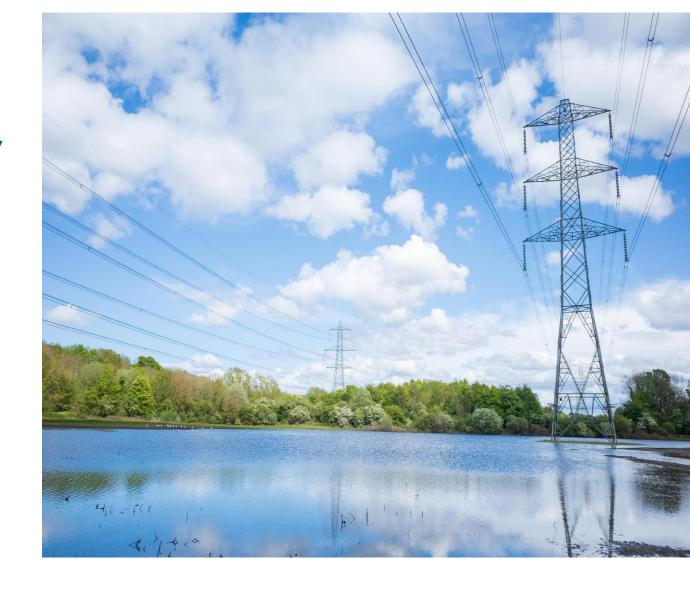
Market Operator User Group

30th January 2025









Housekeeping Rules

Please keep your video switched off



Raise your hand if you have a question



When asked to unmute your line



Thank you for your cooperation.











Agenda Items	Presenters
Welcome	Claire Kane
Release Program	Vikas Gupta
Ex-Ante Markets	Joaquin Iñiguez de Gante
SEMO Trading	Dermot Campfield
SEMOpx Trading	Amy Yeung
Settlements	John Tracey
System Operations IE	Charlie McGee
System Operations NI	Stephen McClure
Cross-Border Adjustment Mechanism	Amber Raut
Market Interface	Rosaleen Fanning









Release Program

Release N Schedule and Dispatch Tranche 1

- SDP-01 Operation of Non-Priority Dispatch Renewables (NPDR)
- SDP-02 Energy Storage Power Station (ESPS) integration
- SDP-04 Wind dispatchability improvements
- Factory Acceptance Test is complete. SAT is in progress.
- Deployment to production in the May 2025 Go-Live window for ESPS and in September 2025 for NPDR & WDI.

Release O Schedule and Dispatch Tranche 2

- SDP-03 Fast Frequency Response (FFR)
- SDP-05 Reserve services scheduling and dispatch
- SDP-06 Synchronous condenser scheduling and dispatch
- Design workshops completed for SDP03 and SDP05. Design for SDP06 is on hold until further direction is received from RAs on scope.
- Forecast go-live- November 2025







Release Program

SEMO Website update

- Improvements to the Search Functionality
- Introduction of an Historic Data page
- Migration to new CMS Drupel
- New Look and Feel
- The removal of inaccurate/outdated information
- Updates to the Settlements Calendar
- Go Live forecast February, subject to approvals

SEMOPX Website update

- Migration to new CMS Drupel, no change in look and feel
- SEMOPX secure document Portal introduction



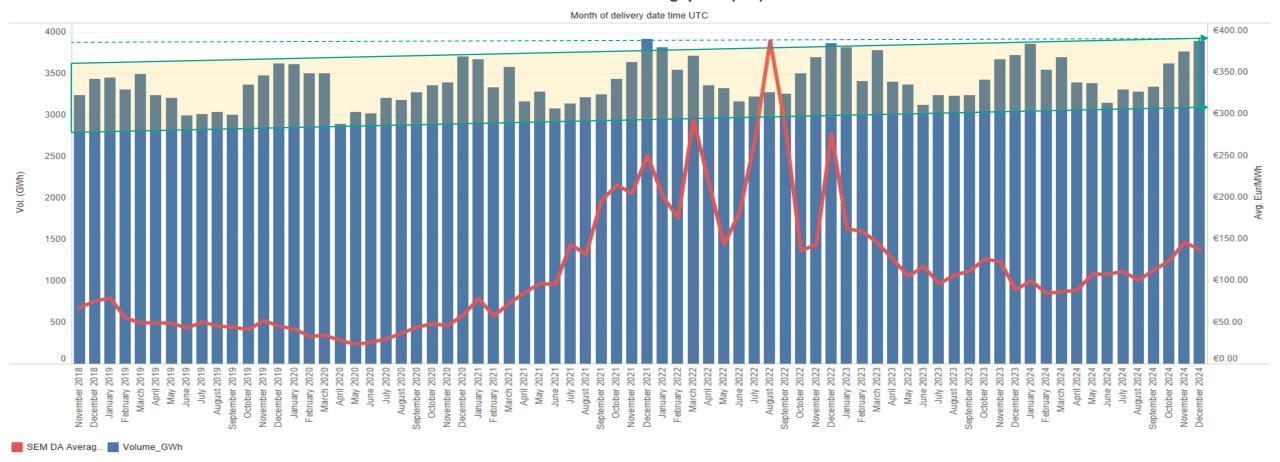






EirGrid

Volumd Trade vs Avg. price (DA)



- Volumes within the DAM have remained constant with respect to previous years, following a seasonal trend, with an average increase of 4% compared to previous years.
- 2024 closed with prices 54% higher than those seen in January of the same year.
- November was the month with the highest average price for 2024.

SONI

Ex-Ante Markets - (DA) Daily Prices



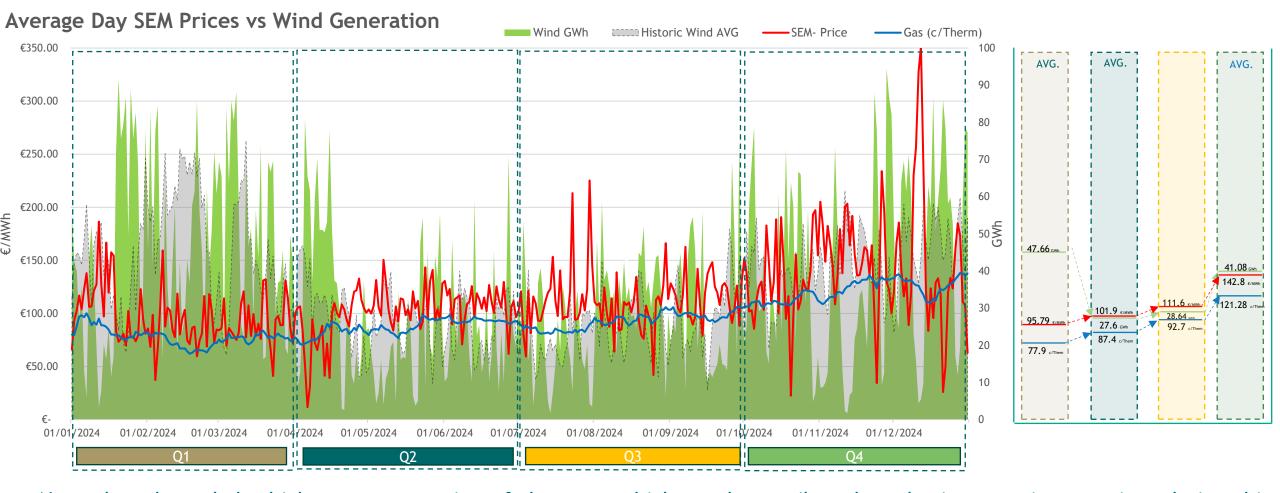
- The average price for 2024 closed 10% lower than that seen in 2023.
- The last months of the year saw increased volatility in the market, where December and November closed with average prices above 120 Eur.





