%, with 2.85% coal and 2.13% hydro. The remaining generation was made up of peat, biomass, distillate, oil and pump storage.

Small scale generation, generating power less than 10MW, does not have to participate directly in the market. The fuel mix figures outlined does not therefore include many of the small-scale generators across the island. This generation is however captured in the overall fuel mix figures for the year as described later in this report.

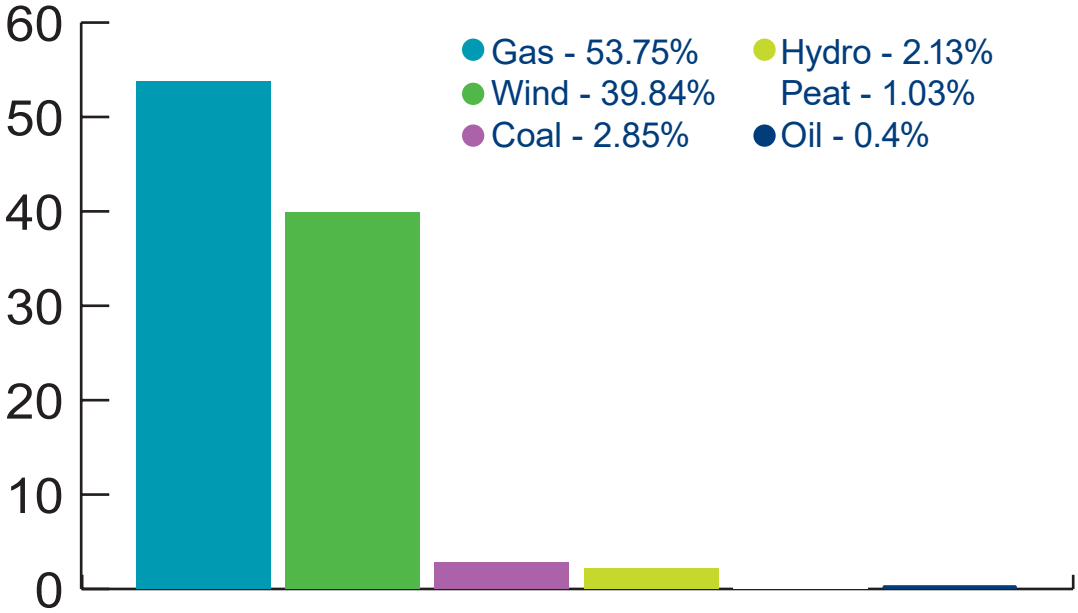


Figure 13: Metered Generation by Fuel Mix

System average availability

The system operators track the availability of conventional generation across the market and publish a monthly report detailing generator performance. Across the year, the total average availability of conventional generation was 77.2%, for Battery was 97.9% and DSU total average availability was 20.4%. (Source: EirGrid Availability Report September 2024).

Planned and forced generation outages can have a significant impact on overall market performance, notably on end market prices. The system-wide availability in SEM has increased this year compared to the past few years due to the introduction of a number of new plants.

Supplier behaviour

The SEM continues to provide suppliers with a competitive environment to purchase energy for their retail offerings to final consumers. Over the period suppliers have continued to directly participate across the markets, while the market arrangements have continued to enable suppliers the ability to play a role in setting prices instead of being only price takers.

Suppliers have continued to accurately calculate their customers' demand and sought to provide for this mainly in the DAM, which has accounted for the majority of volumes traded before balancing. The four Intraday markets have facilitated further participation through three auctions and a continuous trading market, providing flexibility to refine their position in light of changing circumstances. The Intraday 1 auction has seen a continuous increase in volumes traded from 1 January 2021 when new market coupling arrangements with GB meant the markets are now only coupled across the IDA1 and IDA2 markets with the DAM excluded.

Suppliers can enter into contracts for difference (CfD) at prices determined by an administered methodology in the forward market, which are sold in advance of the Day Ahead and Intraday markets. These contracts enable suppliers to lock-down the price they will have to pay in the SEM. They also ensure that there is adequate energy generation capacity in the market through funding regular payments to generators who have been successful in auctions to supply their capacity.

This mechanism in turn protects suppliers from very high energy prices (those above a strike price) that may occur in some periods. This requires that those generators qualifying for capacity payments pay a charge that remunerates suppliers for the costs that exceed this strike price.

5 Interconnectors

The SEM features two existing interconnectors to the GB market: the Moyle Interconnector, a 500 MW HVDC link between Scotland and Northern Ireland, and the East-West Interconnector, a 500 MW HVDC connection between Ireland and Wales.

Prior to 1 January 2021, the two interconnectors Moyle and EWIC were linked to the SEM via Day Ahead market coupling. From 1 January 2021 onwards these two interconnectors are no longer linked through day ahead coupling but are now linked to GB via the intraday auctions IDA1 and IDA2. These new arrangements were put in place to reflect the UK exit from the Single European Day Ahead Market Coupling (SDAC). The current intraday coupling between the SEM and GB operates outside of the pan European framework market coupling between EU bidding zones.

The Intraday Coupling with GB was in operation prior to the EU exit and from 1 January 2021 it became the exclusive route for allocation of capacity

between the two markets. The market coupling principles remain the same (i.e. Interconnection capacity continues to be allocated via implicit auctions). Within an efficient market coupling mechanism, Interconnectors should flow power in the direction of the market with higher prices at a particular trading period.

Interconnectors increase the social welfare by reducing price differentials between the two markets. That improves the efficiency of dispatch and price formation by enabling generation that would otherwise be curtailed, in times of surplus, to be exported. Conversely interconnector's flows can mitigate the price shocks during periods of scarcity by injecting additional generation into the SEM.

