national gas

Securing Britain's Energy.

# Gas Winter Review 2024/25 →

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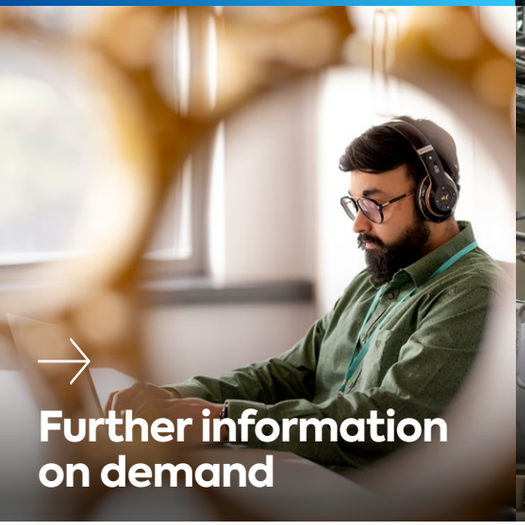
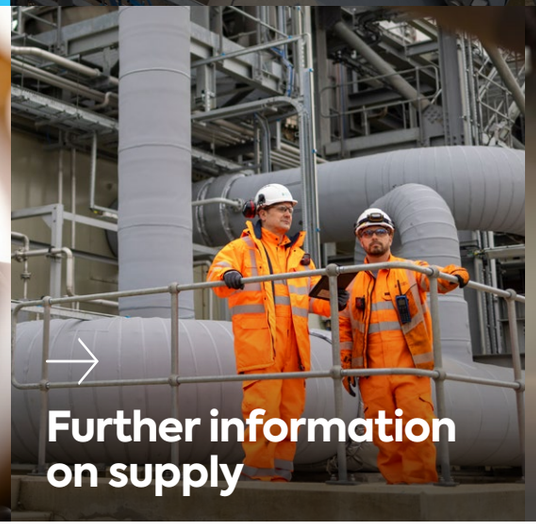

Further information on demand


Further information on supply


Appendix

Glossary

# Welcome

**We have published the Gas Winter Review & Consultation 2025 as an interactive document.**

## How to use this document

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Click on the arrows to move to previous or next page.

**Enlarge/reduce**
Hover over the magnifying icon to make charts bigger or smaller.

**'Linked' content**
Words highlighted in green and underlined have links to other pages in this document, or are URLs.

# Welcome to this year's Gas Winter Review & Consultation

**Each year we publish the Winter Review & Consultation, which looks back at gas supply and demand for the previous winter (1 October 2024 to 31 March 2025) and reviews the various behaviours and patterns that we observed.**

Total NTS demand for winter 2024/25 increased by 3% when compared to the previous winter. There were increases in a number of demand categories including NTS gas demand for power (+18%), exports to Ireland (+13%) and Non Daily Metered (+1%). The overall increase was balanced out by the reduction in exports to continental Europe (-78%).

Supplies in winter 2024/25 were diverse, with UKCS & Norway providing the steady supplies we would usually expect. Flexible supplies came predominantly from liquified natural gas (LNG) and GB gas storage, imports from continental Europe also provided some supply when it was needed. LNG supplies increased to meet the additional gas demand.

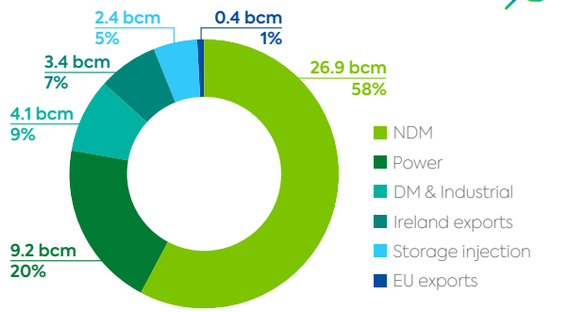
Towards the end of the document, we will also briefly outline our preparations for the coming winter, as well as our current thinking on the types of scenarios we intend to use in our forthcoming Winter Outlook publication. You'll have the opportunity to comment on this through the consultation element of this document, and I'd really encourage you to do so.