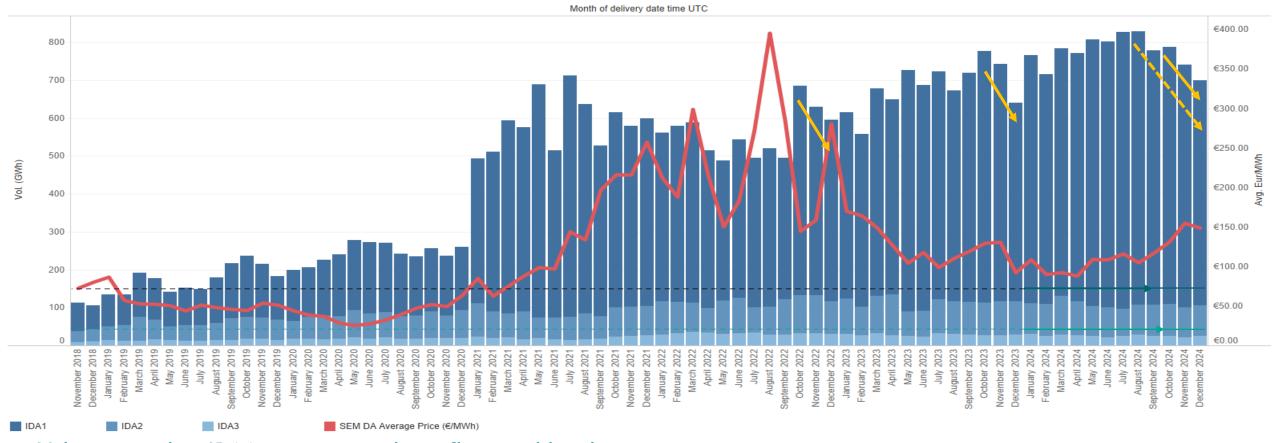


EirGrid



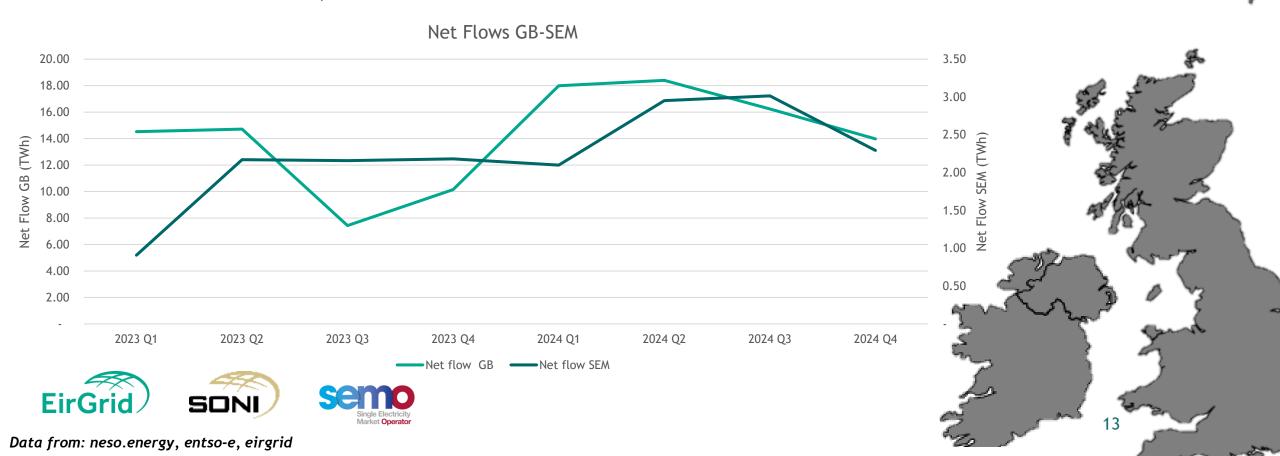
- November showed the highest average price of the year, which can be attributed to the increase in gas prices during this period and the low wind generation (19% lower than the historical average).
- Since the beginning of 2024 there has been a slight but steady increase in gas prices, closing the year 55% above the first quarter price.

Volumd Trade vs Avg. price (IDA's)



- Volumes within IDA1 continue to be influenced by the interconnector.
- IDA2 and IDA3 have maintained a constant behavior without significant changes.
- At the end of the year there was a constant decrease in volumes within IDA1, although December closed 14% higher.

- 2024 within SEM and GB saw an increase in their net import flows, with GB 42% higher than 2023 and SEM 40%.
- SEM saw its largest increase in import flows during the second and third quarters of the year,
- The last quarter of the year saw both jurisdictions see a drop in import flows.
- GB during the last quarter of 2024 showed a decrease in imports from France due to outages within two of its three interconnectors, which could be reflected in the flows from GB to SEM.





Imbalance Pricing

Upcoming Outages

- 13th February 2025 Imbalance Pricing (11:00 to 12:00) Provisional
- 25th February 2025 Imbalance Pricing (13:45 to 15:30)
- 26th February 2025 Balancing Market Outage (14:30 to 15:30)
 - BMI and Imbalance Pricing







Repricing Update

Repricing Dates	ISPs Impacted	Summary of Issue	Materiality Assessment Publication Date	Publication of Update Prices
10/09/2024	02:30 to 11:30	Incorrect application of Wind DIs	6 th Feb 2025	13 th Feb 2025
30/09/2024 - 01/10/2024	18:00 to 00:30	SO Trade price and volume	13 th Feb 2025	20 th Feb 2025
13/12/2024 - 14/12/2024	23:30 to 08:30	Incorrect application of Wind DIs	20 th Feb 2025	27 th Feb 2025
17/12/2024	15:00 to 15:30	Incorrect calculation of QBOA for Wind Units immediately after Imbalance Pricing Outage	TBC	TBC*

Balancing Market Repricing Calendar

TBC* - Repricing may require a software fix from the vendor, to be deployed in a future system release.









ETS Releases

No upcoming ETS releases







ETS Maintenance Windows

Date & Time	Impact	Reason	Communication
11/02/2025	Maintenance	Monthly Maintenance	OMM message (email sent a week in advance and on the same morning)
11/03/2025	Maintenance	Monthly Maintenance	OMM message (email sent a week in advance and on the same morning)
08/04/2025	Maintenance	Monthly Maintenance	OMM message (email sent a week in advance and on the same morning)
13/05/2025	Maintenance	Monthly Maintenance	OMM message (email sent a week in advance and on the same morning)

^{*}Regular maintenance window: Between 21:30 and 01:30 GMT/IST every 2nd Tuesday of the Month.







M7 Releases

Version	Content	Impact	Timeline
6.19	TBC	TBC	End of Q1 2025 to Early Q2 2025







M7 Maintenance Windows

Date & time	Impact	Reason	Communication
11/02/2025	Maintenance	TBC	M7 chat message (1 hour before the maintenance) + OMM message (email sent a week in advance and on the same morning)
11/03/2025	Maintenance	TBC	M7 chat message (1 hour before the maintenance) + OMM message (email sent a week in advance and on the same morning)
08/04/2025	Maintenance	TBC	M7 chat message (1 hour before the maintenance) + OMM message (email sent a week in advance and on the same morning)
13/05/2025	Maintenance	TBC	M7 chat message (1 hour before the maintenance) + OMM message (email sent a week in advance and on the same morning)

^{*}Regular maintenance window: Between 18:30 and 01:30 GMT/IST every 2nd Tuesday of the Month.







