



THE 2025 PARTICIPANTS' FORUM

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EU
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OPERATIONAL
UPDATE

- TEA & COFFEE -

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**EMPIRE
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REMA:

An Update on
the REMA Decision

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UK-EU COOPERATION:

The reintegration of the UK
into the Internal Energy Market

- QUESTIONS -

OUR SPEAKERS



GINEKE VAN DIJK
COMMERCIAL DIRECTOR



PHIL SPAIN
OPERATIONS DIRECTOR



JON COLE
CUSTOMER & MARKETS MANGER



KICK VAN HOUTEN
COMMERCIAL OPERATIONS & PLANNING MANGER



MAITRAYEE BHOWMICK-JEWKES
SENIOR REGULATORY ANALYST



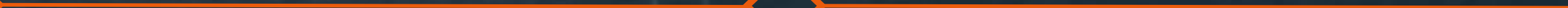

COMMERCIAL UPDATE

PARTICIPANTS' FORUM

JON COLE

COMMERCIAL TEAMS

2025 UPDATES



COMMERCIAL OPERATIONS & SYSTEMS

Key Empire Updates



CUSTOMER & MARKETS

BritNed Flows and Auction Performance

Customer Satisfaction and Feedback



POLICY & REGULATION

UK and EU Bidding Zone Reviews

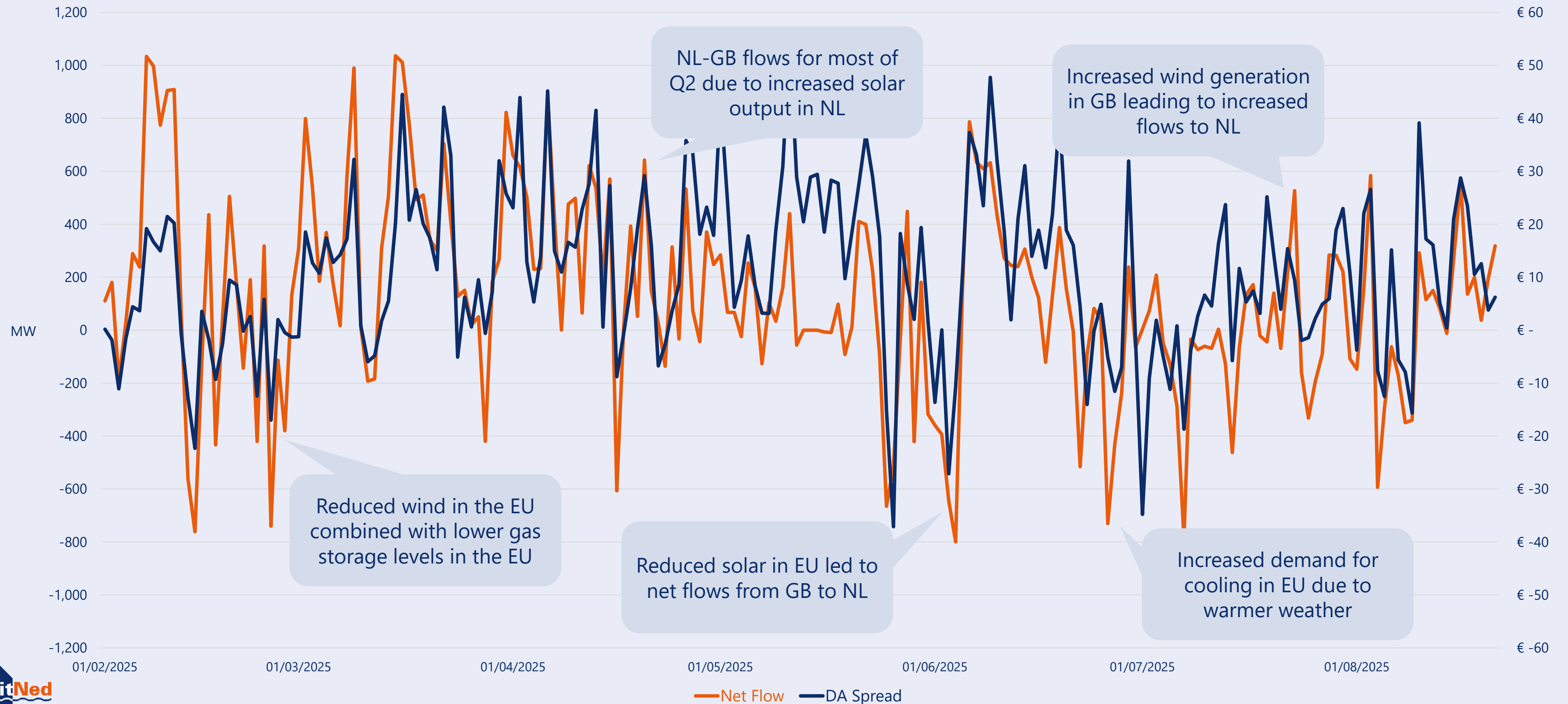
UK-EU Cooperation

Access Rules Updates