Figure 14 shows the volumes imported and export across both SEM Interconnectors.

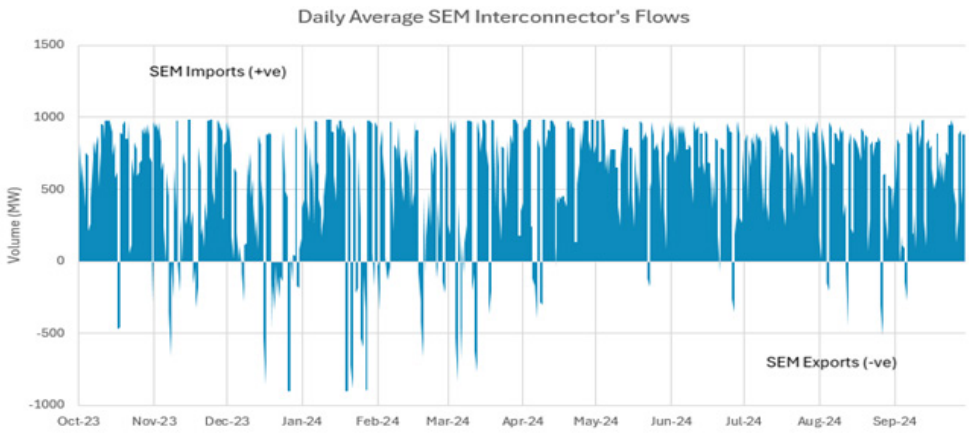


Figure 14:
SEM IC Flows

Figure 14 shows the average volumes allocated between SEM and GB. As it can be seen for the period in question, imports to GB were higher than exports. During this period 87.43% of the Interconnector flows have been allocated from the GB to SEM direction.

6 Forwards Market

To manage wholesale electricity price risk and achieve longer-term certainty, forward contracts allow generators and suppliers to contract publicly via Contract for Differences (CfDs). This allows generators to sell a fixed volume for an agreed upon price covering a specific period of time which provides both generators and suppliers with more wholesale price certainty. In the SEM there are regulated and unregulated forward contracts.

Regulated contracts

Directed Contracts (DCs) are currently the only regulated forward contract in the SEM. DCs are a key feature of our approach to mitigating market power. Generators with a large market share (ESB) are required to sell electricity forwards (DCs) to suppliers. The objective of DCs is to ensure generators with a large market share cannot unduly dominate the market. DCs remove the incentives on the incumbent generators to attempt to profit from the exertion of market power. These contracts mitigate market power by reducing the incentive for the market participants to submit bids above competitive levels, or otherwise withhold capacity, to influence current spot prices or future contract prices.

DC subscription windows are typically held every quarter, with DCs being allocated on a rolling basis up to five quarters ahead. There are three DC products in the market: baseload, mid-merit, and peak. Supply companies can elect to subscribe for any given product for which they are eligible in any particular quarter from the incumbent generator (i.e. ESB).

Since Quarter four 2023, four DC rounds have been successfully held.

A total of 1779 MW of Quarter four 2023 to Quarter three 2024 products were purchased by suppliers. 37 MW, 1073 MW and 670 MW of Baseload, Mid-Merit and Peak products were purchased respectively. The average prices of each product were: Baseload €304.0 / MWh, Mid-Merit €168.9 / MWh and Peak €240.6 / MWh.

Figures 15 and **16** outline the aggregate volumes purchased and average prices of the specific DC products.

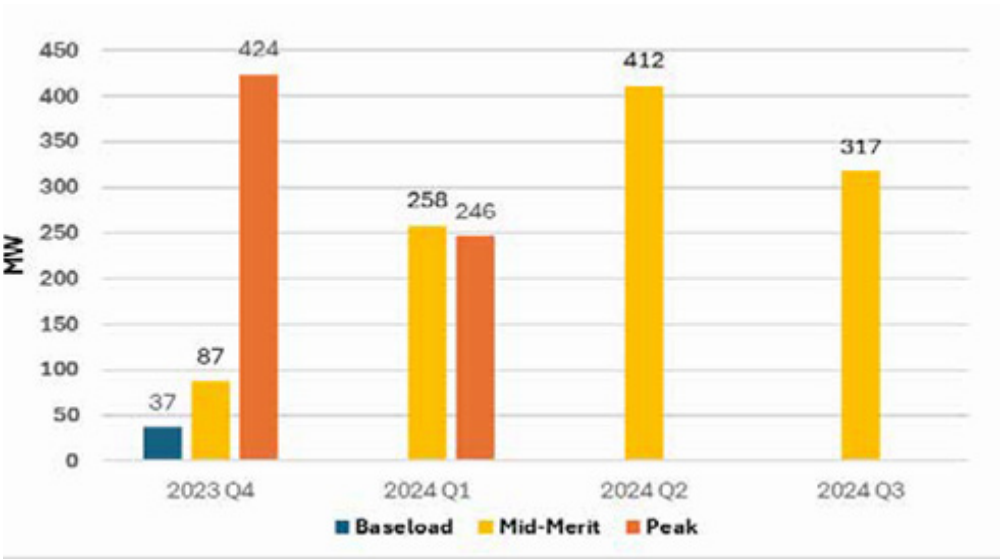


Figure 15: Total Directed Contract Product Volumes Purchased by Suppliers (MW)