DAM 30 Minute MTU

- Go-live date: <u>11th June 2025</u> (Delivery Date: 12th June 2025)
- DAM 30 SIMU Environment Opening
 - Delayed to March 2025
- DAM 60 Minute MTU Harmonised Reference Price
 - All NEMOs agreed to use a joint calculation method of a SDAC 60Min average price as of the 30Min MTU go-live
 - Harmonized SDAC 60Min average price based on the data calculated by SDAC algorithm (EUPHEMIA)
 - Will not be used for clearing or settlement prices
 - Only applicable to the Day-Ahead Market (IDAs are unaffected)
 - Publication on the SEMOpx Website







DAM 30 Minute MTU

- SDAC Member Testing (simulation of real-life trading with scenarios)
 - Delayed to early April 2025
 - Indicatively allocated 6 weeks (currently being assessed up to 2 months)
 - Requested scenarios by Market Participants (to be finalised)
 - ✓ Normal day (with nominations)
 - ✓ Full decoupling (with nominations)
 - ✓ Partial decoupling of a chosen NEMO
 - ✓ Second calculation due to bidding error management
 - ✓ DST Long Clock Change
 - ✓ DST Short Clock Change
 - √ Max/Min price reached*
 - ✓ Curtailment day*
 - ✓ Opposite cross-border flows within the same hour*
 - ✓ No liquidity in a given time resolution*
 - ✓ Maximum number of Block Orders*







DAM 30 Minute MTU

Rollback Plan

- Switch to configuration of systems prior to 30Min MTU go-live (back to 60Min MTU)
- Rollback from 30Min to 60Min MTU in MATS Trading system
- Rollback period of 1 week commences immediately after 30Min MTU go-live
 - > Decommissioning of systems must not be done during this period
 - Rollback validation and triggering process during this period (timelines still to be determined)







DAM 30 Minute MTU

Rollback Validation and Triggering Process

- Incident Committee declares Full or Partial Decoupling due to incident regarding central or regional assets
- > (ie. no Market Coupling Results, rejected Market Coupling Results or any other situation leading to a full or partial decoupling)
- Occurrence of incidents twice in a 7-day rolling period

Triggering Event

Investigation

- Outcomes of investigation focus on following factors:
- ➤ Whether incident is related to 15MinMTU change (30MinMTU for SEMOpx) in SDAC and NEMOs/TSOs/MCO assets
- Identification, reproduction and root cause of analysis of incident
- >Expected time required to resolve the incident

- Recommendation to apply rollback will come from SDAC Operational Committee based on outcomes of investigation
- Decision to apply rollback solution shall be taken by Market Coupling Steering Committee (MCSC)

MCSC Decision

Communication and Rollback Implementation

- Date of rollback activation (1st trading day of the rollback setup) will be preferably a working day
- Participation of TSOs, NEMOs, CCPs & Market Participants
- Each NEMO will announce decision to rollback to their members







Multiple Auction Trading System (MATS)

- MATS GoTo Session #2 on 21st Jan 2025
 - Interactive sessions/demos to be released on a monthly basis
- Next MATS GoTo Session #3
 - 20th February 2025
- Updated FAQs Document and API Package
 - To be issued to MATS POCs in the next 2-4 weeks
 - Updated API Package to contain new functionalities added to Trading System

Remaining planned blocks of our roadmap

[API users] PUSH updates (e.g. Auction session and auction status notifications)

Fixes for some of the issues you faced

- [Web Client users] User can paste duplicate delivery periods in the linear order grid
- [Web Client users] Same price cannot be displayed three times
- [Web Client users] Unable to paste linear order for SEEPEX markets

Missing features and / or improvements you requested

- [All users] Result status
- [Web Client users] SUM row in Linear and SCO screens
- [Web Client users] Handling of price decimals
- [API users] Removal of IP restriction
- [API users] Client order ID

Member Readiness Forms

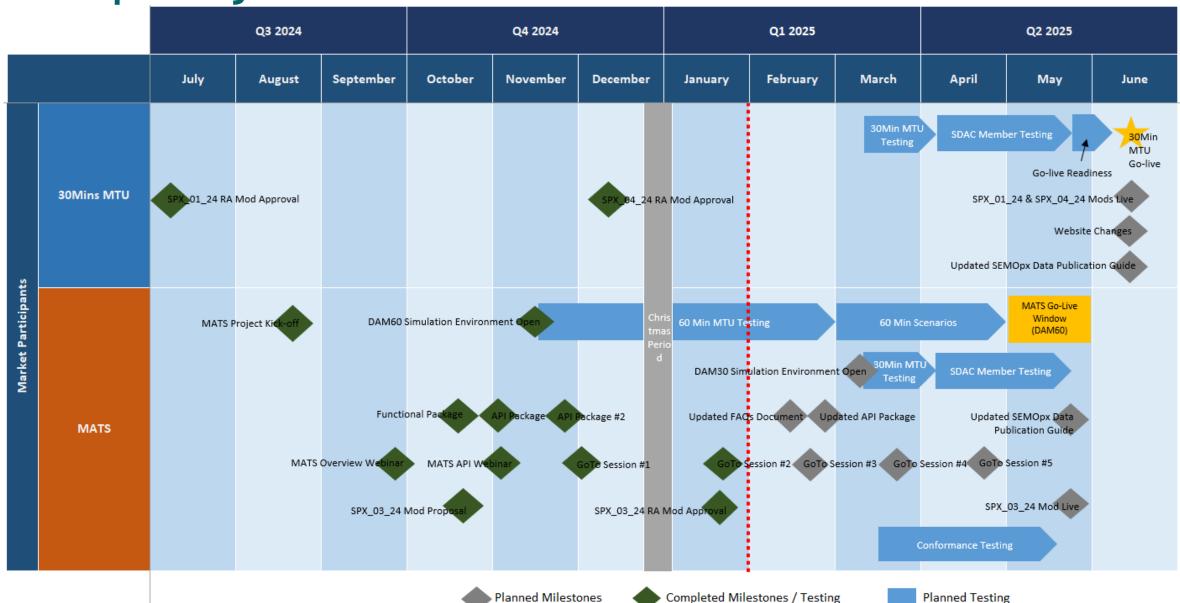
To be filled out by members - self-assessed checklist of what is ready





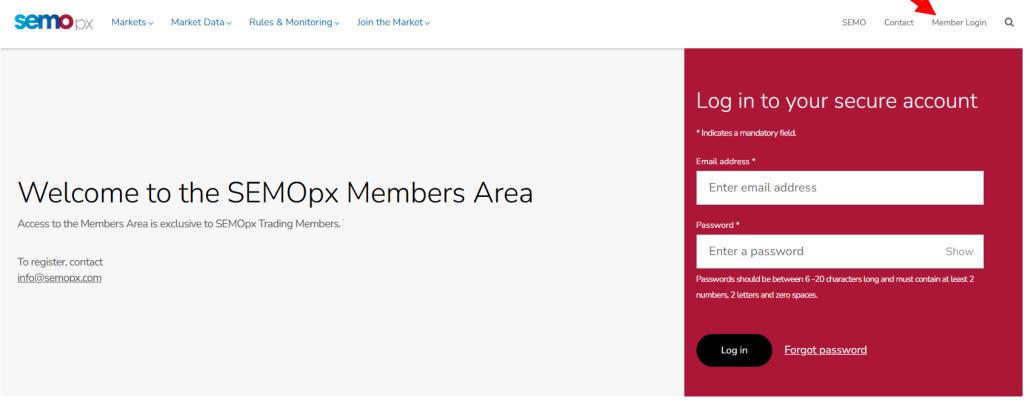


SEMOpx Project Timelines



SEMOpx Website Secure Member Area

- New Members Area (requires login and password)
- Security enhancement of SEMOpx Market and documentation library