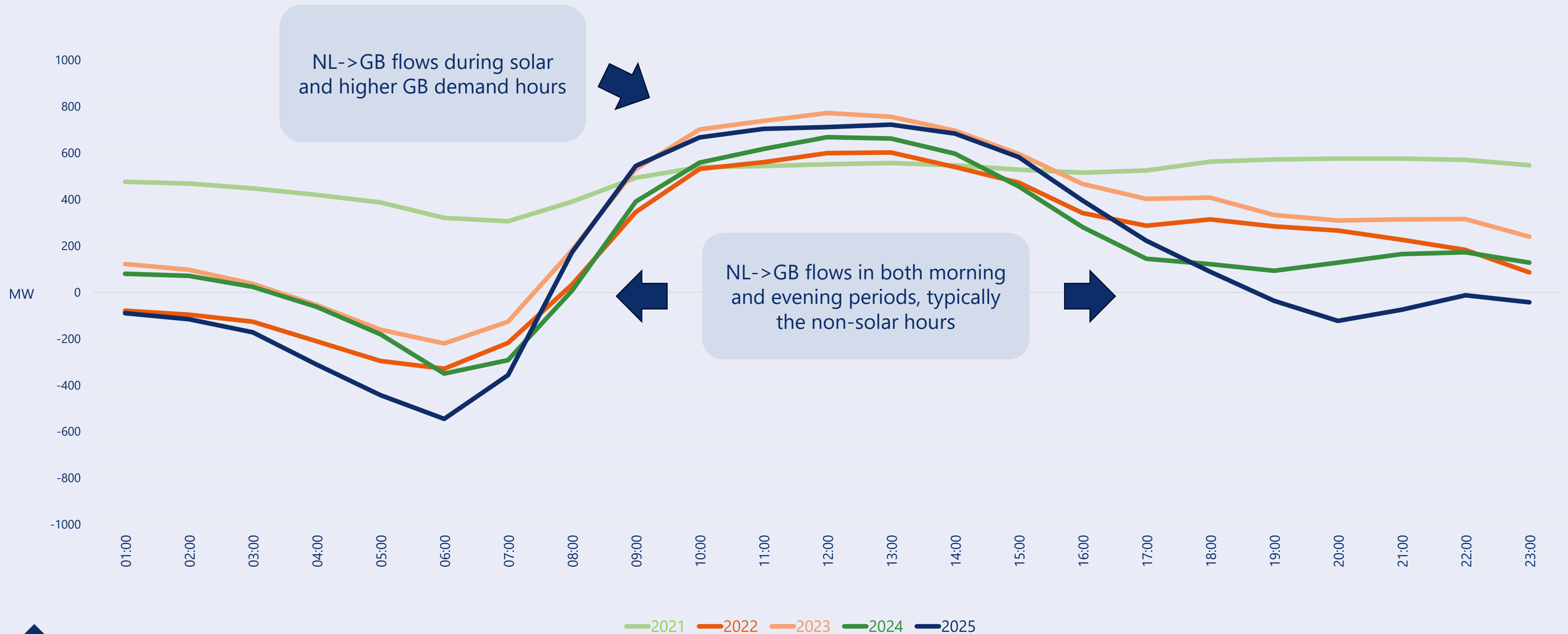
DAY-AHEAD SPREADS & FLOWS

2025



BRITNED FLOWS

AVERAGE DAILY FLOW PROFILES 2021 - 2025

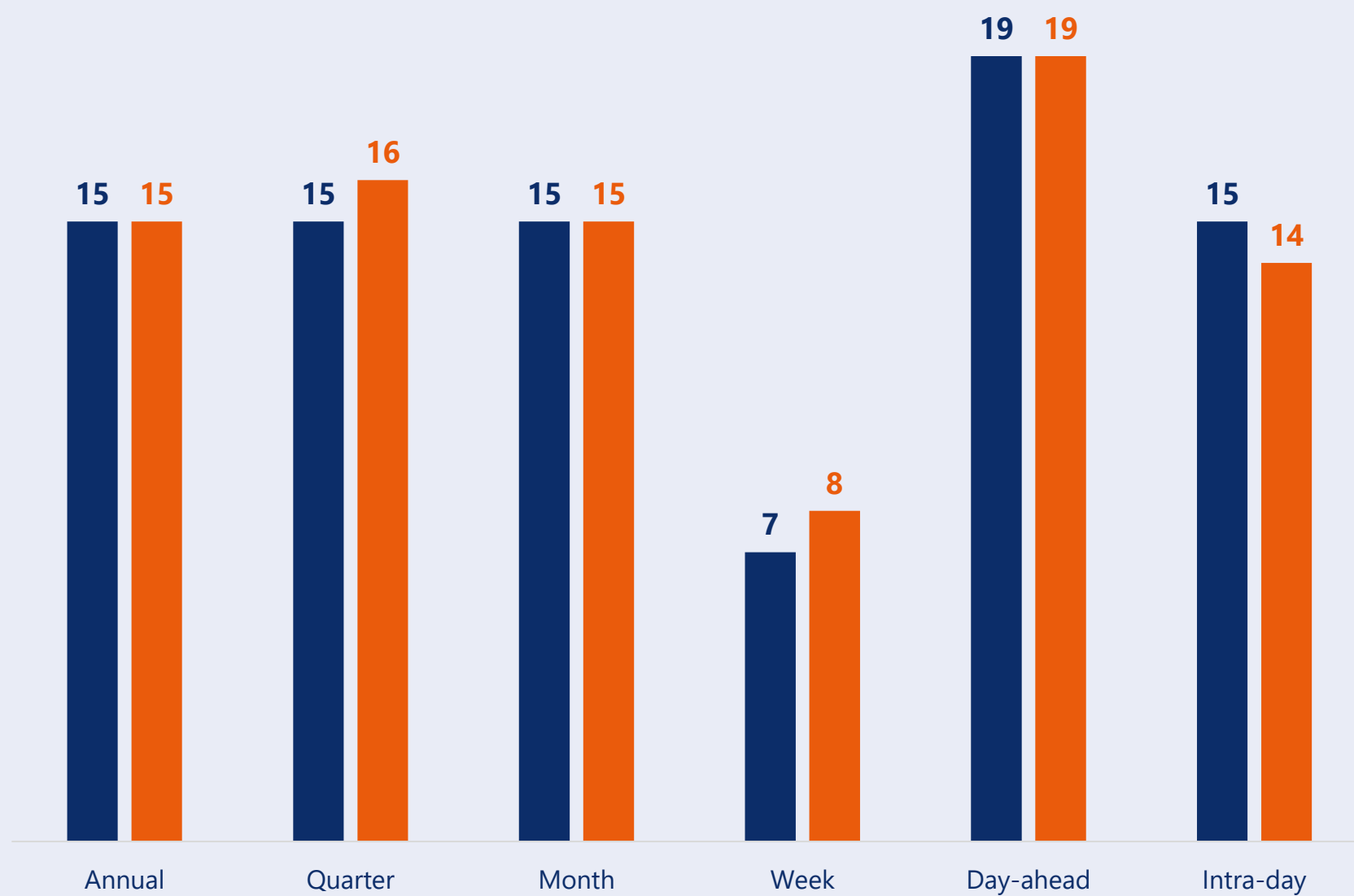


AUCTIONS OVERVIEW

JANUARY – AUGUST 2025

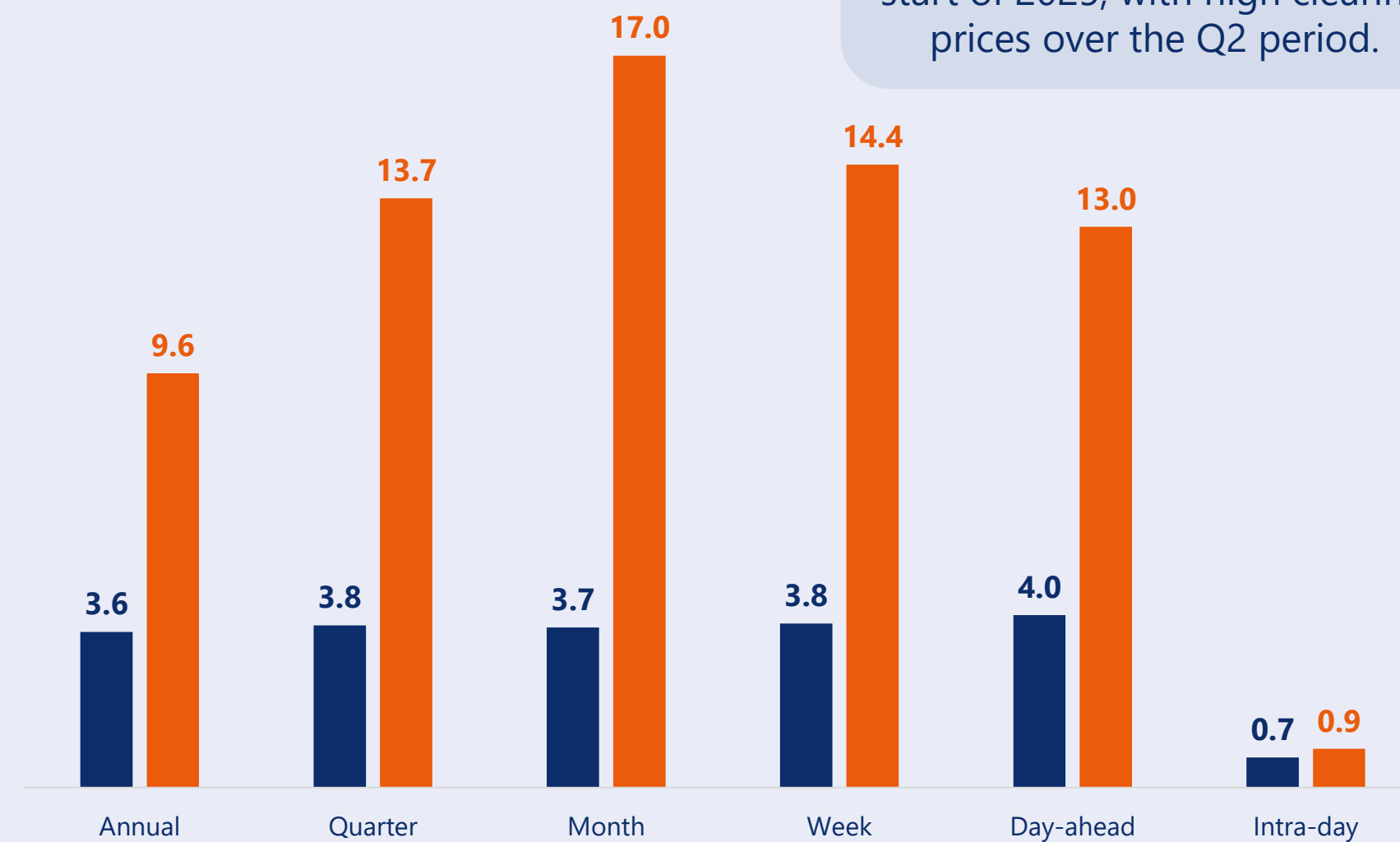
AVERAGE NUMBER OF PARTICIPANTS

■ GB-NL ■ NL-GB



AVERAGE CLEARING PRICE (€/MW)

■ GB-NL ■ NL-GB

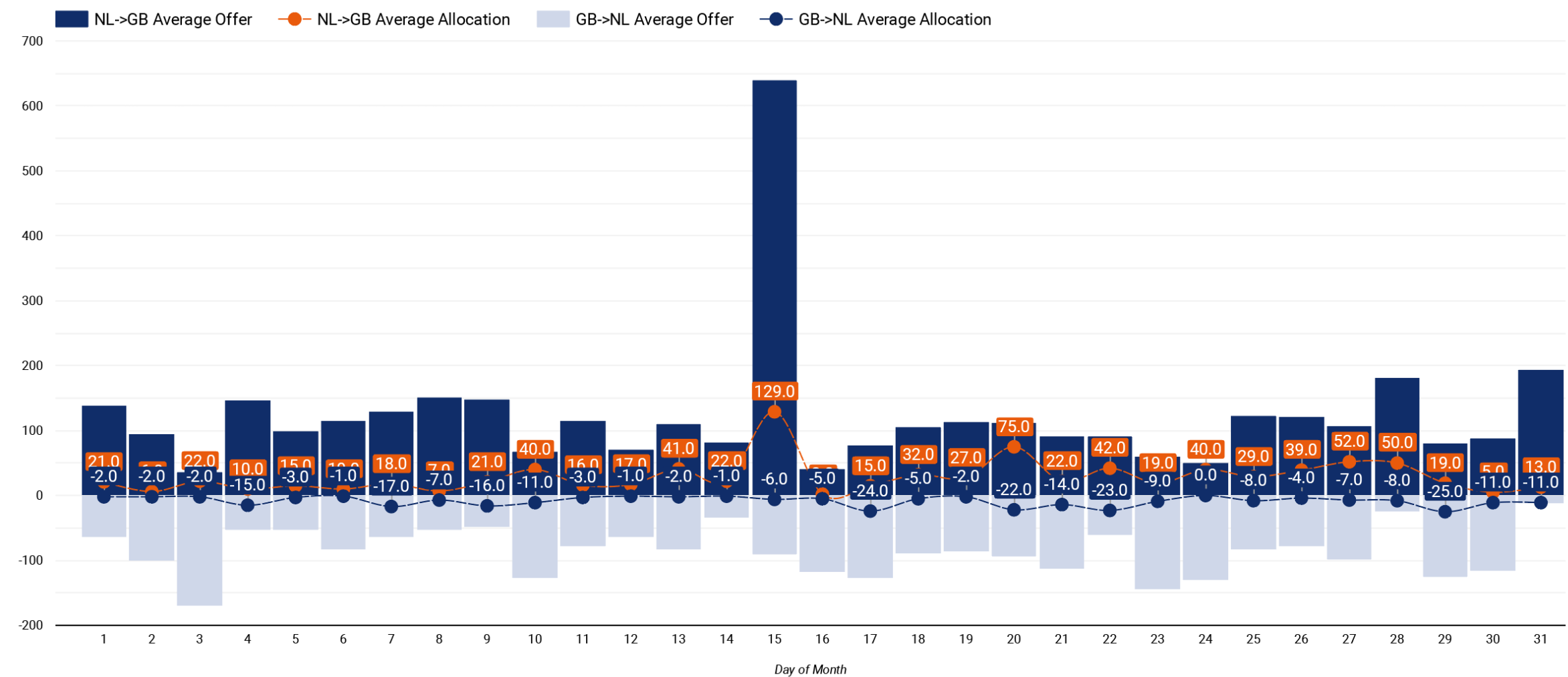


The difference in average NL-GB prices has been driven by the increase in market prices at the start of 2025, with high clearing prices over the Q2 period.

MONTHLY TRADING REPORT

AUCTION & FLOW PERFORMANCE REPORTING

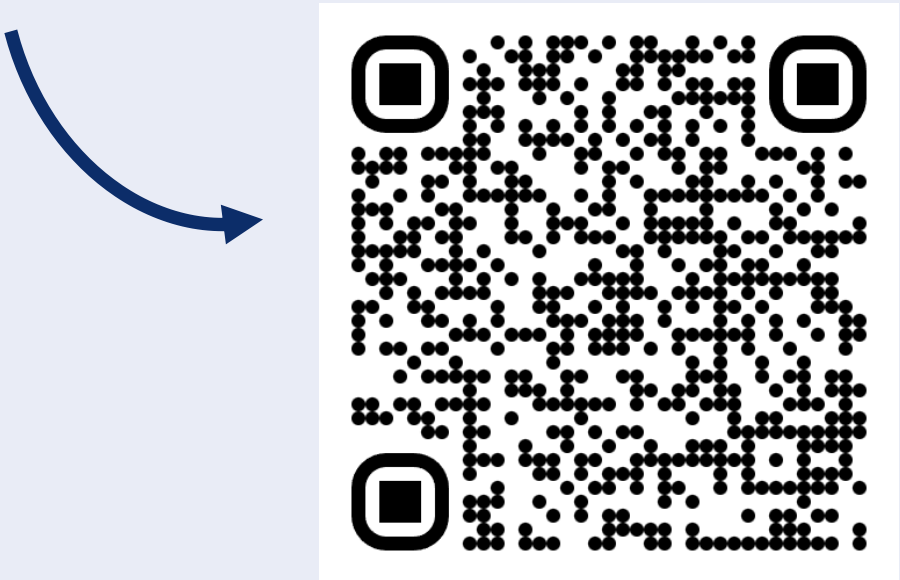
Buy Now Capacity Overview (MW)



August 2025 Data

KEY DATA FROM ALL AUCTIONS

- Designed to provide a comprehensive but concise breakdown of the Long Term, Day-Ahead, Intraday and Buy Now auctions, as well as nominations and flows.
- In each edition, we highlight key trends and data that we believe market participants would find useful to analyse the potential value they could achieve through trading via BritNed.
- [Register now using the QR code](#)