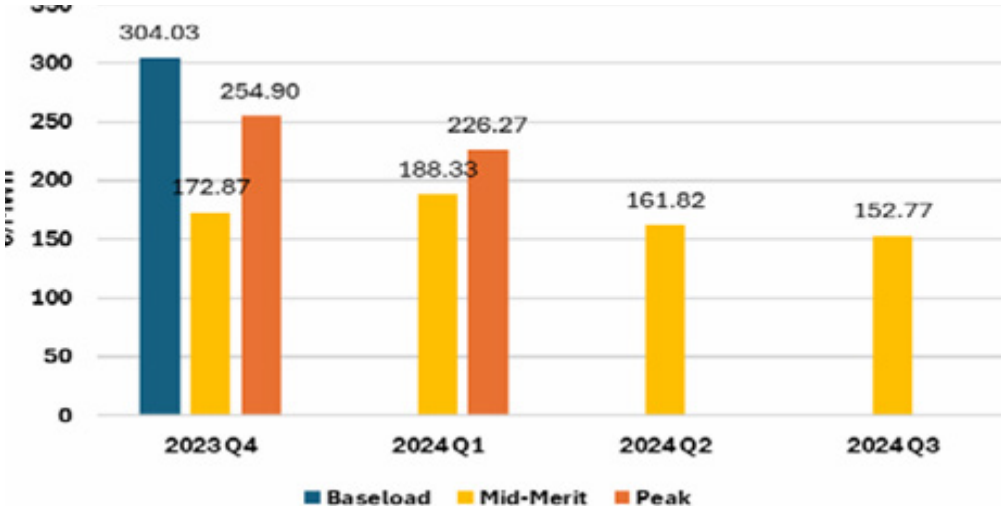


Figure 16: Average price of directed contrat products purchased by suppliers (€/MWh)

Although commodity prices (predominantly NBP gas prices) decreased from their record high levels recorded in 2022, prices remained high by comparison to historical norms. Increased interconnection and the forecast increase in renewable capacity is having a deflationary impact on Directed Contract volumes since Quarter 4 2023.

Unregulated Contracts

Generators can offer forward contracts in the SEM which suppliers are free to bid for. We have no direct role in setting the price or volume of these forward contracts, although we do monitor transaction activity. A common type of forward contract is an Over the Counter (OTC) sale, in which the generator offers the product, setting the volume and the price. With an OTC sale the suppliers have a set window in which to purchase a product. If a supplier makes a bid at the price set by the generator, then they are able to purchase it instantly (i.e. first-come-first-served). Other hedging options include 'Proxy Hedging'. A proxy hedge involves the use of a correlated financial instrument (gas) to hedge a particular risk when a direct hedge (electricity) is not available.


CAR PARK
ST. BENEDICT'S P
CHAPEL. BIBLE GARDEN. T
MOUNTVIEW HOU
B & B
CORK

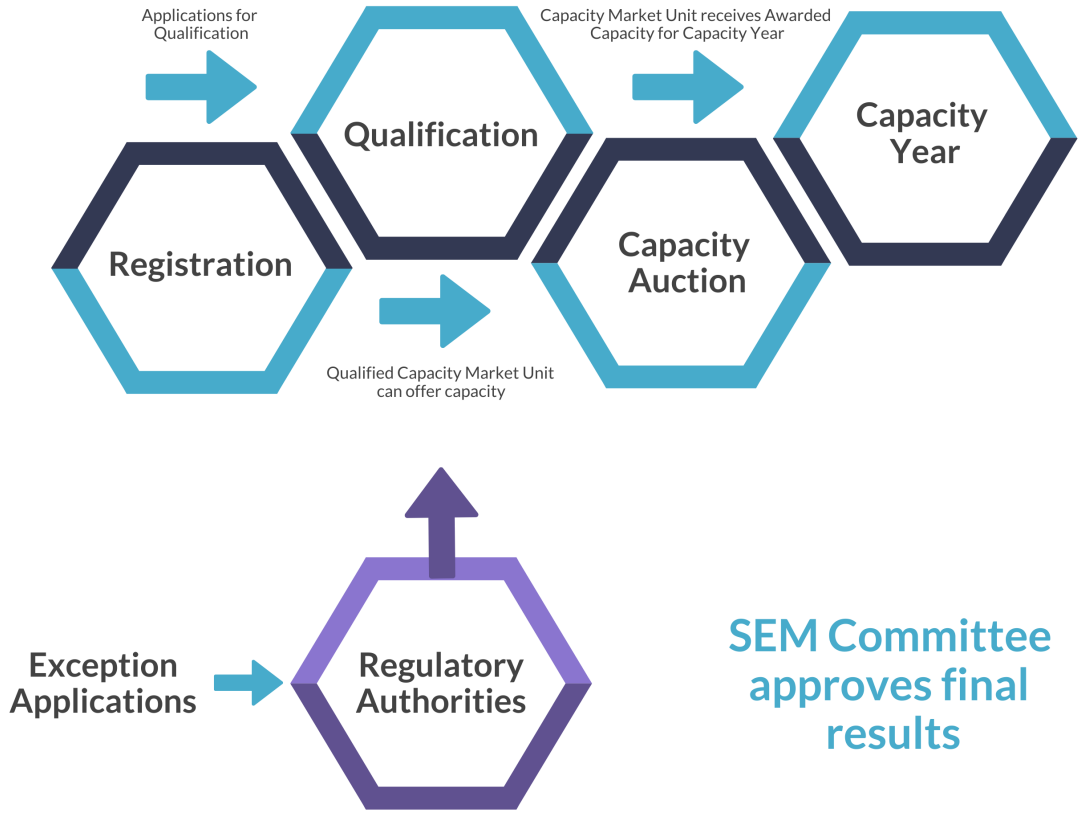
7 Capacity Remuneration Mechanism

The Capacity Remuneration Mechanism (CRM) is designed to ensure that enough capacity is available to meet the demand for electricity on the island of Ireland. The overall aim of the CRM is to ensure security of supply, as well as ensuring that consumers do not pay for more capacity than is needed.