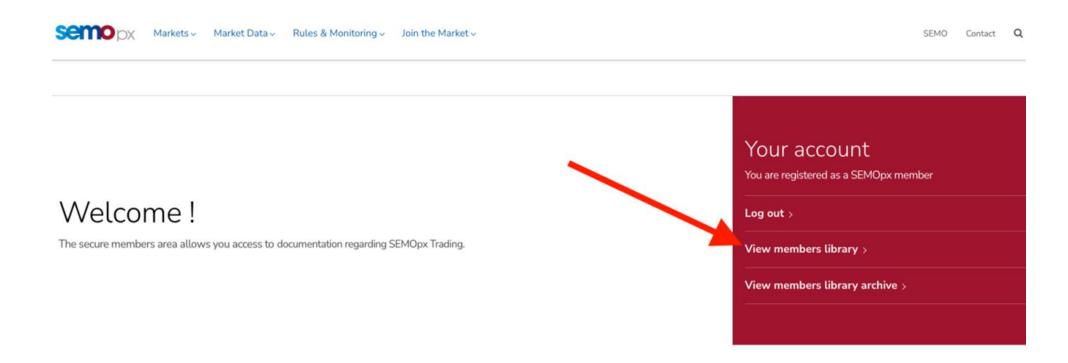








- Same 'look and feel' as current SEMOpx Website
- Members Library and Archive pages

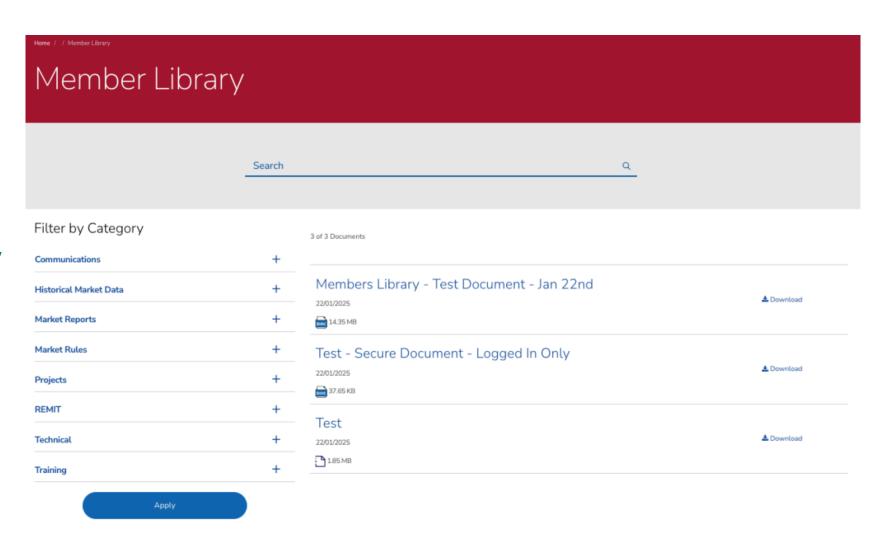








- Member Library for technical and system release documents
- Improvements to search functionality and Filter by Category functionality

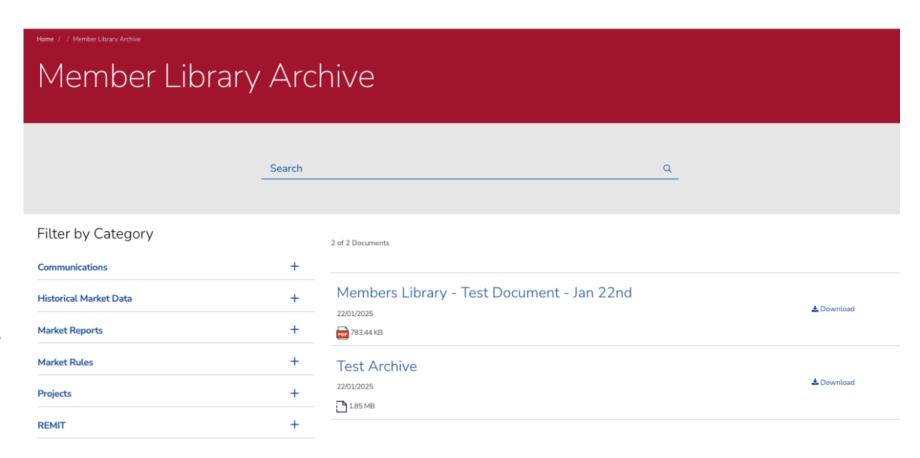








- Member Library Archive for outdated documents
- Go-live is targeted for March 2025
- Members on the SEMOpx Distribution list will be issued with survey to confirm registration to the new Members Area









Bid/Ask Aggregated Curve File - Change in Number of Decimals

- Go-Live: 11th February 2025
- Current state:
 - Prices rounded to 2 decimal places
 - Volumes rounded to 1 decimal place
- Future state:
 - Prices unrounded up to 13 decimal places
 - Volumes unrounded up to 13 decimal places
- Applied retroactively to the Bid/Ask Curves files published from delivery day 1st Jan 2025 to 11th Feb 2025,
 - Second version with a different timestamp will be published on the SEMOpx Website.
- Change is applicable to DAM, IDA1, IDA2 and IDA3 Bid/Ask Curves files
- Sample File available <u>here</u>
- SEMOpx Data Publication Guide v7.7 updated <u>here</u>







Erroneous Bids and Second Calculation Process

- Second Auction Process removal
 - Go-live: 29th Jan 2025 (More information here)
- Erroneous Bids process
 - If an "Erroneous Bid" is submitted, the member can flag the Erroneous Bid in their submission to the Market Operator via telephone and email* until the following deadlines:

issues:

DAM: 11:43 GMT/BST | IDA1: 17:55 GMT/BST | IDA2: 08:25 GMT/BST

- <u>Definition</u>: An Erroneous Bid submission refers to a bid or offer submitted by a Market Participant that contains incorrect or unintended information, which can disrupt Market Operations, lead to financial losses or affect the reliability of the Power System.
- E.g. €1000 bid as opposed to intended €100 bid

*SEMOpx Hotline Details (Link here):

	Ireland:	1800 283 010
	Northern Ireland:	0800 008 3010
	International:	+353 1 668 8183
1. Urgent A	uction operational 7am-	marketops@ops.semopx.co

7pm*







Erroneous Bids and Second Calculation Process

Second Calculation process

- In the event an Erroneous Bid submission has been raised by the deadlines highlighted in the previous slide, the "Second Calculation" process that is in place in both SDAC and SEM-GB, allows the possibility to correct any bidding error
- Once confirmed as erroneous by SEMOpx, the bid can be modified or removed, with a second calculation following the update to the submission
- Only triggered if a first calculation was performed and at least one NEMO rejected the first market results
- Note: market participants will not receive or see the results of the first calculation







IDA Decoupling Member Testing

- Delayed until March 2025
- Common invitation will be issued to members
- Details of testing runbook will be issued to members

DST23 Short Clock Change Member Test

- DAM and IDA1
- Communication to be issued to members
 - Date to be confirmed
 - OBK Gate Closure timings
 - SIMU Environment (ETS)







SEMOpx Useful Resources

Documentation:

- SEMOpx Auction Timing and Market Message document
 - > Sections related to Second Auction Removal removed
 - > Sections 3.8 and 4.6 added for Erroneous Bids timing and definition

Website Resources:

- ETS Trader Client Guide
- M7 Manuals
- M7 2FA User Guide
- SEMOpx Training Category Location (Technical/Training etc)
- ETS <u>Trading on Behalf</u> fallback solution
 - Done on a best effort basis
- M7 Trading on Behalf fallback solution
 - Done on a best effort basis
 - Priority given to ensuring system stability