I hope this publication provides you with useful insight into what we saw in winter 2024/25 and that you find our early thoughts about the forthcoming winter helpful. I look forward to continuing to engage with you through our various publications and industry forums.

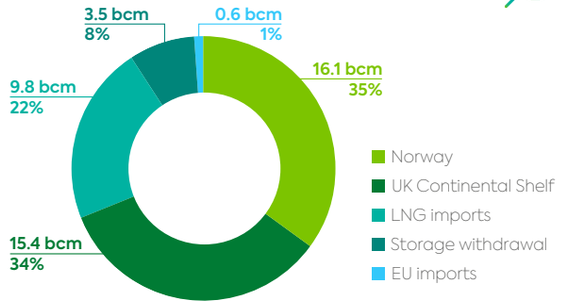
As with all of our publications, we really value your feedback – let us know what works, what doesn't, and how we could improve. If you'd like to get in touch, you can find contact details here.

**Glenn Bryn-Jacobsen**
Director of Energy Systems & Resilience

Demand breakdown – winter 2024/25




Supply breakdown – winter 2024/25



# About US

**National Gas is the owner and operator of the gas National Transmission System (NTS) in Great Britain. Our licence is established under the Gas Act 1986. This requires us to develop, maintain and operate economic and efficient networks and to facilitate competition in the supply of gas in Great Britain.**

Our primary responsibility is to transport gas safely, efficiently and reliably across the NTS, by managing the day-to-day operation of the network. This includes maintaining system pressures within safe operating limits, ensuring gas quality standards are met and acting as the residual balancer for supply and demand if there is an imbalance in the market.


**Our primary responsibility is to transport gas safely, efficiently and reliably across the NTS, by managing the day-to-day operation of the network.**

## National Gas is securing Britain's energy

We are responsible for transporting gas to power stations, major industries, storage facilities, more than 500,000 businesses, and 24 million homes through nearly 5,000 miles of pipes across Britain.

Gas is an essential part of a secure energy supply in GB, and will continue to play a vital role for decades to come. More than ever, we need the security that gas brings to keep the lights on, businesses running, and to protect jobs. National Gas provides that security.

National Gas is also proud to lead the way in transforming the energy network for a net zero future. Gas provides the energy security to support renewable electricity generation, and we are developing our infrastructure to transport hydrogen and carbon dioxide across the country.

We work closely with government, regulators (including Ofgem), national advisory bodies and the National Energy System Operator (NESO) to ensure we deliver safe, reliable energy across the country, while developing sustainable energy systems for the future.

## How we work with NESO

NESO is an important strategic partner for National Gas in the delivery of our objectives. We support NESO in achieving its long-term goals, as well as more immediate priorities, such as those outlined in the Clean Power 2030 report.

We share the same end goal of developing the energy market for the future to enable a secure and affordable transition to net zero, which includes natural gas, hydrogen and carbon capture and storage (CCS). We work closely with NESO to align longer-term investments with the government's net zero plans, ensuring that securing energy supplies and delivering energy safely to consumers remains the number-one priority.

**Other publications in this suite:**

- Gas Summer Outlook published annually in April.
- Gas Winter Outlook published annually in October.
- Gas Ten Year Statement (GTYS) published annually in November.

# Demand & supply

# Demand summary

**GB demand* for winter 2024/25 was higher than the previous winter (circa 1.3 bcm or 3%).**

Some key observations on last winter's gas demand are:

- Weather corrected NDM demand increased slightly from the previous winter, by about 1% as expected.
- Total NTS gas demand for power increased during the last winter period, by around 18%. This was caused by:
  - increased electricity demand, due in part to colder weather.
  - a decline in wind generation, due to significant periods of still weather.
  - a fall in coal generation as the last GB coal plant closed.