EMPIRE IMPROVEMENTS

2024 & 2025 UPDATES



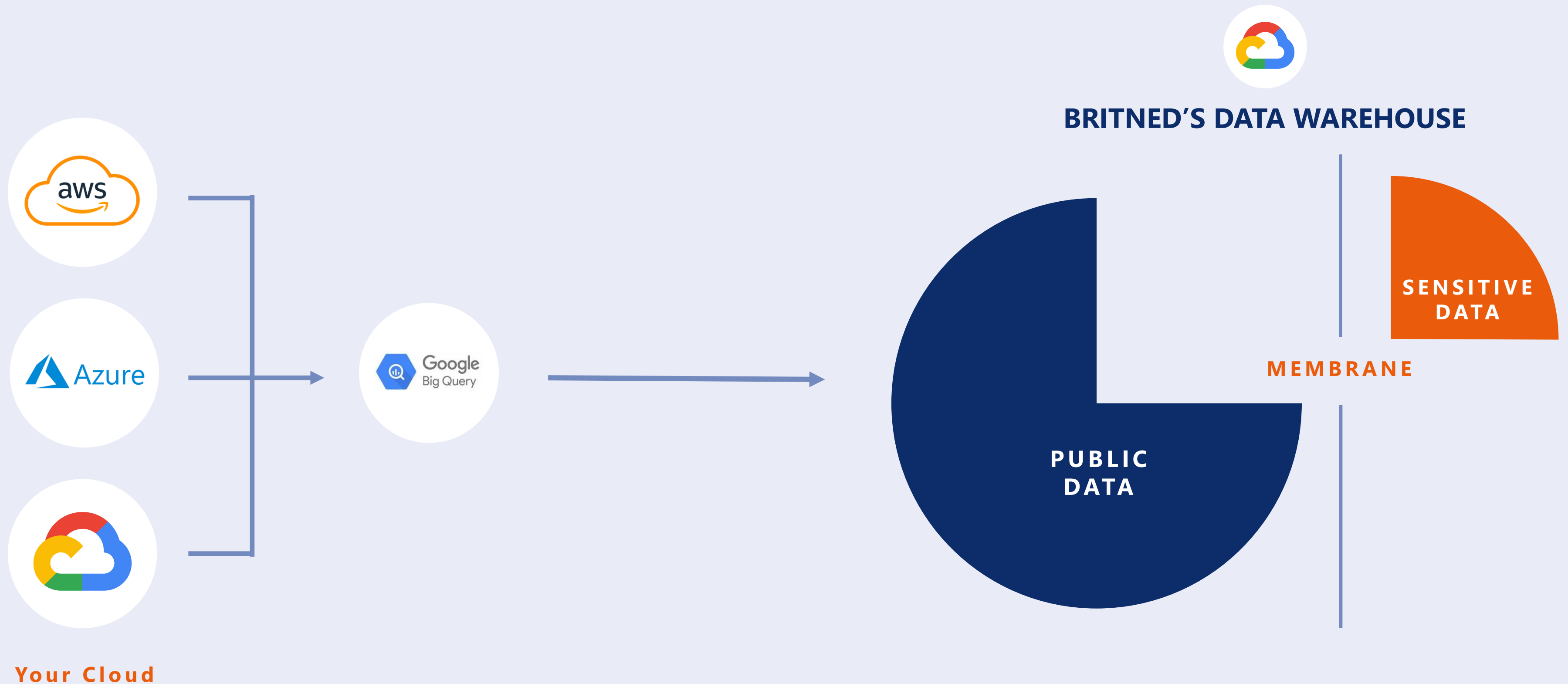


CONNECT

DIRECTLY INTO BRITNED'S DATA WAREHOUSE

CONNECT

DIRECTLY INTO BRITNED'S DATA WAREHOUSE



CONNECT

DIRECTLY INTO BRITNED'S DATA WAREHOUSE

WHAT DATA IS AVAILABLE?

- ✓ Auction clearing prices
- ✓ Auction clearing volumes
- ✓ Anonymised bid curves
- ✓ Aggregated nominations
- ✓ Buy Now auction data

KEY BENEFITS

- ✓ Save time with simplified access to historic BritNed data*
- ✓ Access data (including auction results) across all auction products
- ✓ The service will be available free of charge

CONNECT

TESTIMONIAL



Working with BritNed to setup CONNECT has been an exciting and extremely useful opportunity.

The CONNECT product has opened a plethora of useful data points for us to be able to use, for back testing and as inputs to models that inform trading decisions.

Now, rather than having to scrape and aggregate data ourselves or pay for data through a third party (which is often unreliable or faulty in our experience), we can get the true raw data from the source with CONNECT for the full history of all BritNed auctions.

POLICY & REGULATION

2025 UPDATES

EU BIDDING ZONE REVIEW

No changes planned
for the Netherlands

EU CBAM PAYMENTS

Reporting required from
January 2026 but
payments delayed until
2027, although charges
apply for 2026

Governments working
towards Energy Trading
Scheme linkage between
EU and UK

UK REVIEW OF EM ARRANGEMENTS

DESNZ have announced
their decision to reform
the electricity system while
retaining a single national
wholesale price, which will
include NESO balancing
reform and improving
interconnector flows

UK-EU COOPERATION

Possible reintegration
of the UK into the EU
Internal Electricity
Market



EU CBAM

PARTICIPANTS' FORUM

MAITRAYEE BHOWMICK-JEWKES

EU CBAM OVERVIEW

BACKGROUND

The EU's CBAM regulation is part of the 'Fit for 55' package.

CBAM is a regulatory tool, implemented by the EU, to address carbon leakage and encourage greener global trade practices. It effectively places a carbon price on imported goods based on their embedded greenhouse gas emissions.

CONCERNS

EU CBAM is applied to electricity imported into the EU. The complex nature of electricity as commodity, and heavily interconnected electricity system, makes it challenging or even counter-productive to it to reduce greenhouse gas emissions.

This would be detrimental to UK-EU cross border electricity trade as it would introduce heavy import tariffs. Cross-border electricity trade would particularly be exposed to the unintended consequences of the EU's CBAM given the interdependencies of markets as well as UK's net zero targets and infrastructure development for renewables.



EU CBAM IMPLEMENTATION



- **Focus on Reporting:** Importers of CBAM goods (e.g., iron, steel, aluminium, cement, fertilizers, hydrogen, and electricity) are required to report quarterly on the embedded emissions of their imports.
- **No Financial Obligations:** While reporting is mandatory, there are no financial adjustments (like buying certificates) during this phase.
- **Potential Penalties:** Failure to comply with reporting obligations can lead to penalties.
- **First Report Deadline:** The first CBAM report was due on 31st January 2024, covering the period from 1st October 2023.

- **Financial Adjustments Begin:** Importers will need to purchase CBAM certificates to account for the carbon emissions embedded in their imported goods.
- **Businesses need to get ready well before 2026** to access emissions data and putting systems in place to calculate and track embedded carbon accurately.
- **Process:** To purchase and use CBAM certificates, companies must first register as authorized CBAM declarants

IMPLEMENTATION: DEFINITIVE

ENDURING CBAM ARRANGEMENTS

- **Financial Adjustments Begin:** Importers will need to purchase CBAM certificates to account for the carbon emissions embedded in their imported goods.
- Businesses need to get ready well before 2026 to access emissions data and putting systems in place to calculate and track embedded carbon accurately.
- **Process:** To purchase and use CBAM certificates, companies must first register as authorized CBAM declarants
- **Potential Deferral:** However, in 2025 EC published a **CBAM Simplification Package** which might potentially defer the obligation to purchase CBAM certificates for goods imported in 2026 to February 2027.
- **Reporting for Definitive CBAM Arrangements:**
- CBAM declaration containing the following:
 - Total quantity of goods imported during the preceding calendar year
 - Total embedded emissions in those goods
 - Emissions to be verified by EU accredited verifier
 - Total number of CBAM certificates to be surrendered
 - The carbon price effectively paid in the country of origin for the embedded emissions
- **Declaration to be submitted each year**

How to get and manage CBAM certificates

- ① Apply via your National Competent Authority (NCA)
- ② Receive CBAM account and access to the CBAM Registry
- ③ Purchase certificates through the registry
- ④ Surrender certificates annually based on reported emissions

CBAM MITIGATION

ROUTE 1

Shape CBAM Enduring Methodologies to avoid short term financial impact

- Goal is for EC to amend the mechanism of calculating the import tax & recognise the UK ETS price to minimise potential financial impacts through various legislative acts/ amendments prior to 1st January 2026
- Proactive engagement with EU/UK policymakers and wider industry partners to shape detailed technical provisions for the enduring regime and influence the upcoming review of EU CBAM to mitigate impacts until a linkage agreement is achieved.

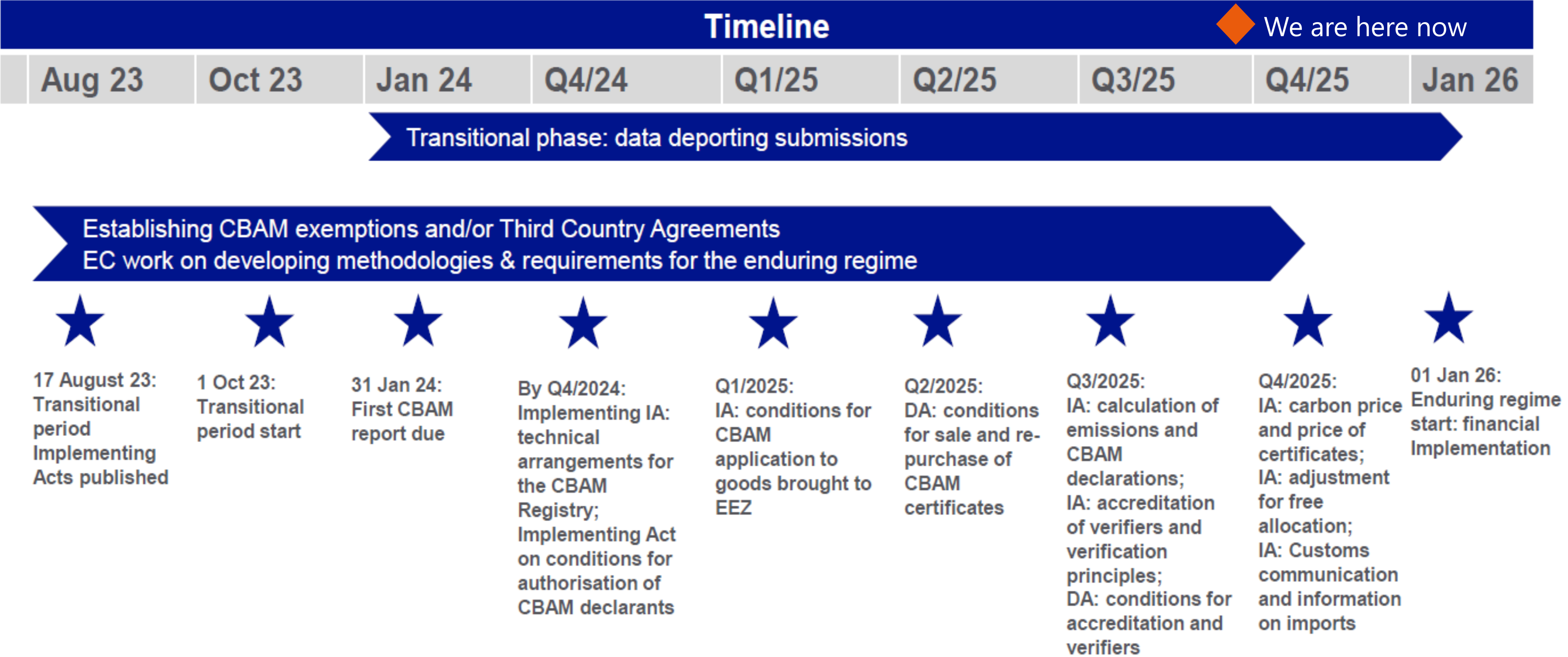
ROUTE 2

Ensure political support for UK-EU ETS Linkage to progress as soon as possible and agree interim mutual CBAM exceptions

- Now that ETS linkage has been included in the “reset” discussions between the EU and UK, the goal is to have a linkage agreement as soon as practicable and in the interim, to get a CBAM exemption while linkage is being negotiated to avoid impacts as of 1 January 2026;
- Linkage negotiations may take at least 12-18 months. Continued engagement with EU/UK policymakers & stakeholders to support linkage discussions; advocate for a flexible a pragmatic approach in negotiations & for the need for urgent clarity on exemption possibilities to avoid costs.