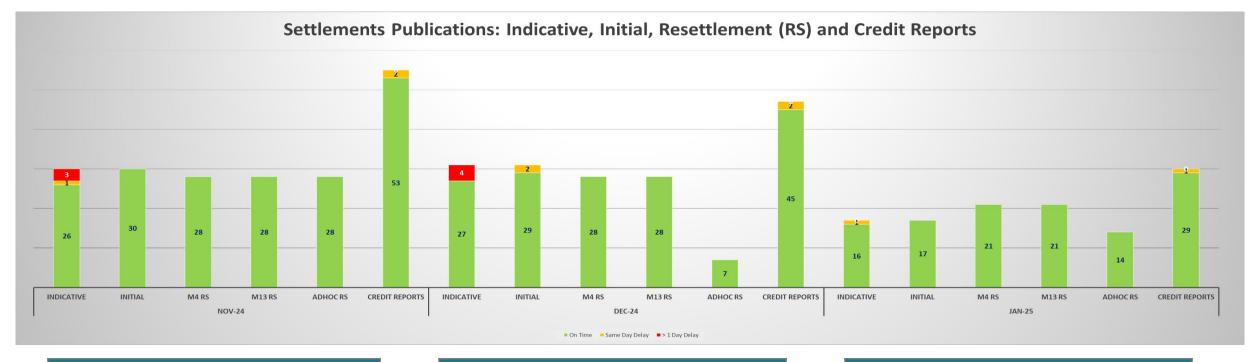








Settlement publications & timelines: 1st Nov 2024 - 17th Jan 2025



November 2024

- 193 settlement publications on time
- 4 delayed Indicatives due delayed receipt of metering data and ACTA's
- 2 delayed Credit Report due to system outage
- Issue now resolved







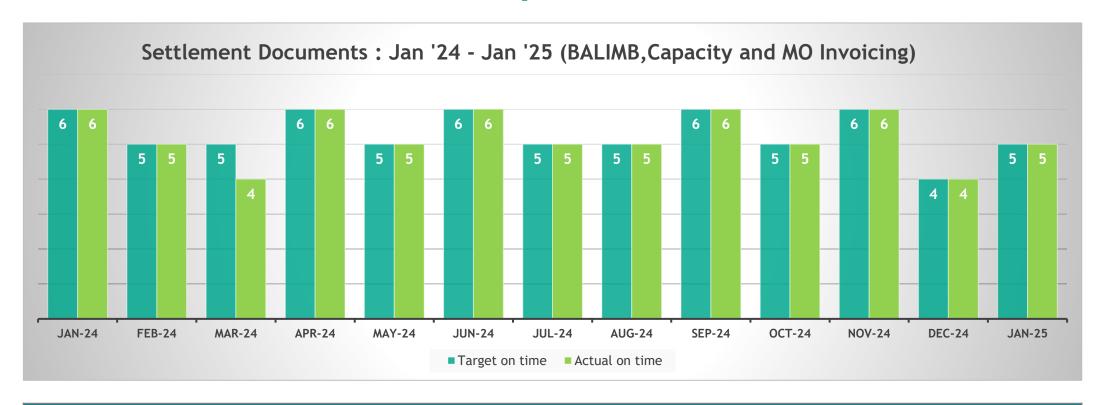
December 2024

- 164 settlement publications on time
- 4 delayed Indicatives due to issue with Instruction Profiler, delayed receipt of metering data and CSB processing delays.
- 2 delayed Initials due to issue with Instruction Profiler
- 2 delayed Credit Report due to delayed receipt of metering data
- All issues now resolved

<u>12</u>

- 118 settlement publications on time
- 1 delayed Indicatives due to issue with Instruction Profiler.
- 1 delayed Credit Report due to delayed receipt of metering data
- All issues now resolved

Settlement Documents publications 2024 - 2025



Settlement Document updates:

 68 Settlement Documents (SDs) published on time between 1st Jan 2024 and Jan 17th 2025 (includes BALIMB, Capacity and MO Invoices)







Ad hoc resettlement: Status update Jan 2025

Ad hoc Iterations 1 & 2 - Completed:

Year	2018	2019	2020
Week	3 4 4 4 4 4 4 4 4 4 5 5 5 5 9 0 1 2 3 4 5 6 7 8 9 0 1 2	2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 8 9 0 1 2 3	5 5 5 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 9 0 1 2 3 3 4 5 6 7 8 9 0 1 2 3 3 4 5 6 7 8 9 0 1 2 3 3 4 5 6 7 8 9 0 1 2 3 4 5 6 7 8 8 9 0 1 2 3 4 5 6 7 8 8 9 0 1 2 3 4 5
Adhoc1			
Adhoc2			

- Ad hoc iteration 1 is now fully complete.
- Ad hoc iteration 2 is now fully complete.

- Cells in Red are adhoc weeks left to process Cells in Green are settlements runs that have been issued
- There are 4 billing periods between 2020 and 2022 which require a final iteration of ad hoc resettlement. These billing periods are based on outstanding upheld formal queries which were dependent on a system fix to be deployed to fully resettle the impacted billing periods.
- SEMO have been in discussions with the impacted participants with a view to complete an outside the system resettlement.
- SEMO envisage that this outside the system settlement will be completed in February 2025. Once complete, there will be no outstanding formal queries relating to years 2018 2022.

Year	Ad hoc billing periods - number of weeks which under review	Specific billing period weeks which are under review	Settlement Calendar timeline
2020	1	Week 10	N/A
2021	1	Week 47	N/A
2022	2	Weeks 10 and 45	N/A
Total	4	Under review - outside the system resettlement	







Settlement Documents to issue Friday 31st January 2025

Settlement Calendar (sem-o.com)

Settlement Document for Friday 31st Jan

INITIAL BALIMB - (19/01/2025 - 25/01/2025) - Week 04 2025

M+4 BALIMB - (29/09/2024 - 05/10/2024) - Week 40 2024

M+4 CRM - September 2024

M+13 BALIMB - (31/12/2023-06/01/2024) - Week 01 2024

M-13 CRM - December 2023

Ad Hoc CRM - December 2024













Winter 2024/5

- Significant demand growth since 2020, peak demand has grown by 900 MW since Winter 2020/21 and has now
 exceeded 6 GW for first time ever*
- The capacity provided by new market capacity and TEG units has avoided several potential System Alerts and System Emergency States. The current status is as follows
 - TEG1 unit at North Wall 193 MW fully available
 - TEG1 unit at Huntstown 50 MW fully available
 - TEG2 unit at Shannonbridge 192 MW of 262 MW (6 of the 8 individual generators)
 - TEG2 unit at Tarbert 150 MW available for emergency dispatch only (testing ongoing)
 - All planned ESB Aero units (FlexGens) and BESS market units delivered in time for winter
- **5 Margin Warnings** have been issued since the first TEG units were made available to the System Operator, with 3 issued so far this Winter:
 - December 11th
 - December 12th
 - January 8th

Winter: 11th Dec 2024 (Wed)

Margin Warning issued: 15:30 to 20:30

TEG Dispatch: No units dispatched (available 339 MW)

Demand: 5,635 MW at peak @ 17:30

Generation: 4,817 MW total at peak (1,183 MW unavailable)

- Forced outages (875 MW total): ED1 (118 MW), MP2 (285 MW), MP3 (285 MW), ER4 (23 MW), LI3 (4 MW), LI4 (4 MW), PB14 (156 MW)
- Reduced Capacity (308 MW total): Units MP1 (220 of 285 MW), PB16 (84 of 168 MW), SQ1 (96 of 192 MW), DW1 (26 of 62 MW)

RES: 98 MW total at peak

• Wind: 98 MW (below forecast all day from 06:00)

Solar: 0 MW

Other

• **Demand response:** 146 MW total available

• Batteries: 329 MW long-run, 392 MW short-run

Imports

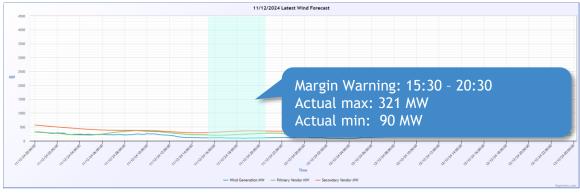
• **EWIC**: 504 MW at peak (max import)

Without the TEG units, the system would have been in Alert State over peak (c. 250 MW margin) - approaching the point at which the Power System Emergency Communications Plan would have been invoked to appeal to customers to reduce demand voluntarily and to prepare for possible load shedding.