The CRM was implemented as part of the revised SEM arrangements which went live on 1 October 2018, and replaced the Capacity Payment Mechanism (CPM) under the previous arrangements. Capacity providers sell qualified capacity to the market, based on generation capacity required in a future capacity year. This takes place in the form of capacity auctions. Auctions are normally held by the Transmission System Operators between one and four years ahead of delivery.

Capacity providers who are successful in a capacity auction receive a regular capacity payment. This payment assists with funding generation capacity. In return, successful participants have an obligation to refund consumers for any energy prices which rise above a set strike price for each capacity auction. Participants submit bids that specify the volume of capacity being offered and the price sought for that capacity. Bids submitted to an auction are arranged from lowest to highest until the capacity requirement for the specific capacity year is satisfied.

The level of capacity required is assessed by the Transmission System Operators in advance of the auction. Capacity that has been bid at a price less than or equal to the last bid is accepted and receives this market clearing price. Capacity that is bid at a price higher than the market clearing price is deemed to have failed to clear the auction and is not paid, unless the capacity is needed to meet a local security of supply need.



Holders of a capacity contract are expected to be available to provide their agreed generation volumes or load reductions (in the case of demand side units) when required at times of system stress or high demand. If a capacity contract holder is unable to do this, they risk being exposed to substantial charges.

Capacity Market Code

The most recent version of the Capacity Market Code (version 12) was published on 5 November 2024. Modification workshops are held approximately every two months, contingent on the submission of modification proposals. As a result, five workshops were held between October 2023 to September 2024, including an urgent workshop to consider the modifications of Intermediate Length Contracts (ILC) and Early Delivery Incentives (EDIs).

In total, twelve modification proposals were submitted from October 2023 to September 2024. Six of these modifications were accepted (discussed below), while two were rejected. Further modification proposals were raised prior to October 2023 but accepted in this period, including a modification relating to delays. This modification (stemming from SEM-23-101) allows multi-year New Capacity contract holders to apply for extensions to their Substantial Financial Completion, Long Stop Date and/or Capacity Quantity End Date and Time. These extension requests are assessed by the SEM Committee on a case by-case basis, in light of CMC objectives. Meanwhile, a modification related to the indexation of capacity payments for certain auctions was approved (CMC_19_23), implementing the decision made in SEM-23-038 and SEM 23-045. This change required extensive consultation, and consideration that a prudent investor could not have reasonably anticipated the level of inflation stemming from the war in Ukraine.

Following the T-4 2027/2028 auction, the SEM Committee progressed policy development to introduce ILCs and EDIs. Following these decisions, modifications were progressed regarding both changes (ILCs (CMC_10_24); EDIs (CMC_11_24)). The former modification allows for market participants to bid for a contract of up to five years in duration to refurbish existing or new capacity, subject to meeting the investment threshold of €100,000 per MW derated, as set out in SEM-24-035. EDIs allow for market participants to receive capacity payments up to a year before the start of the capacity delivery year, with payment at the same price as the participant's awarded capacity. This mechanism was added to encourage multi-year new capacity to come online as soon as possible, as set out in SEM-24-037.

Capacity Auctions

As of September 2024, fourteen capacity auctions have taken place and completed successfully (six T-4 auctions, one T-3 auction, one T-2 auction and six T-1 auctions). A T-1 auction for Capacity Year 2024/2025 took place in April 2024 and procured 784MW of de-rated capacity. This comprised 161MW of de-rated capacity in Northern Ireland, 607MW of de-rated capacity in the Rest of Ireland and 15MW of de-rated capacity in Greater Dublin. Of the 784MW, 31MW was New Capacity.

The table below outlines the volumes procured by the CRM auctions to date, against the delivery years. These figures are approximate and reflect volumes contracted (which may be subject to termination prior to delivery date).

	Awarded Capacity																			
Auction	'18	'19	'20	'21	'22	'23	'24	'25	'26	'27	'28	'29	'30	'31	'32	'33	'34	'35	'36	'37
	'19	'20	'21	'22	'23	'24	'25	'26	'27	'28	'29	'30	'31	'32	'33	'34	'35	'36	'37	'38
2018/2019 T-1	7,727																			
2019/2020 T-1		8,193																		
2020/2021 T-1			7,557	11	11	11	11	11	11	11	11	11								
2021/2022 T-2				7,423																
2022/2023 T-1					1,087	14	14	14	14	14	14	14	14	14						
2022/2023 T-4					6,830	81	81	81	81	81	81	81	81	81						
2023/2024 T-1						639														
2023/2024 T-4						7,074	370	370	370	370	370	370	370	370	370					
2024/2025 T-3							1,100	1,033	1,033	1,033	1,033	1,033	1,033	1,033	1,033	1,033				
2024/2025 T-4							6,105	261	261	261	261	261	261	261	261	261				
2025/2026 T-4								6,426	542	542	542	542	542	542	542	542	542			
2026/2027 T-4									7,204	1,474	1,474	1,474	1,474	1,474	1,474	1,474	1,474	1,474		
2027/2028 T-4										5,469	144	144	144	144	144	144	144	144	144	
	7,727	8,193	7,557	7,434	7,928	7,818	7,681	8,196	9,517	9,205	3,880	3,880	3,869	3,869	3,775	3,404	2,110	1,568	144	

Extensive work has been undertaken this year to prepare for the T-4 auction for Capacity Year 2028/2029. The T-4 CY2028/2029 Exception Application process allows New Capacity to seek approval for a minimum capacity duration of more than 1 and up to 10 years for their Reliability Option (RO), or for all of part of Existing Capacity to be subject to a Unit Specific Price Cap (USPC). In addition, following the introduction of the Intermediate Length Contract (ILC) mechanism, evaluation of ILC applications also formed part of the Exception Application process this year. An approved ILC application allows Existing Capacity and New Capacity, investing more than €100,000/MWd (the Intermediate Contract Investment Rate Threshold (ICIRT)), to bid for an ILC of up to five years. This could be sought with or without a USPC.