- It is widely recognised that the best way to mitigate the risks from CBAM would be to align the EU and UK ETS (Emissions Trading Scheme).
- After considerable amount of advocacy, the ETS linkage has been agreed following the UK-EU Summit on 19th May.
- The following routes are being considered in how the risks from CBAM are going to be mitigated until the ETS Linkage is finalised and implemented between UK and EU
- Joint EU Associations’ letter to keep the attention high on ETS linkage and CBAM exemption sent to EC and Council on 10th July
- The letter reiterates that time is of the essence to ensure industry and consumers do not bear unnecessary costs

IMPLEMENTATION TIMELINE





OPERATIONAL UPDATE

PARTICIPANTS' FORUM

PHIL SPAIN

AGENDA

OPERATIONAL UPDATE

1

**Asset
Overview**

2

**Current Asset
Performance**

3

**The Cable Repair
Project**

4

**Future Plans and
Investment**

5

Questions

THE ROUTE OF THE INTERCONNECTOR

AN OVERVIEW OF BRITNED'S ASSETS



THE CONVERTER STATIONS

THE ISLE OF GRAIN | MAASVLAKTE

The Valve Halls

Contains the equipment to convert Alternating Current (AC) to Direct Current (DC)

The DC Halls

Contains the DC Smoothing Reactor and connects the site with the HVDC cable

The AC Switchyard

Electricity enters and leaves the site here. The Yard is split into two poles.

The Control Building

Includes the control room, offices and staff facilities

Pole 1

Capable of delivering 500MW

Pole 2

Capable of delivering 500MW

The Transformers

3 per pole. Each weigh 282 tonnes & enable the voltage to be stepped up & down as required

Both sites are approximately **5 hectares** or 7 football pitches

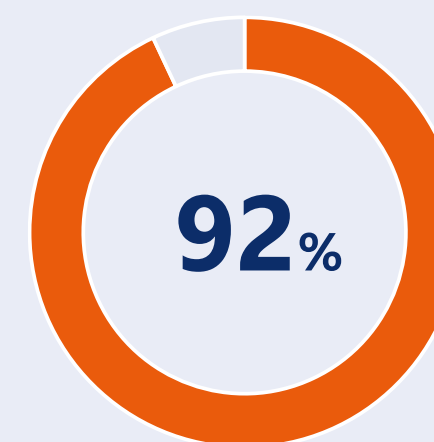
KEY FIGURES

AN OVERVIEW OF BRITNED'S ASSETS

TOTAL FLOW (TWh)



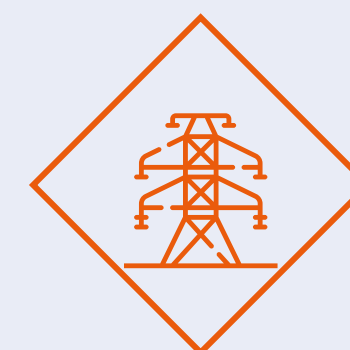
PERFORMANCE



Average Annual Availability
April 2011 – August 2025



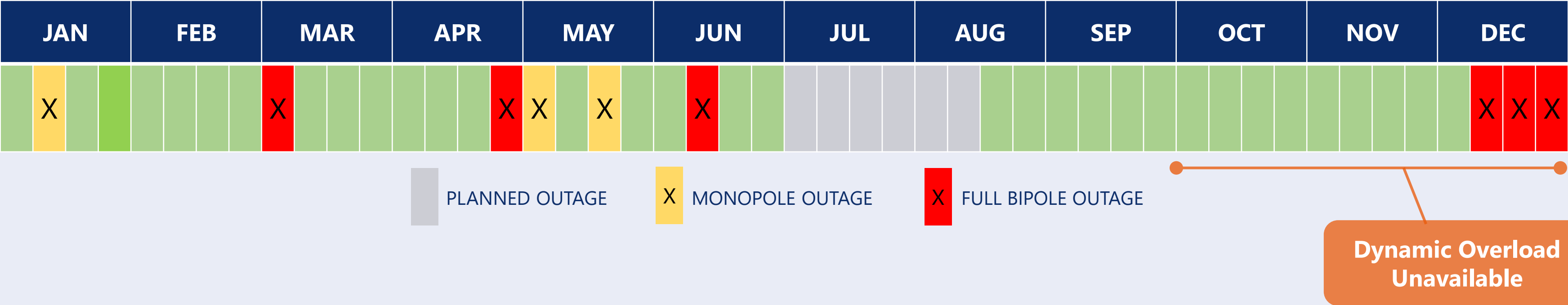
14 YEARS
Operational
2011 - 2025



67 TWh
Power exchanged
2011 - 2025

HISTORICAL PERFORMANCE

2024 AVAILABILITY & RELIABILITY



2024 TARGET	AVAILABILITY w/o Dynamic Overload	AVAILABILITY with Dynamic Overload	RELIABILITY (Unplanned/forced planned outages)
97.5%	84.76%	84.77%	8

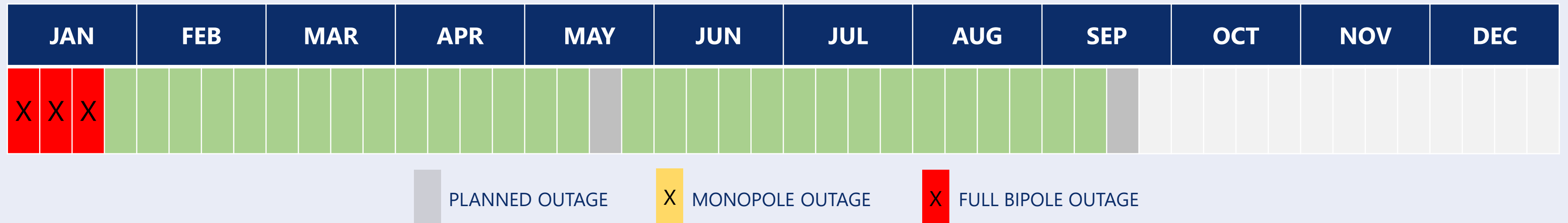
BENCHMARKING

Based on CIGRE comparisons, excluding cable failures, our performance is “in the pack”



CURRENT PERFORMANCE

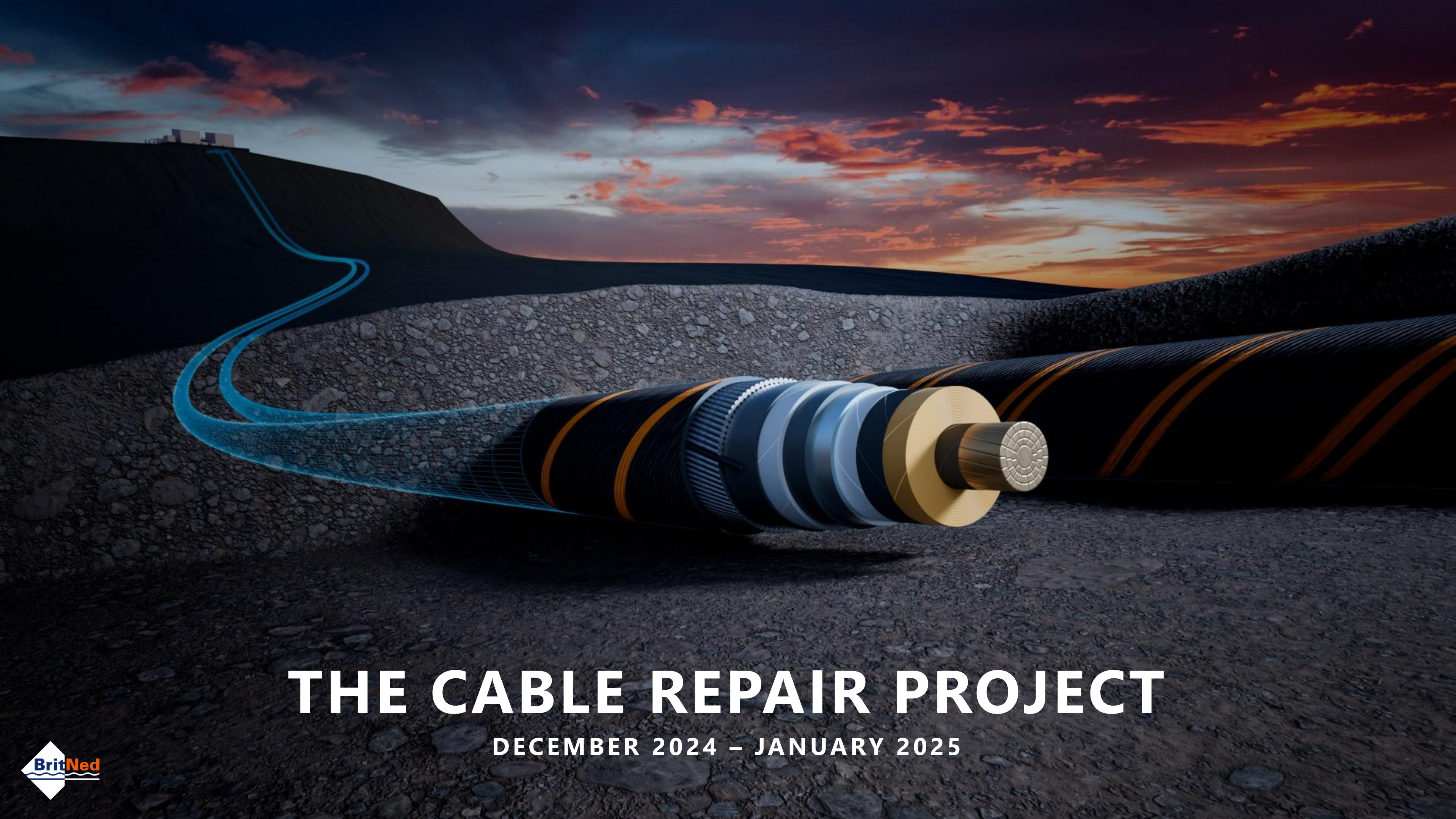
2025 AVAILABILITY & RELIABILITY



2025 TARGET	AVAILABILITY w/o Dynamic Overload	AVAILABILITY with Dynamic Overload	RELIABILITY (Unplanned/forced planned outages)
94%	86.63%	89.03%	1 (January)