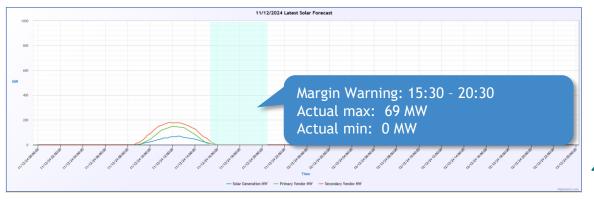
Demand profile



RES profile: wind (- actual, forecast: - primary - secondary)



RES profile: solar (- actual, forecast: - primary - secondary)



^{*} The short-run batteries can delay the need to dispatch TEG units until an incident occurs

Winter: 12th Dec 2024 (Thur)

Margin Warning issued: 14:30 to 20:00

TEG Dispatch: No units dispatched (available 435 MW)

Demand: 5,595 MW peak @ 17:30

Generation: 4,891 MW total at peak (1,109 MW unavailable)

- Forced outages (898 MW Total): units ED1 (118 MW), MP2 (285 MW), MP3 (285 MW), ER3 (23 MW), ER4 (23 MW), LI4 (4 MW), LI5 (4 MW), PB14 (156 MW)
- Reduced Capacity (211 MW total): units MP1 (220 of 285 MW), PB16 (84 of 168 MW), DW1 (26 of 62 MW), RP1 (26 MW of 52 MW)

RES: 282 MW total at peak

Wind: 282 MWSolar: 0 MW

Other

• **Demand response:** 126 MW total available

Batteries: 329 MW long-run, 422 MW short-run*

Imports

• **EWIC**: 504 MW at peak (max import)

Without the TEG units, the system would have been in Alert State over peak (c. 400 MW margin). Significant interconnector trades were required on the day to secure the system

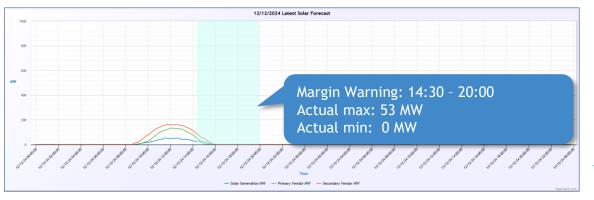
Demand profile



RES profile: wind (- actual, forecast: - primary - secondary)



RES profile: solar (- actual, forecast: - primary - secondary)



^{*} The short-run batteries can delay the need to dispatch TEG units until an incident occurs

Winter: 8th Jan 2025 (Wed)

Margin Warning issued: 15:30 to 19:30

TEG Dispatch: No units dispatched (available 408 MW)

Demand: 6,024 MW peak @ 17:47 (new system record)

Generation: 5466 MW total at peak (622 MW unavailable)

Forced outages (519 MW Total): MP3 (285 MW), ER4 (23 MW), GO2 (3 MW), LI4 (4 MW), PB14 (156 MW), RP1 (52MW)

Reduced Capacity (103 MW total): units MP1 (220 of 285 MW), MP2 (250 of 285 MW), DW1 (59 of 62 MW)

RES: 720 MW total at peak

Wind: 720 MW (picked up closer to peak)

Solar: 0 MW

Other

• **Demand response:** 126 MW total available

Batteries: 309 MW long-run, 416 MW short-run*

Imports

• **EWIC**: 150 MW at peak

Good generator availability on a day of record system demand (>6 GW). GB also extremely tight yet some market driven imports secured. Wind generation picked up over the peak so clear of System Warning quickly.





Risk Preparedness Plan* - Dispatch Priority Order

	n State with TEG	System Operations Action (NCC or other)	Note	Notice	Volumes (approximate)	Day Ahead	Anticipated on the day > 1hr	Rapid < 1hr
Normal	Normal	Continuous scheduling & dispatch of market resources	Optimise juristictional margin (spare margin in NI)		all available	•	•	•
		Trade on EWIC/MOYLE (CPT/CBB)	To avoid: a) Margin Warning, b) running NMG, c) Alert	1-2hrs	all available		•	(●)
		DSU's	Schedule twice on the day if needed	1.5 hrs	all available		•	(●)
		Peakers	Dispatch as required (manage annual run hours)	< 15 min	all available		•	•
		Batteries	Manage charging when possible (e.g. mid-day solar)	< 15 min	all available		•	•
n/a		Issue Margin Warning - available Temporary Emergency Generation (TEG) counted in margin in assessing system state "[MW]"						
n/a		Trade on EWIC/MOYLE (CPT/CBB) to avoid TEG dispatch	Non-market generation minimised	1 to 2 hrs			•	(●)
>450		Beat the Peak Demand Reduction (if not called already)	Issed by ESB Networks (requested by Director SO)	1 to 4 hrs	TBC		•	
>450	~300 *	Flex Demand (contracted)	Schedule / dispatch to avoid dispatching NMG	< 15 min	New		•	•
n/a	< ~200 *	Dispatch Non-Market Generation (TEG)	* If 100 MWh / 400 MW 15 min batteries available	< 15 min	250-650 MW		•	•
n/a		Trade on EWIC/MOYLE (CPT/CBB) to reduce/exit NMG	Limited run-hours (500hrs / HN 1,500 hrs)	1 -2 hrs				(●)
450	[450]	Issue System Alert State (EAS) - loss of largest single infeed after inclusion of non-market generation						
		Emergency Assistance (EA) - request		< 15 min	150 MW (2hrs)		(●)	•
		NDCC prepares / staffs up for Demand Control					•	(●)
		LEUs prepare / staff up for possible MDC					•	(●)
		Maximise Jurisdictional Margin (NI enters Alert State)	To avoid Emergency in IE		Tie-line		•	•
150		Invoke Power System Emergency Communciation process	Decision by Director SO (Day-ahead if Rota shedding)			(●)	•	•
		Voluntary Demand Reduction (VDR) request issued ***	LEUs and Distribution Customers >= 38 KV	> 1hr	not available	(●)	•	
		Public Appeal ***	Issued by EirGrid/ESBN comms (Crisis Comms Plan)	> 1hr	not available	(●)	•	
50		Issue System Emergency State - jurisdictional dynamic re						
		Emergency Instruction (EI) - issue	Interconnector to 0 MW if exporting.	< 15 min	(export to 500		(●)	•
		Mandatory Demand Curtailement (MDC) - instruct	NCC & NDCC: LEUs (50%/75% reduction instructed)	> 1hr	350 MW		•	(●)
		EBSN VDR Requested (Customers 38kV and above)	If not already issued	> 1hr	not available		•	(●)
		Emergency Demand Disconnection (Rapid) Instruct	NDCC Protocol	<15 min	500 MW		•	•
		Emergency Demand Disconnection (Slow) Instruct	NDCC Protocol	<30 min	1000 MW		•	•
		Rota Demand Disconnection (up to 3 x 1000 MW)	Additional 150 MW available rapidly	> 12hrs	1000 MW	•		