  Read more about this in NTS gas demand for power.
- The highest NTS gas demand in a single day for power generation during last winter was 107.4 mcm/d.
- Demand for DM & Industrial was comparable to previous winters.

**Total gas demand** for winter 2024/25 was higher than the previous winter (circa 0.4 bcm or 1%).**

Some key observations on last winter's gas demand are:

- Demand for Ireland was higher than the previous winter, but in line with our forecast.
- Storage injection levels were higher than the previous winter.
- Exports to continental Europe were lower than the previous winter, and more in line with the level of flows seen before the energy crisis of 2022.

The highest daily demand during winter 2024/25 was 392 mcm/d which occurred on 10 January. This was very similar to the max of 387 mcm/d last winter.

In the subsequent chapters we'll show a deeper dive into all demand categories.

**Figure 1**
Demand – winter key stats

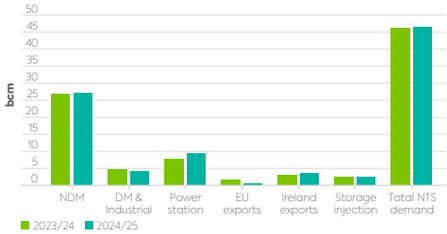



**Table 1**
Demand summary (weather corrected)

| Demand in bcm | 2022/23 weather corrected demand | 2023/24 weather corrected demand | 2024/25 forecast | 2024/25 weather corrected demand |
|---|---|---|---|---|
| NDM | 25.9 | 26.7 | 27.4 | 26.9 ↑ |
| DM & Industrial | 4.3 | 4.4 | 3.8 | 4.1 ↓ |
| Power | 9.3 | 7.8 | 7.8 | 9.2 ↑ |
| GB total | 39.5 | 39.0 | 39.0 | 40.3 ↑ |
| Ireland | 3.0 | 3.0 | 3.5 | 3.4 ↑ |
| Interconnector export | 7.6 | 1.7 | 0.5 | 0.4 ↓ |
| Storage injection | 2.5 | 2.3 | 1.7 | 2.4 ↑ |
| Total demand | 52.6 | 46.0 | 44.7 | 46.4 ↑ |

The totals may not match the components due to differences in rounding and the impact of shrinkage.

* GB demand is comprised of gas used in households, the commercial sector and for industry.
** Total gas demand is GB demand combined with exported gas to continental Europe and Ireland along with storage injection.

# Demand summary continued

– Actual NDM demand increased by about 5% or 1.3 bcm compared to last year.
– This was mostly due to weather, with last winter colder than 2023/24. Last winter was a 1 in 5 warm winter, the 12th warmest since 1960. While this was not a particularly cold winter, it was colder than 2023/24 which was the second warmest winter since 1960.
– Figure 2 illustrates actual NDM demand compared to our seasonal normal curve and the warm and cold SND range. This shows some colder than average periods in late November and the first half of January. During much of December, and from late February, onwards it shows warmer than average periods.

**Table 2**
Demand summary (actual demand)

| Demand in bcm | 2022/23 actual demand | 2023/24 actual demand | 2024/25 actual demand |
|---|---|---|---|
| NDM | 24.8 | 25.1 | 26.4 ↑ |
| DM & Industrial | 4.3 | 4.3 | 4.1 ↓ |
| Power | 9.3 | 7.8 | 9.2 ↑ |
| GB total | 38.4 | 37.1 | 39.7 ↑ |
| Ireland | 3.0 | 3.0 | 3.4 ↑ |
| Interconnector export | 7.6 | 1.7 | 0.4 ↓ |
| Storage injection | 2.5 | 2.3 | 2.4 ↑ |
| Total demand | 51.5 | 44.1 | 45.9 ↑ |