BENCHMARKING

Based on CIGRE comparisons, excluding cable failures, our performance is **"in the pack"**



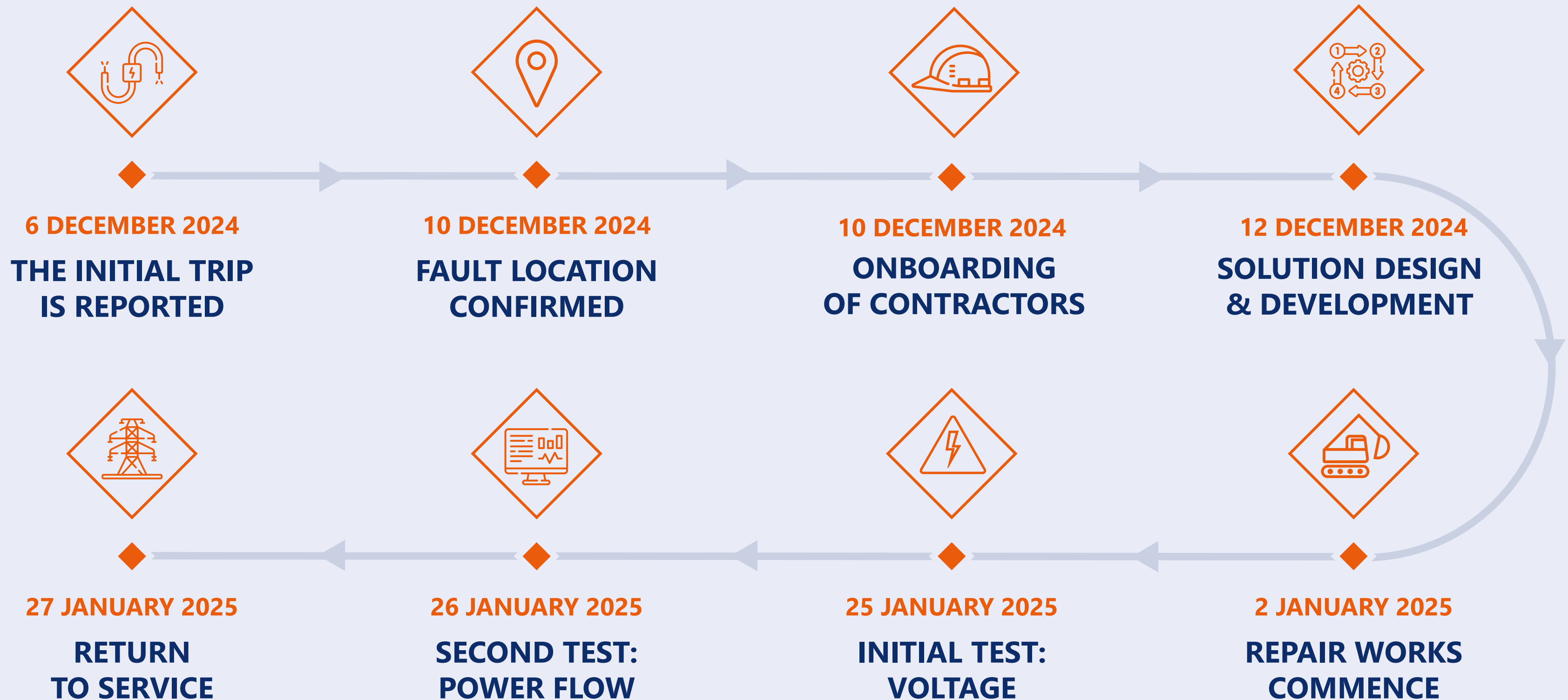
THE CABLE REPAIR PROJECT

DECEMBER 2024 – JANUARY 2025



THE CABLE REPAIR PROJECT

TIMELINE – MAJOR MILESTONES



THE LOCATION OF THE FAULT

MAASVLAKTE

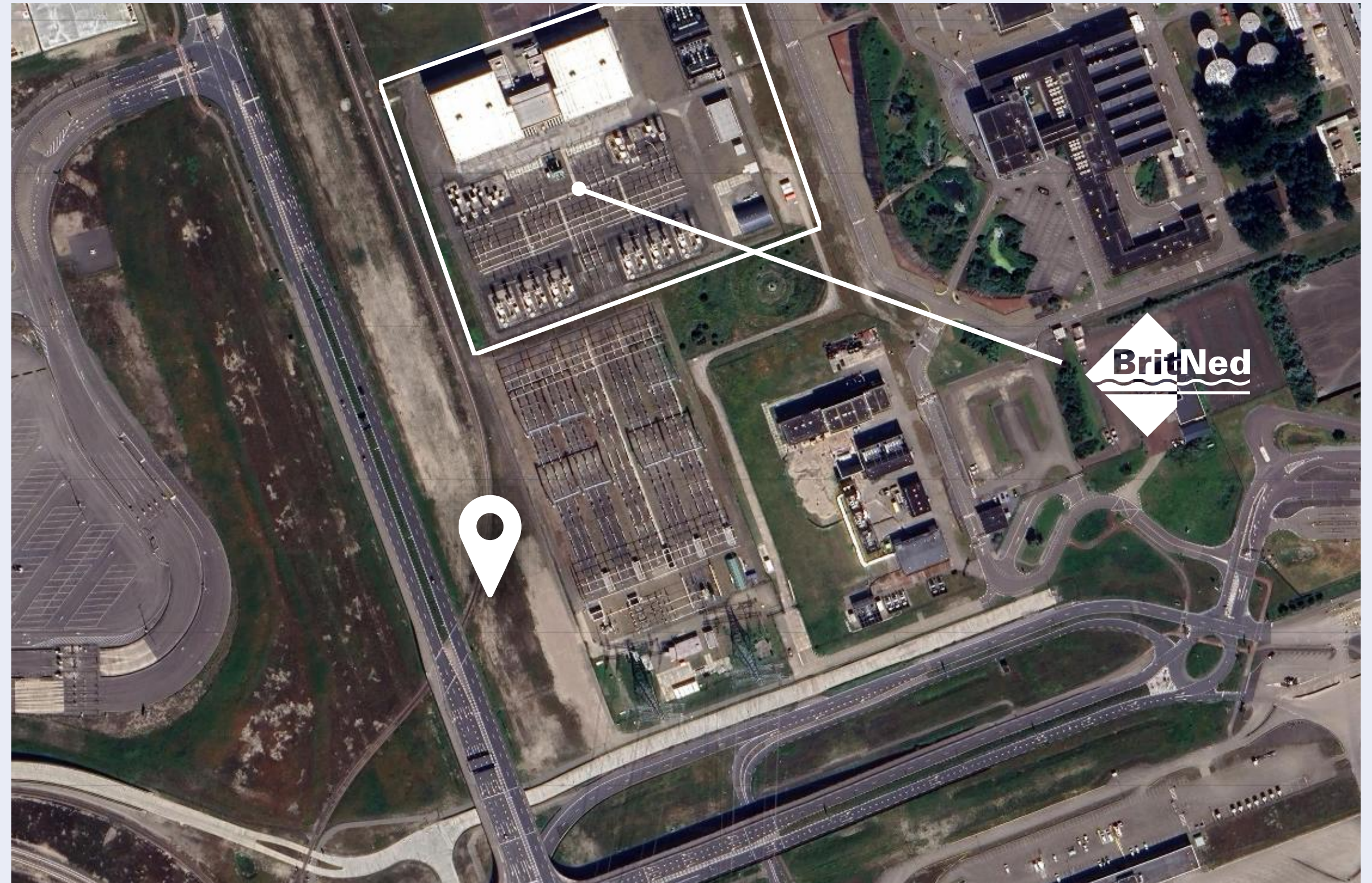
Our Cable Resilience Plan enabled the team to identify the cable fault quickly.

On 10 December, the location of the fault was confirmed.

High Voltage tests identified a fault with Pole 1, $\approx 300\text{m}$ from the Maasvlakte converter station.

We engaged several partners, including:

- Elektro Koopman
- NKT
- BT Geo
- Van Vulpen
- KLIC

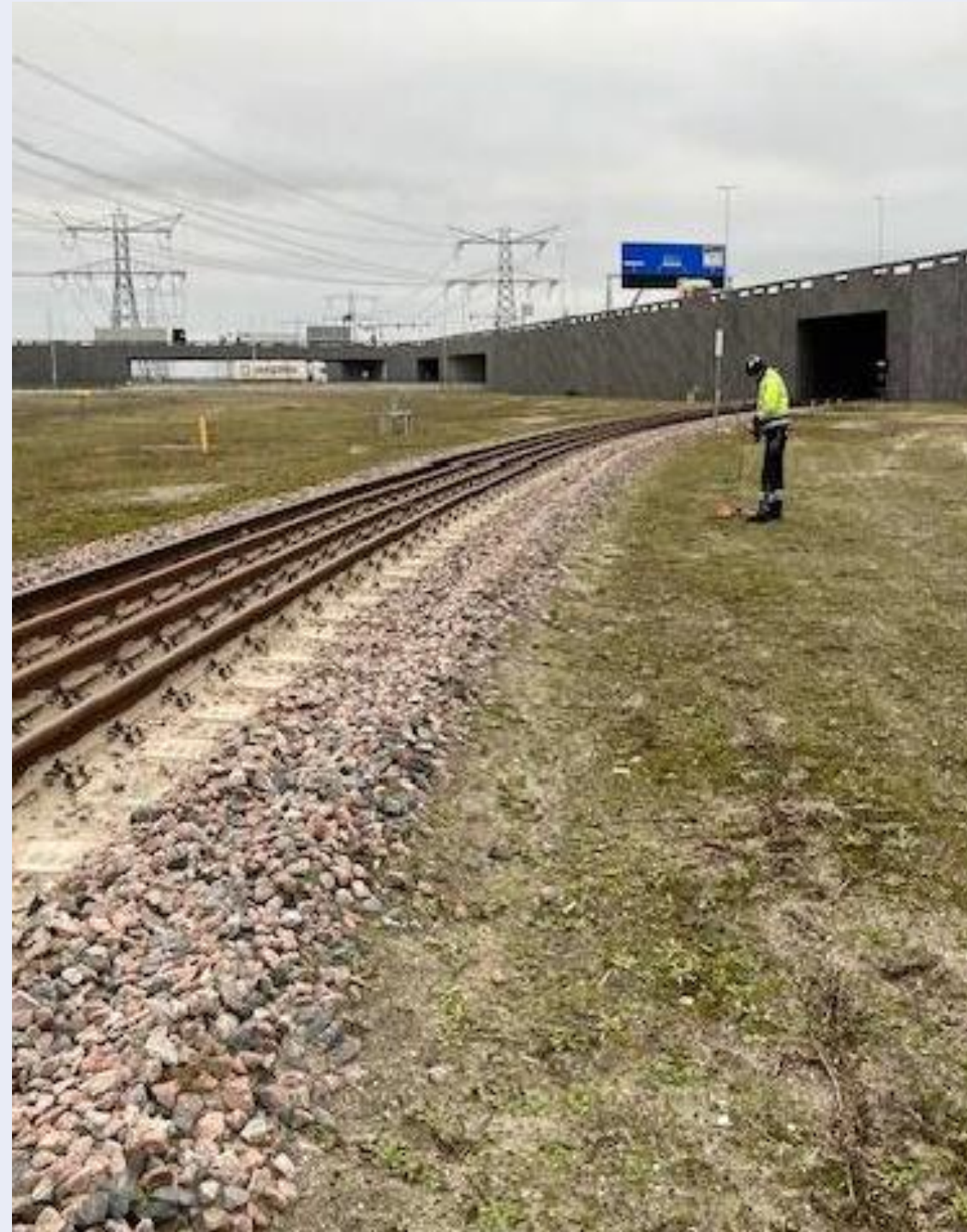


THE LOCATION OF THE FAULT

COMPLEXITIES AND CHALLENGES

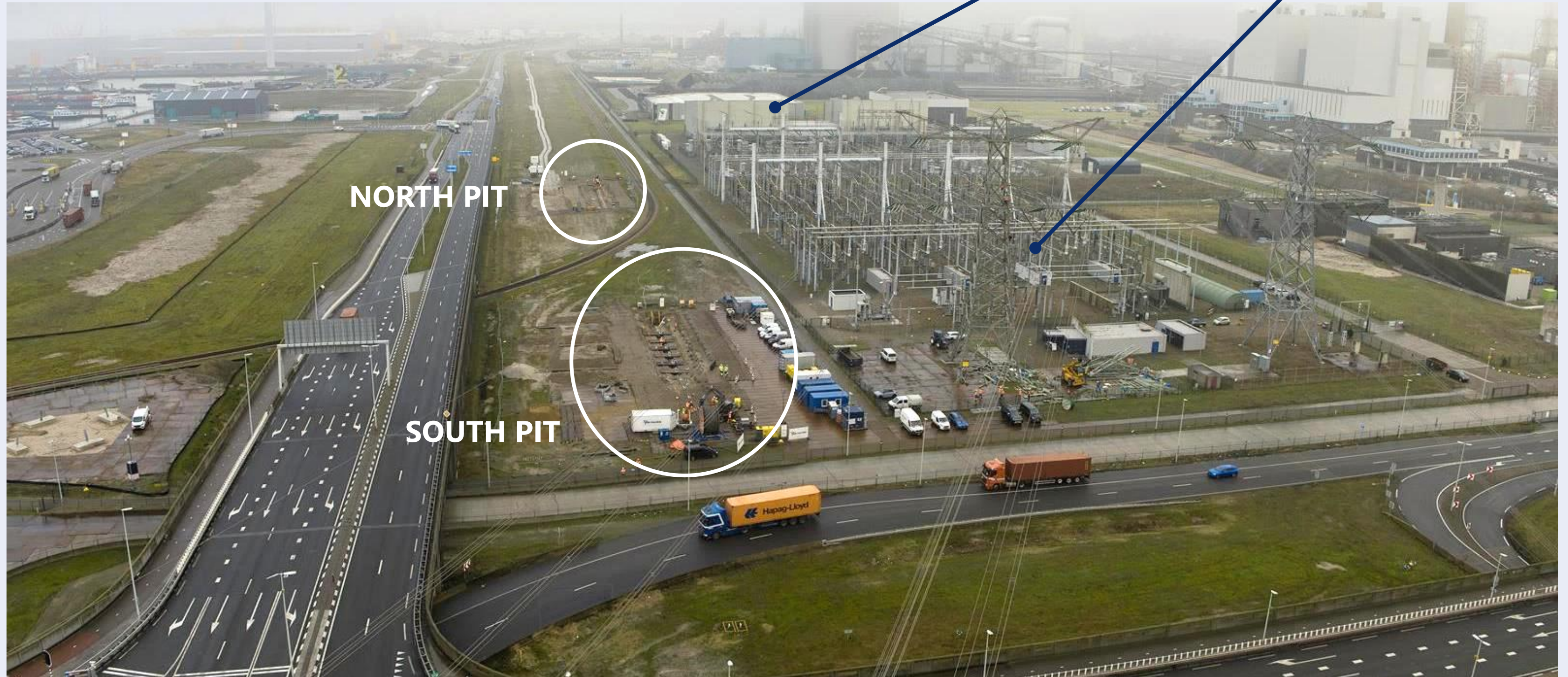
PROJECT CHALLENGES:

- **Engineering** – the fault was in a congested area with 12 infrastructures in a 4m2 area, including a railway track and other high-voltage cables
- **Stakeholders** – due to the number of infrastructures, there were many stakeholders in the area
- **Permitting** – the project required new permitting and working documents to be drafted and approved
- **People** – The Christmas holidays would pose difficulties with contractor availability
- **Excavation** – could only be done with ProRail approved contractors due to the proximity to railway



THE REPAIR PROJECT

WORK SITE OVERVIEW



EARLY RETURN TO SERVICE

27 JANUARY 2025 – 4 DAYS EARLY



PROJECT OVERVIEW

STATISTICS

51

DAYS

**ENTIRE PROJECT
DURATION**

6 December – 27 January

25

DAYS

**REPAIR PROJECT
DURATION**

2 January – 27 January

100

PEOPLE

**REPAIR PROJECT
TEAM SIZE**

including partners

4

DAYS

**EARLY RETURN
TO SERVICE**

0

ACCIDENTS

**NO ACCIDENTS OR
SAFETY INCIDENTS**

NEXT STEPS

THE CABLE REPAIR PROJECT



**REVIEW OF THE CABLE
RESILIENCE PLAN**
(including land cable repair procedure)



**ORGANISE LESSONS
LEARNED SESSION WITH
STAKEHOLDERS**



**RISK ASSESSMENT
AT BOTH SITES**
*(identifying key stakeholders for land
cable route)*



**CONTINUE TO PREPARE
FOR PHASE 2**
*(recover faulty part near railway track
& assess the status of Pole 2)*

ASSET MANAGEMENT

TACKLE EMERGING CHALLENGES TO
MAINTAIN OPERATIONAL EXCELLENCE

TECHNOLOGY & SYSTEMS

System Strategy

HMI Replacement
(planned for Sept 26)

Review the remaining Asset
Management Systems

Review new Condition
Monitoring equipment

ASSETS

Complete Critical Asset
Strategies and Resilience
Plans

Continue Asset Health and
Maintenance Project

Take AM maturity and gap
assessment

SAFETY

Complete the Safety
Management System and
review Safety Rules

Roll out Behavioural Safety
programme

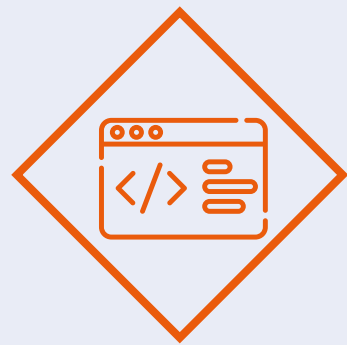
We will complete our asset management improvement initiative in-line with our vision to:

*Deliver 'World Class' performance for our customers and stakeholders,
whilst enabling the opportunities of the 'Energy Transition'.*



FUTURE ASSET PLANS & INVESTMENT

PROJECTS TO FURTHER INCREASE OUR AVAILABILITY & RELIABILITY



**TELECOMMUNICATIONS
SYSTEMS**



**CONTROL AND
PROTECTION SYSTEM**



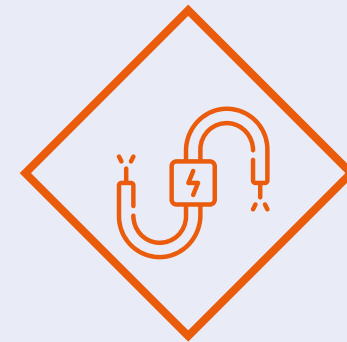
CIRCUIT BREAKERS



**CYBER SECURITY AND
PROTECTION OF ASSETS**



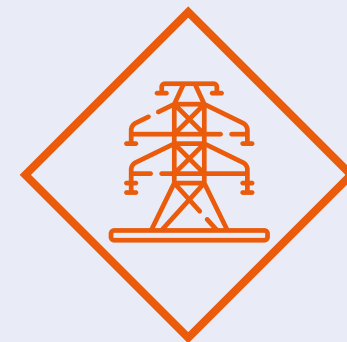
**SPARE PARTS
BUILDING**



CABLE MONITORING



RESILLIENCE / SPARES



**ASSET MANAGEMENT
SYSTEMS**



EMPIRE UPDATE

PARTICIPANTS' FORUM

KICK VAN HOUTEN

AGENDA

EMPIRE UPDATE

1

**Empire
Improvements**

2

**2025
Challenges**

3

**Buy Now 2.0
Feedback**

4

**Webhooks
Recap**

5

**Empire Explained
Video Series**

EMPIRE IMPROVEMENTS

2024 & 2025 UPDATES



CHALLENGES

EMPIRE UNAVAILABILITY

EMPIRE DATABASE FAILURE (AWS)

- 25/07/2025
- Empire intermittently unavailable for 31 minutes
- Intraday Auction 2 cancelled

FAILED EMPIRE 7.0 DEPLOYMENT

- 14/08/2025
- Empire GUI and API unavailable between 17:38 – 21:00
- Intraday Auction 1 for 15/08/2025 cancelled
- All capacity offered in Buy Now auctions

BUY NOW 2.0

REDESIGNING & IMPROVING THE UNIQUE AUCTION

Launched
April 2025

Buy Now Auction Offers

GB-NL NL-GB



Next Price Change: 2 Seconds

MTU CE(S)T	Current Price (€)	Next Price (€)	OC (MW)	Request Capacity (MW)
12:00-13:00	7.85	7.53	91	<input type="text" value="91"/>
13:00-14:00	21.99	21.90	89	<input type="text" value="70"/>
14:00-15:00	12.99	12.97	56	<input type="text" value="35"/>