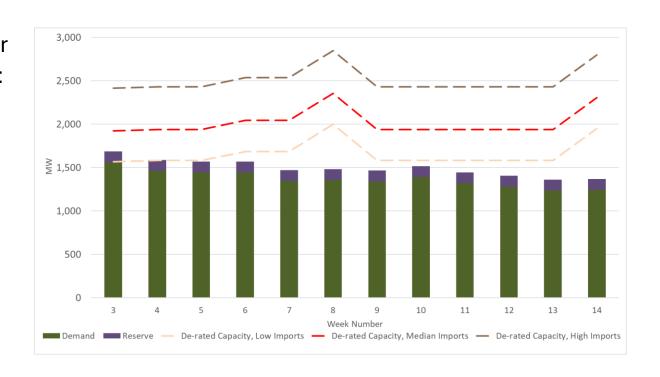
^{4/}



Winter Outlook Addendum

On the 7 December 2024, Storm Darragh caused significant and unforeseeable damage at Ballylumford, which resulted in the loss of a significant amount of conventional generation. As a result, three of the six large generators in Northern Ireland were forced into extended outage. Such an extraordinary event is a scenario that cannot be reasonably forecast; SONI therefore provided an updated assessment for the remainder of the Winter period.

The revised outlook for the remainder of the Winter period still indicates that there will be sufficient generation to meet consumer demand in normal operating conditions, with the risk of disruption to the electricity supply remaining low. There is no risk of blackouts where the expected portfolio of conventional generation remains available. However, the power system will be operating at an increased level of risk for the remainder of the Winter period.









Winter 2024/25

Three Recent System Alerts

Primarily a by-product of the reduced available conventional generation portfolio

- 1) 17/12/24 A generator required a 4-hour maintenance outage, meaning we were in breach of our security standards for this period and operating at a higher level of risk the event passed with no issues
- 2) 30/12/24 A generator tripped (back within 4 hours), again breaching security standards and increasing operational risk levels the event passed with no issues
- 3) 24/01/25 In alert for the duration of the red and amber weather warnings associated with the Storm Eowyn, for the potential risk. During this period however, system risk heightened with short term generation issues.

General Winter Period

- In general, the 24/25 winter period has run smoothly, considering Northern Ireland had no redundancy against our security standards. For the most part, there have been reasonable levels of wind providing support.
- There have been several cold spells, and when these were combined with zero wind, have led to tight margins
 for us and neighbouring TSOs.
- We are consistently communicating with NESO and European TSOs to maximise support across Moyle when required.









Contents

- What is CBAM?
- Implementation Timelines
- Estimated CBAM Costs
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- Summary







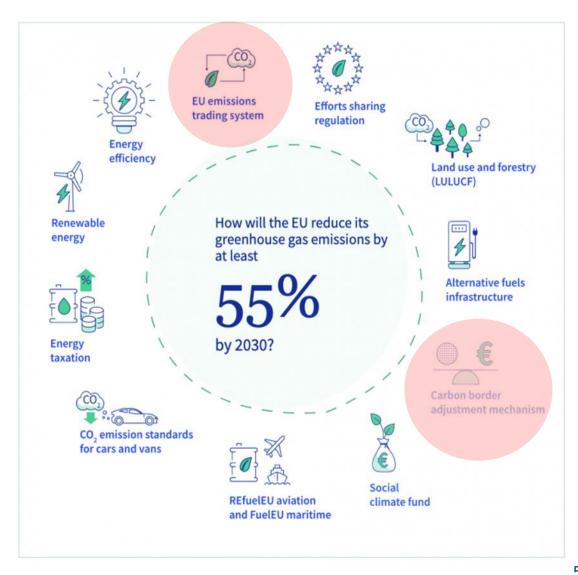
What is CBAM?

- Complements the EU ETS on imported goods by mitigating risk of carbon leakage
- CBAM extends the concept of carbon pricing to imports for the first time.
- Requires importers to purchase CBAM certificates to ensure the emission costs paid in production of goods outside of the EU are equivalent to the EU ETS.
- Its a 'surcharge' to prevent countries from outsourcing production of carbon-intensive goods to regions with less stringent sustainability targets
- Targeted sectors include:
 - Iron and steel
 - Cement
 - Fertilisers
 - Aluminum
 - Electricity
 - Hydrogen



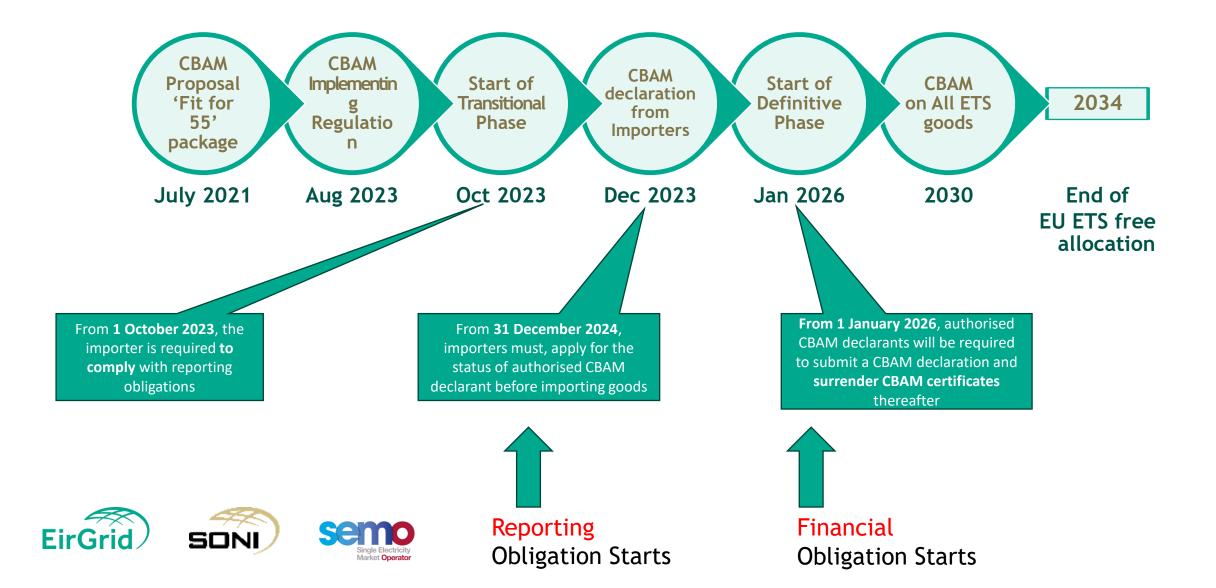






Source: sobolt.com

Overall CBAM Legislation implementation timeline:



Estimated Yearly CBAM Costs

CBAM costs are dependent on the final allowable calculation inputs:

Allowable Attributes	Details
"Full EU ETS"	EU ETS Prices ~ €90/tCO2. Assuming all gas imports, implies ~ €40/MWh
"ETS difference allowed"	Allowed to offset EU ETS with UK ETS already paid. Based on current ETS prices and assumed all gas imports ~ €9/ <u>MWh</u> Note: UK ETS Prices ~ €70/tCO2
"Renewables allowed"	Allowed methodology for emission factor calculation (All Fossil vs Renewables Included).
Market Conditions	e.g. continued strong imports as was seen in 2024
NI Relevance	Whether Moyle (as well as EWIC and Greenlink) are relevant

Scenarios: Estimated costs for **EWIC only** imports based on 2024 imports

Allowed Calculation	CBAM Cost	Inc in Import Costs
All Fossil, Full EU ETS	114m	33%
All Fossil, ETS difference allowed	25m	7 %
Renewables allowed, Full EU ETS	20m	6%
Renewables allowed, ETS difference only	10m	3%