**Figure 2**
NDM demand – actual vs seasonal normal

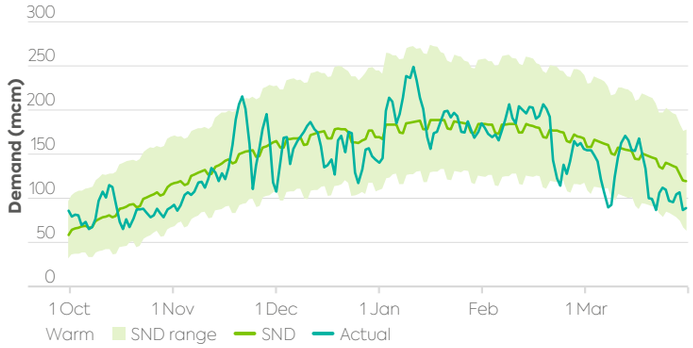
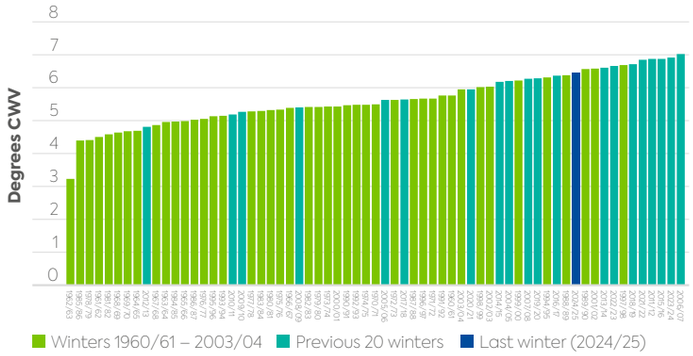



**Figure 3**
Historical winter Composite Weather Variables (CWVs)



# NTS gas demand for power

## Total gas demand

Over recent years, the total NTS gas demand for power for a winter period has been reducing year on year as more renewable generation comes online, however, winter 2024/25 saw an increase in total NTS gas demand for power. This was caused by:

- increased electricity demand, due in part to colder weather.
- a decline in wind generation, due to significant periods of still weather.
- a fall in coal generation as the last GB coal plant closed (figure 4).

## Day-to-day gas demand

Variability in demand continues to increase (see table 3) with peak gas demands rising for the last 5 years. During winter 2024/25 the peak NTS gas demand for power in a single day was 107.4 mcm/d, the average was 50.7 mcm/d and the lowest was 15.4 mcm/d. On average the gas generation running on these days was 25 GW, 12 GW and 3 GW respectively.

## Within-day gas demand

The peak NTS gas demand for power was seen on 12 December, this day also saw the highest within day peak for power generated by gas at 27.9 GW (figure 5).

**Did you know – the 17 GW increase in power generation from gas over just 5 hours is the equivalent of the output of more than 8 Hoover Dams?**

A couple of days before that, on 10 December 2024, we saw a 17 GW increase over just five hours. Such large swings in demand can be challenging for the gas network, and we need to ensure we have a full fleet of compressors available to move the gas from where it comes onto the network to where the increased demand is.

**We expect these day-to-day and within day peaks and swings in demand to become larger going forward. As renewable energy sources increase along with additional electricity demand, gas will be required to fill the gap when renewable energy sources are unavailable.**

**Table 3**
Min, max and average daily NTS gas demand for power for the last four winters

| Winter (mcm/d) | Max | Avg | Min |
|---|---|---|---|
| 2020/21 | 93.3 | 57.5 | 18.0 |
| 2021/22 | 92.2 | 51.8 | 15.3 |
| 2022/23 | 100.8 | 51.1 | 11.1 |
| 2023/24 | 102.6 | 42.8 | 11.6 |
| 2024/25 | 107.4 | 50.7 | 15.4 |