8 System Services and DS3

The system services workstream aims to improve the technical capability of the generation fleet and the system more generally. This is achieved by defining the capability required by the TSOs and appropriately incentivising the delivery of that capability. System services allow participants to provide services which support operating the system with increased renewable penetration through allowing the TSO to deploy units when a frequency deviation occurs. Participants are currently rewarded for their availability through a tariff or a contract.

We have been developing a framework for the system services future arrangements since 2020. The objective of the project is to deliver a competitive framework for the procurement of system services, which ensures secure operation of the electricity system with higher levels of non-synchronous generation. Phase One of this process concluded with our decision on the scope and assessment criteria for the project in 2021. The development of the high-level design was carried out in Phase two and concluded with our decision on the high-level design in 2022.

In 2023 we published a consultation paper, setting out proposals in relation to Phase Three of the System Services Future Arrangements and its subsequent Decision paper was published. This decision paper commenced Phase three, with a Phased Implementation Roadmap (PIR) detailing the suggested upcoming activities of the next two years to be revised by the Transmission System Operators. The TSOs published the most recent iteration of the PIR in September 2024, which details the key activities to be undertaken by both the TSOs, the Regulatory Authorities and any joint collaborations.

During 2023/2024, the programme progressed with the publication of the Detailed Design and Implementation – Phased Implementation Roadmap Decision Paper and the Day Ahead System Services Auction (DASSA) Design Decision Paper.

The DS3 programme (Delivering a Secure, Sustainable Power System), aims to meet the challenges of operating the electricity system in a secure manner while achieving the renewables targets set in both the Republic of Ireland and Northern Ireland.

With increasing amounts of variable renewable generation, there is a need to ensure that the power system can continue to be operated securely and sustainably.

In January 2023 we published our decision on the procurement process for Low Carbon Inertia Services, and in September 2023 we published our decision on the contractual arrangements for this procurement.

The context for requiring LCIS is an increasing amount of renewable and non synchronous generation in Ireland and Northern Ireland, which poses challenges to electricity system stability. This is because this type of generation does not produce the same amount of electricity consistently, making it less predictable and more difficult to bring onto the grid. Most renewable forms of energy, such as wind and solar, are types of non-synchronous generation

Following a procurement process by Transmission System Operators (TSOs), 10,963 MVAs of Low Carbon Inertia Services (LCIS) have been successfully contracted, exceeding the target set by the SEM Committee. LCIS are used to absorb or produce reactive power on the electricity grid to provide inertia (or a steady frequency) and thereby ensure security of supply.

This procurement equates to approximately 45% of the system's current inertia floor requirements. The success of the LCIS procurement will allow the Regulatory Authorities and TSOs to further decarbonise the electricity system, support increasing renewable and low carbon generation, and ensure security of supply.

9 Market Operation

In addition to the trading, capacity and system services elements of the market, we also oversee a number of other areas to ensure the market runs efficiently, effectively and in the best interests of consumers. Although the TSOs, market operator and market participants are separately licenced by the Regulatory Authorities, we are responsible for overseeing a number of cross-cutting market issues.

SEMO Regulation

SEMO is licensed and regulated cooperatively by the CRU in Ireland and the Utility Regulator in Northern Ireland. SEMO is subject to a regulated price control and also has a number of licence and market rules obligations to comply with.

The current price control was determined in September 2021 and was scheduled to be re-determined to commence on 1 October 2024. The final determination for the price control period covering 1 October 2024 to 30 September 2029 has been delayed and is now due for publication in June 2025.

In the meantime, SEMO's revenue requirements for the first year of the Price Control have been set through an appropriate proxy revenue tariff process for 2024/2025. The tariffs covering 1 October 2024 to 30 September 2025 are based on SEMO's revenue requirement for the first year of the new Price Control period, as outlined in their Business Plan Submission, with relevant adjustments by the RAs before SEMOC's final approval. The 2024/2025 revenue requirement will then be corrected through the K-factor included in the 2026/2027 tariff year to reflect the price control final determination.

At present, a flexible and agile framework applies to capital investment, with costs recoverable subject to SEMO evidencing that the expenditure is efficiently incurred, is demonstrably necessary, is incremental to existing price controls and is capable of being robustly validated by the regulators.

A SEMO 'Focus Group' which convened in March 2022, has met five times since its inception to discuss SEMO's performance and capital investment programme. The Focus Group consists of twelve representatives from industry across a range of technologies and is chaired by a market participant. This provides a platform for accountability, transparency and two-way feedback with SEMO.

A SEMO 'Working Group' was established in March 2024, as a subset of the Focus Group, with the aim of providing members the opportunity to constructively engage with SEMO (and the RAs) on how their views can be incorporated into the development of the SEM as supported by the 2024-2029 Price Control. The Working Group has six members and to date, have had two meetings with SEMO to discuss areas such as KPIs and Capital Projects in relation to the 2024-2029 Price Control Period.

SEMO reports on its capital programme, performance, KPIs and its finances. Regular interaction is scheduled between SEMO and the regulators about the industry rules and governance relating to the Trading and Settlement Code.

SEMOpx Regulation

SEMOpx (as a contractual joint venture of EirGrid plc and SONI Ltd) was designated by the respective regulators in the Ireland and Northern Ireland jurisdictions as the Nominated Electricity Market Operator (NEMO) from 3 October 2022 on an enduring basis.