BUY NOW

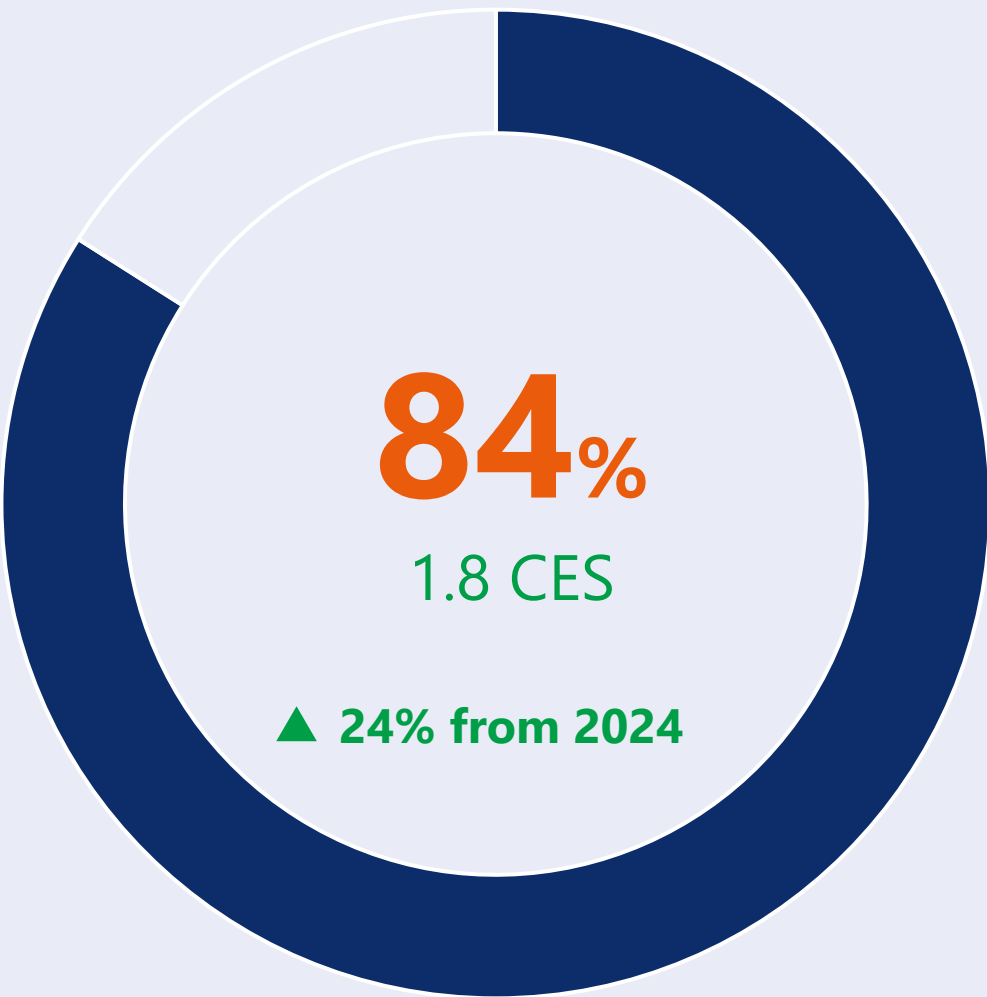
INSTANTLY SECURE CAPACITY

- ✓ Purchase any capacity amount (up to the offered capacity)
- ✓ Acquire capacity before, during, and after the regular Intraday auctions
- ✓ Secure capacity 30 minutes before the Intraday auction and up to just two minutes before the nomination gate closure
- ✓ Purchase capacity for multiple MTUs simultaneously

BUY NOW 2.0

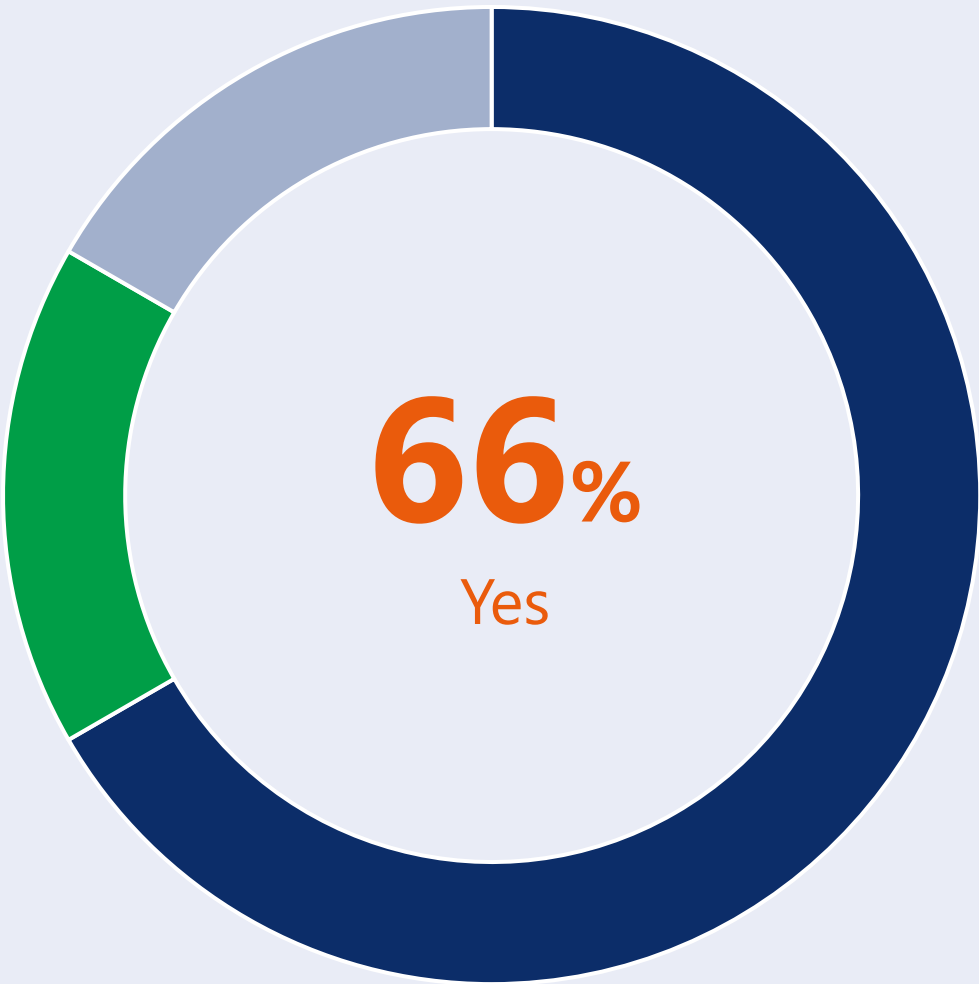
MID-YEAR SURVEY RESULTS

Following the release of Buy Now 2.0, how would you describe participating in Buy Now auctions?



66% of participants responded **Very Easy or Easy**

Do you think BritNed offers enough capacity in Buy Now auctions?



■ Yes ■ No - I'd like more Intraday Capacity offered ■ Not applicable to me

WEBHOOKS

PUSH NOTIFICATIONS FROM EMPIRE



REAL-TIME NOTIFICATIONS

Get real-time notifications and respond immediately to key events, no polling, no delays



SEAMLESS AUTOMATION

Trigger workflows or actions automatically, reducing manual effort and improving efficiency



LOWER API USAGE

Reduce polling and unnecessary API calls, avoiding API rate limit and saving system resources

Auctions	Buy now offers	Finance
<input type="checkbox"/> Long Term auction specification updated	<input type="checkbox"/> Buy now offer published	<input type="checkbox"/> Invoice sent
<input type="checkbox"/> Day Ahead auction specification updated	Secondary Market	<input type="checkbox"/> Invoice marked as paid
<input type="checkbox"/> Intraday auction specification changed	<input type="checkbox"/> Transfer request received for LT	Outages
<input type="checkbox"/> Auction status updated	<input type="checkbox"/> Transfer request received for DA	<input type="checkbox"/> Unplanned outage created
<input type="checkbox"/> Auction cancelled	<input type="checkbox"/> Transfer request received for ID	<input type="checkbox"/> Unplanned outage updated
<input type="checkbox"/> Long Term auction allocated	Nomination Window Overrides	<input type="checkbox"/> Unplanned outage cancelled
<input type="checkbox"/> Day Ahead auction allocated	<input type="checkbox"/> Nomination window override created	<input type="checkbox"/> Unplanned outage ended
<input type="checkbox"/> Intraday auction allocated	<input type="checkbox"/> Nomination window override updated	Curtailment
		<input type="checkbox"/> Curtailment executed

EMPIRE EXPLAINED

VIDEO SERIES

PHASE ONE



DASHBOARD



REPORTS



BUY NOW



NOMINATIONS



AUCTIONS



ORGANISATION
SETUP



INVOICING &
SETTLEMENTS

PHASE TWO



THE REMA DECISION

PARTICIPANTS' FORUM

MAITRAYEE BHOWMICK-JEWKES

OVERVIEW

REMA - THE REVIEW OF THE ELECTRICITY MARKET ARRANGEMENTS

NATIONAL PRICING OPTION 1

Less disruptive

Was looking to include reforms to the self-dispatch, transmission charging (TNUoS) and optimising the use of interconnectors.

None of these changes were likely to be of high impact.

ZONAL PRICING OPTION 2

Would divide the electricity market into larger zones or hubs, each with a unique price.

Boundaries of the zones would be drawn to reflect where major transmission network constraints occur and the price within each zone would be determined based on the supply and demand within the zone.

To facilitate GB's aim to reach Clean Power by 2030, networks must be sufficient to prevent large scale curtailment of zero carbon resources with economic options available to NESO should constraints need to be managed. This includes any transition periods where the build out of zero carbon generation temporarily outstrips network build.