**Figure 4**
Electricity generation sources winter 2023/24 to winter 2024/25. Source: NESO

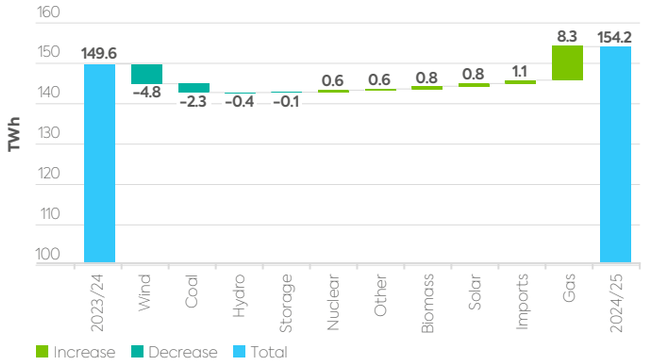
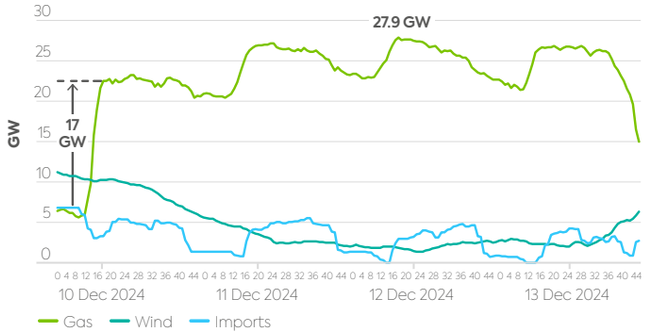



**Figure 5**
Half hourly electricity generation. Source: NESO



# NTS gas demand for power continued

## Electricity generation from gas

Table 4 shows that the average share of power generation from gas has increased when compared to the previous winter, as has the peak level (65%) of electricity generation from gas on a single day. We also saw increases to peak half hourly share of electricity from gas which reached 73% last winter (table 5).

The weather can cause significantly different requirements for gas fired power generation over short spaces of time. As can be seen on figure 6, November 2024 was very much a tale of two halves:

- In the early part of November wind output was low and as a consequence demand for gas was high. During that period gas peaked at 24 GW which accounted for 63% of the electricity generation mix.
- Later that month we saw Storm Bert, which resulted in high levels of wind and therefore reduced gas fired power generation. During this period, gas dropped to as low as 2.5 GW and only accounted for around 8% of generation at times.

The varying demand levels we have seen over the last winter show just how important gas is for power generation, to fill the gap when renewable energy sources are low.

**Did you know that there were 267 half hours during winter 2024/25 when at least 60% of power was generated from gas?**

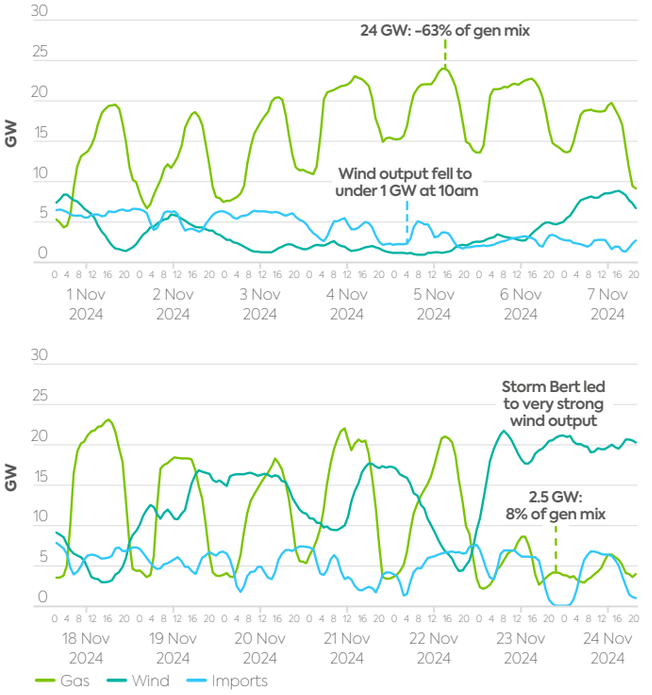
**Table 4**
Electricity generation from gas – daily. Source: NESO

| Daily | 2022/23 | 2023/24 | 2024/25 |
|---|---|---|---|
| Average electricity generated from gas in a day | 34% | 28% | 33% |
| Peak electricity generated from gas in a day | 60% | 61% | 65% |
| Number of days where at least 40% of electricity was generated from gas | 66 | 37 | 54 |
| Number of days where at least 50% of electricity was generated from gas | 28 | 9 | 19 |
| Number of days where at least 60% of electricity was generated from gas | 0 | 1 | 5 |