Considerations

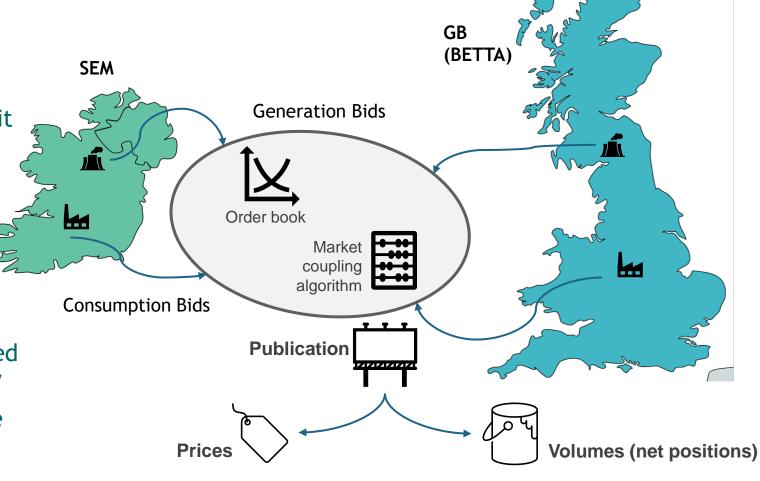
- SEM Implicit Auctions

Other regions have **Explicit** Auctions

 Most GB-EU interconnectors hold Explicit Auctions which may allow traders to price in CBAM certificates explicitly.

SEM has Implicit Auctions

- Difficulties relate to anonymity of implicit trading
- Difficult to determine who has purchased imported vs locally produced electricity
- Difficulty in demonstrating carbon price paid in GB as origin is anonymous.









Considerations

- Default/Alternative Values for Emissions Factors

Challenge

- Default value: CO2 intensity of electricity produced from fossil fuels over a 5year period
- Issue: Overstating of CO2 emissions
- Actual embedded emissions are lower and expected to decrease until 2040

Solution

• Base derived carbon intensity for electricity imports on an alternative to the 5-year average fossil-based measure. e.g. System CO2 factor from Y-1 including renewables.

Benefit

- Better reflects GB decarbonisation.
- Lessens the issue of excessive carbon cost exposure and its impacts.







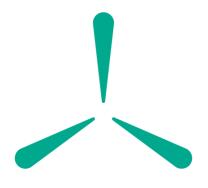


Considerations

- Off-set for Carbon Price Already Paid

Challenge

- Difficult to trace, as electricity is traded anonymously (in implicit auctions)
- Excessive carbon pricing exposure if no off-set for carbon prices already paid in GB i.e. EU ETS is c. €90/tCO2 which equates to c. €40/MWh (based on gas emissions factor)

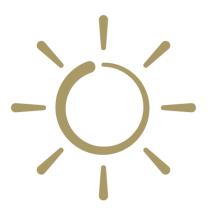


Solution

 Implicit recognition of UK ETS carbon price having been paid in GB for any electricity imports from GB to SEM

Benefit

- Overcomes reporting requirement impracticalities
- Supports realisation of rebates in line with CBAM design intent
- Lessens the risk of undue carbon price exposure on imports









Points to Note for CBAM declarants

Buying of Certificates

- CBAM declarants to buy CBAM certificates ahead of each quarter
- Requirement to hold CBAM certificates corresponding to at least 80% of their embedded emissions by the end of each quarter
- CBAM declarants can buy certificates through a common central platform

Price and Declaration of certificates

- The price of the CBAM certs will be based of weekly averages of the EU ETS price
- Declarants will need to submit annual declarations by 31st May each year for the previous year
- More information needed of how carbon price in third countries is calculated

CBAM FAQs







Summary

- CBAM aims to deter carbon-intensive processes and encourage non-EU manufacturers to 'green' as much of their processes as possible
- Unique challenges in applying CBAM in SEM due to implicit auctions
- Exemption for electricity from CBAM for SEM-GB very unlikely
- Lack of clarity in legislation on who has CBAM obligations in implicit auctions, and how to implement in order to achieved desired outcomes of CBAM
- Allowable values for emissions factors and off-set of already paid emissions costs have a significant impact on the CBAM costs
- **Tight Timelines** for "**Definitive**" CBAM implementation (Jan 2026)













SEMO & SEMOpx Helpdesk Hours - Monday, 03rd of February 2025

- The SEMO Helpdesk will be unavailable due to the Bank Holiday in Ireland, this includes <u>info@semo.com</u> and non-urgent phone lines. We will be available to take urgent calls on **1800 726 772**.
- SEMOpx will remain available 24/7 for Urgent Operational Issues relating to the DAM/IDM, including ETS/M7 Availability, Connectivity issues, Password Resets etc.

Urgent Operational Issues

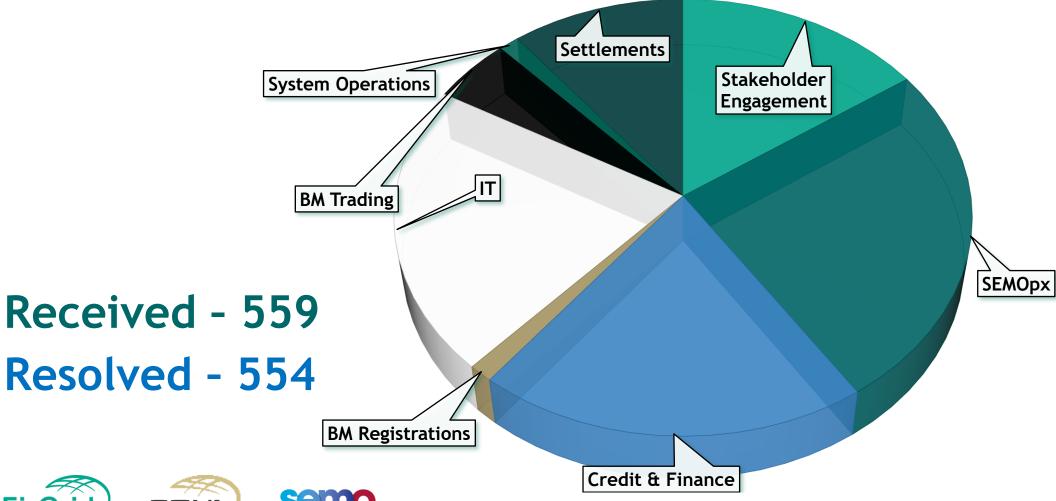
- Email: <u>marketops@ops.semopx.com</u>
- o ROI: 1800 283 010 (select option 1 or 2)
- o NI: 0800 008 3010
- International: +353 1 668 8183
- SEMOpx Helpdesk will be available to take urgent calls on **1800 283 010** select option 3. Non-urgent operational queries can be submitted to the SEMOpx Helpdesk info@semopx.com however these will not be actioned until Tuesday, 04th February 2025.







SEMO and SEMOpx General Queries 06th of November 2024 - 28th of January 2025









Disputes

 October 2024 - 28th of January 2025: No Disputes raised



Formal Settlement Queries (06th of November 2024 - 28th of January 2025)

- Received: 70
- Closed: 62

(43 were Upheld, 16 were not Upheld, 1 was Rejected and 2 were Withdrawn)



Open: 8







Dates to Note

- The next Thursday Participant call @09.30am will take place on 06th of February 2025.
- The Market Operator User Group (MOUG) meetings for 2025 are scheduled on the following dates:
 - o 27th March
 - o 29th May
 - 11th September
 - o 06th November
 - 11th December