THE DECISION

A REFORMED NATIONAL PRICING DELIVERY PLAN

NATIONAL PRICING

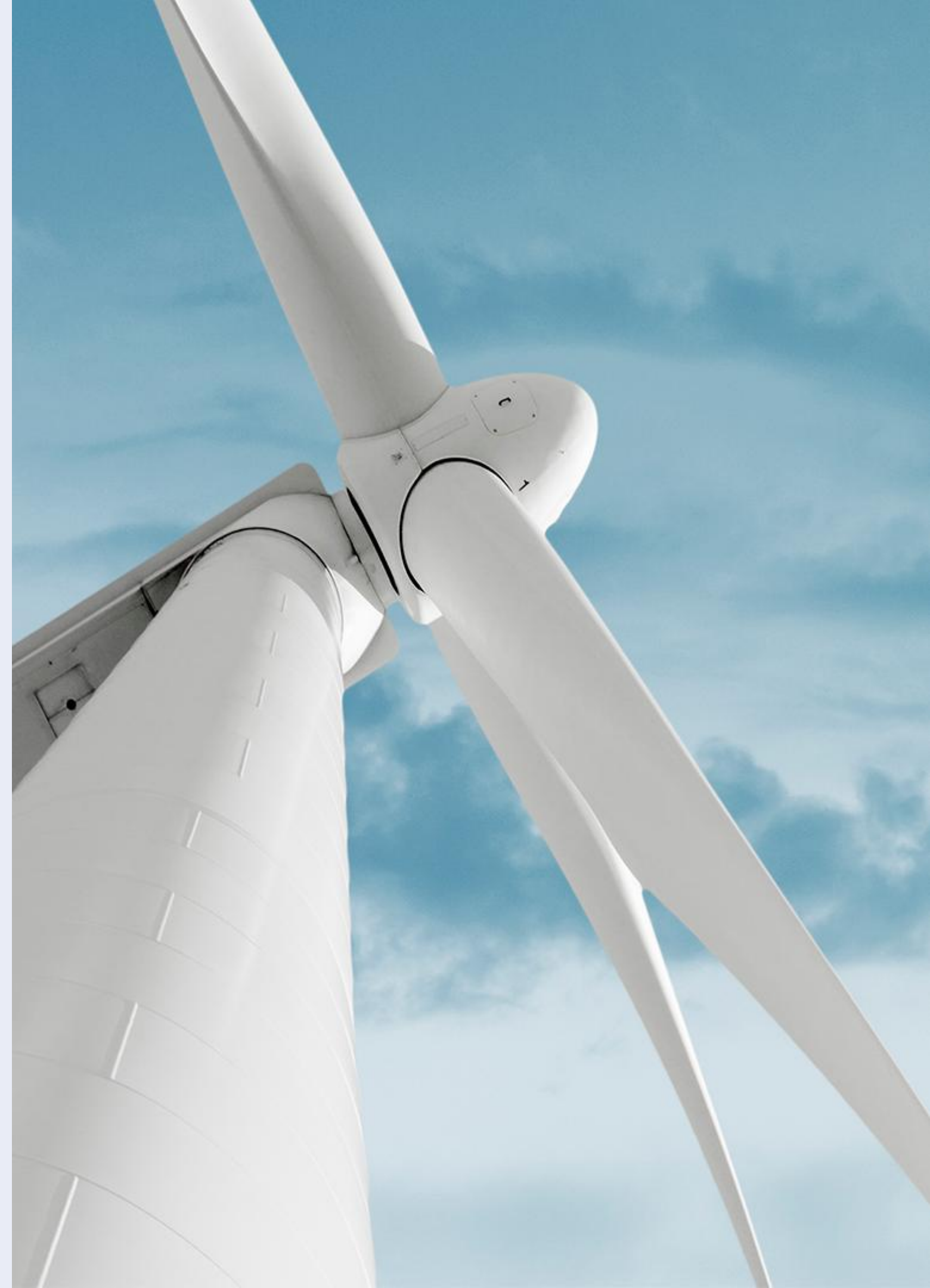
OPTION 1

DESNZ have announced their decision to reform the electricity system while retaining a single national wholesale price.

The government will publish a Reformed National Pricing Delivery Plan later this year, setting out the next steps on design and delivery.

The initial elements of the package include:

- utilising Strategic Spatial Energy
- reforming transmission charging & connection charging
- NESO balancing reform
- constraint management through the Constraints Collaboration Project
- improving interconnector flows



KEY PRIORITIES

THE REFORMED NATIONAL PRICING PACKAGE



NESO BALANCING REFORM

Cautious support for principals behind change (or more granular signals), but will depend on the detail of the proposals



CONSTRAINTS COLLABORATION PROJECT

Support of NESO's focus on alternative ways to manage system constraints outside the Balancing Mechanisms.

Have previously indicated that intraday trading on interconnectors provides a blueprint for potential constraint management tools in UK.



IMPROVING INTERCONNECTOR FLOWS

It is encouraging that the Government has recognised the issues around this topic, and this aligns with our engagement with NESO and TenneT

It will be useful to explore the full benefits of the IEM by all parties, including the use of balancing products by NESO in the exploration of the UK's participation in the IEM.



UK-EU CLOSER COOPERATION

PARTICIPANTS' FORUM

MAITRAYEE BHOWMICK-JEWKES

REINTEGRATION IN TO THE IEM

UK-EU CLOSER COOPERATION



- The UK is no longer part of the Internal Energy Market (IEM) following its departure from the EU.
- While the UK and EU remain interconnected for energy, trading arrangements are now governed by the Trade and Cooperation Agreement (TCA) rather than EU market mechanisms.
- However, British energy markets could be re-integrated into the IEM under the UK-EU agreement reached on 19th May 2025.

THE NEW UK – EC ‘COMMON UNDERSTANDING’

"The UK and EC share the view that close cooperation on electricity is in the interest of both the European Union and the United Kingdom".

"...explore in detail the necessary parameters for the United Kingdom's possible participation in the European Union's internal electricity market, including participation in the European Union's trading platforms in all timeframes".

A NEW AGREEMENT

"...should define the relationship between the United Kingdom and European Union rules on the electricity market, as well as on State aid, the promotion of renewables and the protection of the environment, in so far as they relate to the electricity sector".

Until then, current electricity trading arrangements will continue to apply.

REINTEGRATION IN TO THE IEM

UK-EU CLOSER COOPERATION

“ ”

The agreement at the Summit reflects that call (reestablishment of price coupling). This is great news for energy consumers in the EU and the UK.

UK participation in the EU electricity market will make it easier to trade electricity and reduce electricity prices in both the UK and EU. It'll help with the top political priority of reducing energy costs for European industry.



WindEurope CEO
Giles Dickson

OPTIONS FOR IEM PARTICIPATION

UK-EU CLOSER COOPERATION

BLOCK 1: EARLIER IMPLEMENTATION

Single Day-Ahead Coupling

BLOCK 2: LATER IMPLEMENTATION

Intraday Coupling

Forward Capacity Allocation (JAO/ HARS)

SDAC PRIORITISED IN BLOCK 1:

- Most investable proposition
- Social welfare and efficiency gains above explicit and MRLVC

FCA COULD OCCUR EARLY / IN PARALLEL TO SDAC:

- Relatively easy implementation
- Coordination of platforms (SDAC, SAP)
- However, there are **certain risks with FCA**:
 - Smaller priority than SDAC due to low market efficiency gains
 - Curtailment compensation at market spread
 - Empire platform may no longer be used operationally

ACCESS TO BALANCING PLATFORM AND INTRADAY COUPLING (SIDC & XBID) IN BLOCK 2:

- Significantly more complex markets and lower welfare gains suggest these platforms are likely to follow SDAC
- XBID provides no additional revenue to interconnectors despite using our capacity so is unattractive

Before taking away explicit, Intraday, balancing tools and mechanisms may need to be developed

WHAT WOULD PARTICIPATION MEAN?

UK-EU CLOSER COOPERATION



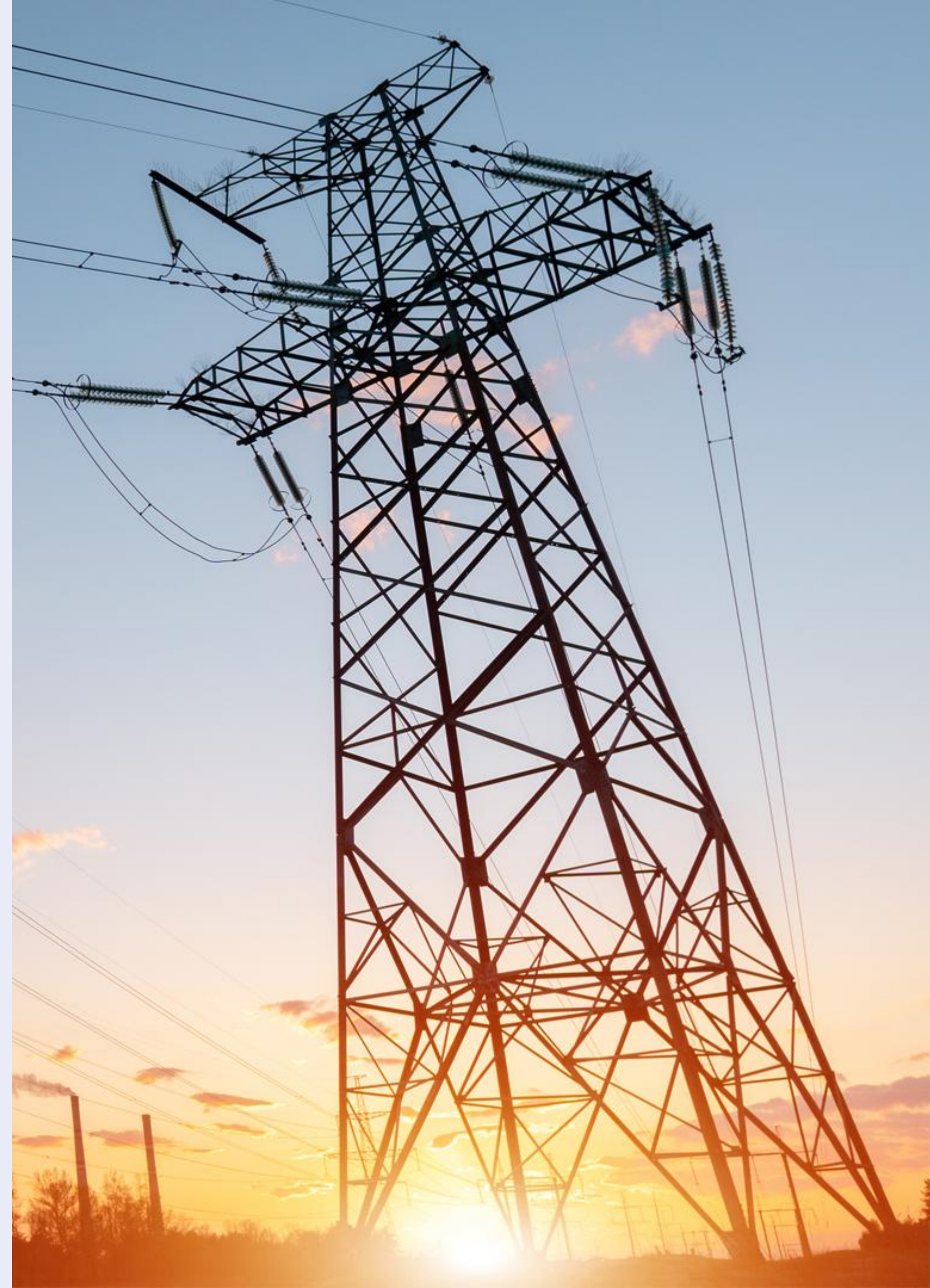
CONSIDERATIONS

- New Capacity Calculation Methodology
- Empire cannot be used operationally
- Re-register with JAO
- Long-term auctions within JAO



BENEFITS

- Easier to trade electricity
- Lower wholesale prices
- Reduced consumer bills



An aerial photograph of a coastal area featuring two electrical substations. One substation is located on a grassy peninsula in the upper right, and the other is on a smaller peninsula in the lower left. A dark blue body of water separates them. Two bright blue lines, representing a cable, run across the water's surface from the upper substation to the lower one. Light blue lines with circular nodes are also visible on the grassy areas, suggesting a network or monitoring system.

ANY QUESTIONS?