SEMOpx provides day-ahead and intraday electricity market trading as part of the Single Electricity Market and is subject to a regulated price control as part of the regulatory framework. On 10 June 2024 the SEM Committee published a decision on a streamlined annual Regulatory Revenue Recovery Framework for SEMOpx (SEM-24-043) that applies from 2024/2025. On 26 August 2024 The SEM Committee published an Information Paper (SEM-24-055) detailing the approved SEMOpx revenue for 2024/2025 as per the new framework.

SEMOpx is governed by a set of rules and operating procedures that set out the obligations on Exchange Members and the processes for trading on the exchange. The regulatory authorities attend biannual Exchange Committee meetings where the rules are discussed and modified as necessary.

Trading and Settlement Code

Through 2023 into 2024, the Trading and Settlement Code Modifications Committee continued to consider and progress modification proposals in order to further develop the SEM in line with the objectives of the Trading and Settlement Code. Thirteen modification proposals were raised across 2023 and seven modification proposals were raised in 2024. These modification proposals have been considered through Modification Committee meetings and working groups with constructive engagement and feedback from the committee and broader industry observers.

Tariffs

The all-island tariff timetable was coordinated by the regulators with EirGrid Group during Q1 of 2024 to ensure delivery of approvals of a suite of tariffs for the tariff year 2024/2025 or calendar year 2025 as appropriate. The timetable is published on our website for transparency so that any key dates of consultations or publications are well communicated.

A number of tariffs were approved by the SEM Committee during late summer after public consultation which was led by the TSOs or MO; these included Generator Transmission Use of System (GTUoS) charges, Other System Charges (OSC), Transmission Loss Adjustment Factors (TLAFs), generator testing tariffs, capacity charges and Imperfections.

All-Island Programme

In August 2024, the SEM Committee published the All- Island Programmes Approach to Governance and Revenue Recovery Arrangements. These arrangements outline the approach for All-Island Programmes of work, to enable robust regulatory oversight of programme progress and a co-ordinated regulatory consideration of expected costs to ensure timely implementation.

An All-Island Programme must be deemed to be one by the SEM Committee and involve input from EirGrid plc and SONI Ltd in their capacities as either/or Transmission System Operators (TSOs) and/or Market Operators (MOs). There are currently three All Island Programmes underway.

1. System Services Future Arrangements Programme (FASS)
2. Scheduling and Dispatch Programme (SDP)
3. Strategic Markets Programme (SMP)

Governance for all island programmes involves the SEM Committee, the CRU, the UR, EirGrid plc and SONI Ltd. A new All Island Programme sub-committee has been established under these arrangements, comprising the chair of the CRU and the chief executive of the UR. The sub-committee has delegated authority to act on behalf of the SEM Committee in relation to the All Island programmes. A Joint Programme board comprising of Directors from CRU, UR, EirGrid plc and SONI Ltd meets every two months and is required to present to the SEM Committee every four months.

Fuel Mix Disclosure

The All-Island Fuel Mix Disclosure and CO2 Emissions 2023 information paper set out the 2023 fuel mix disclosure and CO2 emissions for electricity suppliers licensed in Ireland and Northern Ireland and operating in the SEM. It presents reliable information regarding the sources of electricity, i.e., the fuel

mix that suppliers have chosen to meet their customers' demand and the related environmental impact.

It does this by disclosing the fuel mix as the percentage of a supplier's demand that is met by various electricity sources and the associated carbon dioxide (CO2) emissions intensity (grammes/kWh). The disclosure allows consumers to understand the recent environmental impact of the electricity that they buy and choose between suppliers on this basis, and to show how the individual supplier's fuel mix compares with the All-Island average.

The 2023 report showed that, on average, 61.01% of the electricity supplied was from renewable sources, compared to 57.6% in 2021. CO2 emissions intensity decreased from 234 grammes per kWh in 2022 to 223 grammes per kWh in 2023.

Generator financial performance reporting

Work on the Generator Financial Performance Report for FY2022 was progressed with the final document published in July 2024. Published on an annual basis, all generation companies with a combined ownership capacity of greater than or equal to 25MW and operating in the SEM are included.

The report provides aggregated information on the financial performance of generators in the SEM along with a breakdown by generation fuel source. Analysis shows a decrease in the margin of generators operating in the SEM when compared to the previous year. Overall net margin for FY2022 was 14% compared to 16% in FY2021.

Due to the time taken for generation companies to have their financial audits completed for a given year, and for the subsequent submission and collation of the relevant data, there is a lag between the reporting period covered in the report and its publication. In July 2024, the SEM Committee also published a consultation on potential amendments to the GFP framework. A decision on this will follow in early 2025.

Audits

The independent Market Auditor's report for the Trading and settlement Code (TSC) Market Audit 2023 was published on 17 September 2024. The Market Audit 2023 was a core SEMO audit. Based on reasonable assurance engagement, the Market Auditor found that, in all material respects, SEMO had complied with the TSC and relevant agreed procedures as set out in the terms of reference for the Market Audit 2023 for the period from 1 January 2023 to 31 December 2023.

The consultation paper on the terms of reference for the TSC Market Audit 2024 was published on 23 September 2024 and closed on 28 October 2024. One response was received from SEMO, who acknowledged the proposed core SEMO audit and the materiality threshold remaining at 0.5% and provided no further comments. Following closure of this consultation, a decision paper on the terms of reference for the TSC Market Audit 2024 was published on 29 November 2024. We expect to publish the independent Market Auditor's report in Q3 2025.

The independent assurance report for the scheduling and dispatch audit 2023 was published on 9 January 2025. The auditors found that, in all material respects, the TSOs had complied with the requirements as they relate to the specified elements of the scheduling and dispatch process during the 12-month period ended 31 December 2023.

The TSOs are required to develop the Balancing Market Principles Statement (BMPS) and publish an updated version annually. The BMPS is a restatement of obligations, alongside an explanation of how these obligations are met and is intended to increase awareness and visibility of the TSOs' scheduling and dispatch process. It also provides clarity and certainty to the market on the timing and nature of TSO actions. The 2024 BMPS was published for consultation on 20 May 2024, and the final BMPS was published on 29 July 2024.

Clean Energy Package

Following the publication of SEM 22-009 paper "Decision Paper on Dispatch, Redispatch and Compensation pursuant to Regulation (EU) 20I9/943" in March 2022, the following updates have taken place to implement Article(s) 12, 13 and 13(7) of Regulation (EU) 2019/943 ('the Regulation') under Clean Energy Package.

- **Revision to Annex 13-011 under SDP:** The TSOs via their submission to the CRU and UR in March 2024 under the Scheduling and Dispatch Programme proposed revised definitions of Energy Balancing, Curtailment and Constraint for Non-Synchronous Renewable Generation Units. The approach set out refers to the interim arrangements foreseen in SEM-21-027. The SEM Committee published a Consultation on 14 June 2024, 'TSOs' proposed definitions of Curtailment, Constraint and Energy Balancing for Non-Synchronous Renewable Generation Units' Consultation Paper (SEM-24-044), outlining Eirgrid and SONI's (TSOs) proposal for changes to SEM-13-011 (i.e. SEM 13-010 (ii), the annex to SEM-13-10, definition of Curtailment, Constraint Energy Balancing for Non-Synchronous Renewable Units). The Consultation Paper invited industry feedback on the definitions and steps described by the TSOs. Significant feedback was received from industry. The SEM Committee is currently working on preparing a decision based on this consultation.
- **TSOs proposed report Article 13(4):** The SEM Committee published a Consultation on 27 August 2024, 'TSOs proposed report under Article 13(4) of Regulation 2019/943' Consultation Paper (SEM-24-059), outlining the proposed report ('the Report') submitted by Eirgrid and SONI (TSOs) to UR and CRU (RAs) pertaining to annual reporting by the Transmission System Operators to the Regulatory Authorities on redispatching and associated mechanisms and mitigations under Article 13(4) of Regulation 2019/943. The Consultation Paper invited industry feedback on the Report proposed described by the TSOs. Significant feedback was received from industry and the SEM Committee is currently working on preparing a decision on this topic.

Market Monitoring

The Market Monitoring Unit (MMU) is a joint regulatory unit that is the main monitoring function of the two RAs. The Unit's role is to monitor the performance of the wholesale market, including compliance with the Bidding Code of Practice (BCoP) and other market rules, and where necessary investigate potential abuse of market power.

This function of the MMU is carried out alongside that of the Agency for the Cooperation of Energy Regulators (ACER) and is provided for by Regulation (EU) No 1227/2011 of 25 October 2011 on wholesale energy market integrity and transparency (REMIT). The monitoring function of the Regulatory Authorities is complemented by the oversight of the Single Electricity Market Operator (SEMO) and SEMOpx which also provide surveillance to ensure the integrity of their exchanges. The purpose of the monitoring of trading activity in wholesale energy products carried out by the MMU is to:

1. Detect and prevent trading based on inside information and market manipulation.
2. Enhance transparency of the SEM and improve market integrity and functioning.
3. Assist identification of barriers to efficiency e.g. low liquidity, and possible improvements to competition in the market.

The MMU has put in place the necessary systems and processes required to actively monitor the SEM arrangements. Throughout the year the unit engaged with market participants on a number of key areas including bidding behaviour. The unit has also provided in-depth analysis on a number of market events to the SEM Committee alongside regular market updates. The MMU publishes a monthly market monitoring report which provide useful information on the performance of the market.

10 Report on Forward Work Plan (FWP) 2024-2025

Our October 2023-September 2024 Forward Work Plan set some of the most significant projects identified to commence or complete across the year.

At the end of the reporting year, of the 31 projects identified in our original FWP, 77% were completed or partially completed and 23% delayed. This work was completed with a backdrop of unplanned projects, work to ensure security of supply and other emerging market issues.

FWP Ref	Project Title	Project scope and outcomes	Timing	End of year position	Comments
1	Strategic overview of the SEM and delivery of Market Operator/ System Operator functions	Establish appropriate forums with industry and governance mechanisms to consider multi-year work planning in context of EU/ UK legislative and policy developments	Across year	Delayed	Governance and revenue recovery arrangements agreed and engaging during 2025 on multi-year work planning
2	All island tariff reviews	Annual review of testing, GTUoS, OSC, TLAFs, capacity charges,SEMO and SEMOpx tariffs	Q2 – Q3 2024	Partially complete	
3	Implementation and monitoring of DSU energy payments solution	Work with industry to aid implementation of DSU energy payments solution	Q4 2023 – Q1 2024	Delayed	Consultation published in August 2024, work being finalised during 2025 on DSU energy payments solution
4	National Resource Adequacy Assessment implementation	Work with TSOs on methodology for NRAA and manage transition from Generation Capacity Statement process.	Q4 2023 - Q3 2024	Partially complete	
5	Decision on Administered Scarcity Pricing review	Publish decision and progress work on any Trading and Settlement/ Capacity Market Code modifications as required.	Q4 2023-Q1 2024	Delayed	Work on decision paper underway.

FWP Ref	Project Title	Project scope and outcomes	Timing	End of year position	Comments
6	SEM GB Trading	Continued consideration of potential changes to SEM GB trading arrangements	Across year	Partially complete	
7	Reintegration of SEM into the Internal Energy Market	Reintegration work package including ex ante markets, balancing market platforms and system operation\ capacity calculation. EBG compliance assessment.	Multi-year with work progressing across reporting year	Partially complete	
8	T-4 2027/2028 capacity auction	Complete preparation and auction for T-4 2027/2028 capacity year.	Q4 2023	Complete	
9	T-1 2024/2025 capacity auction	Complete preparation and auction for T-1 2024/2025 capacity year.	Q4 2023	Complete	
10	T-4 2028/2029 capacity auction	Complete preparation for T-4 2028/2029 capacity auction	Across year	Partially complete	
11	CRM governance and next steps in enhancing the performance of the CRM	Ongoing review of TSO and RA operational processes, methodologies and policies, to enhance efficiency and the delivery of the CMC objectives.	Across year	Complete	

FWP Ref	Project Title	Project scope and outcomes	Timing	End of year position	Comments
12	Monitor and respond to capacity delivery	Monitor delivery of capacity through the CRM and respond to market outcomes including relevant changes to CMC.	Across year	Partially complete	
13	Capacity Market/ new State aid application	Commence the next phase of the Capacity Market/ new State aid application.	Across year	Partially complete	
14	SEMO Price Control	Consult and determine the SEMO Price Control.	Q4 2023 – Q3 2024	Delayed	Price control delayed but Draft Determination was published in Q1 2025
15	Market queries and investigations	Effectively respond to and action market queries. Carry out investigations where necessary.	Across year	Partially complete	
16	Fuel Mix disclosure Allisland	Publish Annual report on fuel mix disclosure. Consider arrangements in relation to Guarantees of Origin.	Q2 – Q3 2024	Partially complete	
17	Generator Financial Performance Report 2022	Collect data and publish report for 2022	Q1 2024	Partially complete	
18	Clean Energy Package - decision on priority dispatch	Consultation and decision on priority dispatch hierarchy	Q2 2024	Delayed	Initial engagement commenced during 2024, and work being further progressed during 2025 on a review of priority dispatch and the implementation of a redispatch hierarchy

FWP Ref	Project Title	Project scope and outcomes	Timing	End of year position	Comments
19	15-minute derogation assessment	Cost benefit analysis and engagement with ACER	Across year	Delayed	RAs considering next steps on this item.
20	Consultation and Decision on SO reporting requirements under Art.13.4	Consultation and Decision on TSO reporting framework under Article 13. 4 on reasons for redispatch	Q4 2024	Delayed	Consultation published in July 2024 with further engagement required.
21	Trading and settlement code market audit 2023	Final market audit completed with report produced and published	Q2 2024	Partially complete	
22	Trading and settlement code market audit 2024	Publish audit terms of reference for consultation	Q3 2024	Partially complete	
23	Scheduling and dispatch audit 2023	Final audit completed with report produced and published	Q1 – Q2 2024	Partially complete	
24	Scheduling and dispatch audit 2024	Publish audit terms of reference for consultation	Q3 2024	Partially complete	
25	Phased Implementation Roadmap for System Services	Decision on the system services roadmap	Q4 2023	Complete	
26	Progression of day-ahead system services auction	Design of daily system services auctions, development of system services code, volume methodology, supplier tariff and product review.	Across year	Partially complete	
27	TSO operational changes to reduce carbon emissions	Oversight of TSO projects, LCIS Phase 1 and LCIS Phase II	Across year	Partially complete	

FWP Ref	Project Title	Project scope and outcomes	Timing	End of year position	Comments
28	Directed Contracts Modelling	Complete quarterly Directed Contracts modelling for rounds 25, 26, 27, 28	Across year	Complete	
29	Imperfections Tariff	Assess, consult on and then publish the imperfections charges for tariff year 2024/25	Q1 – Q3 2024	Complete	
30	SEMOpx streamlined regulatory revenue approach	Consult on and determine SEMOpx streamlined regulatory revenue approach.	Across year	Complete	
31	Scheduling and Dispatch programme	Progress Scheduling and Dispatch programme along with TSOs	Multi-year with work progressing across reporting year	Delayed	Programme is multi year and Tranche 1 initiatives original go-live date still expected to be April 2025.

11 Glossary

	Abbreviation	Explanation
1	ACER	The European Union Agency for the Cooperation of Energy Regulators
2	AIP	All Island Programme
3	CBAM	Carbon Border Adjustment Mechanism
4	CEEAG	Climate Environment and Energy Aid Guidelines
5	CMC	Capacity Market Code
6	CRU	Capacity Remuneration Mechanism
7	DSU	Demand Side Unit
8	EGBL	Establishing a guideline on electricity balancing
9	ERAA	Europen Resource Adequacy Assessment
10	EVA	Economic Viability Assessment
11	EU	European Union
12	FASS	Future Arrangements for System Services
13	FTRs	Financial Transmission Rights
14	FWP	Forward Work Programme
15	GB	Great Britain
16	GFP	Generator Financial Perfromance
17	GTUoS	Generator Transmission Use of System
18	IEM	Internal Energy Market
19	LCIS	Low Carbon Inertia Services
20	MMU	Market Monitoring Unit
21	MRLVC	Multi-Regional Loose Volume Coupling
22	NEMO	Nominated Electricity Market Operator
23	NRAA	National Resource Adequacy Assessment
24	OSC	Other System Charges

	Abbreviation	Explanation
25	PTRs	Physical Transmission Rights
26	SCE	EC-UK specialised committee
27	SEMO	Single Electricity Market Operator
28	SO	System Operator
29	TLAF	Transmission Loss Adjustment Factors
30	TSC	Trading and Settlement Code
31	TSO	Transmission System Operator
32	UK	United Kingdom
33	UR	Utility Regulator