**Table 5**
Electricity generation from gas – half hourly. Source: NESO

| Half hourly | 2022/23 | 2023/24 | 2024/25 |
|---|---|---|---|
| Peak electicity generated from gas in a half hour | 66% | 69% | 73% |
| Number of half hours where at least 40% of electricity was generated from gas | 3389 | 1998 | 2923 |
| Number of half hours where at least 50% of electricity was generated from gas | 1576 | 760 | 1370 |
| Number of half hours where at least 60% of electricity was generated from gas | 159 | 98 | 267 |

**Figure 6**
Half hourly electricity generation. Source: NESO



# Supply summary

**Supplies in winter 2024/25 were diverse, with UKCS & Norway providing steady supplies. Flexible supplies were predominantly from LNG, along with GB storage and imports from continental Europe.**

Baseload supplies from UKCS & Norway were broadly in line with our expectations:

- UKCS supplies were slightly lower than previous years (6%). We believe this is due to the steady decline in UKCS production.
- Norwegian supplies were comparable to the previous year.

Flexible supplies predominantly came from LNG and GB storage, along with a small volume of continental European imports.

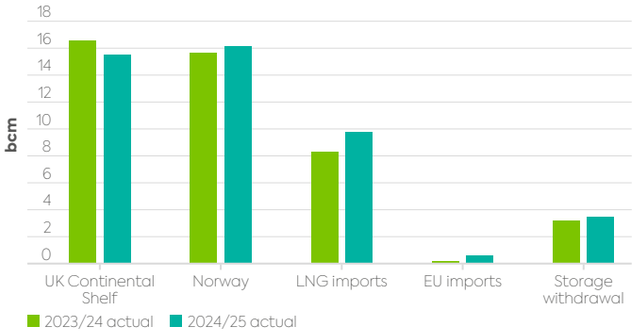
- LNG supplies were higher than the previous winter, largely due to the increase in total gas demand. Read more about this in our flexible supplies spotlight.
- GB storage behaved as expected, filling during periods of low demand and emptying during periods of high demand. Read more about this in our flexible supplies spotlight.
- Imports from continental Europe remained low as anticipated. The behaviour of interconnectors is extremely price sensitive and therefore highly flexible.

**Table 6**
Supply summary

| Supply sources (bcm) | 2023/24 actual | 2024/25 forecast | 2024/25 actual | Actual % change |
|---|---|---|---|---|
| UK Continental Shelf | 16.5 | 15.5 | 15.4 | -6% |
| Norway | 15.6 | 15.7 | 16.1 | 3% |
| LNG import | 8.3 | 10.7 | 9.8 | 18% |
| EU import | 0.1 | 0.2 | 0.6 | 770% |
| Storage withdrawal | 3.2 | 2.5 | 3.5 | 9% |
| Total | 43.7 | 44.5 | 45.4 | |

Due to impacts of rounding and embedded supply totals and % may not match.

**Figure 7**
Supply key stats



# Flexible supplies

Spotlight

**Flexible supplies in winter 2024/25 predominantly came from LNG and GB storage, along with a small volume of continental European imports (see figure 8).**

Storage stocks for the first half of winter were comparable to the range seen over the previous 4 winters (figure 9), the cold weather in January drove some very high storage withdrawals for a number of days (figure 8) which meant that stocks depleted to a much lower level. From February onwards, storage tended to cycle with periods of injections and withdrawals and, by the end of winter, stocks were comparable to previous years.

LNG supplies during winter 2024/25 were higher than the previous winter, driven by the higher demand levels. During the high level of storage withdrawals in January, LNG supplies reduced and then increased for the rest of winter (see the next page for more information on LNG supplies).

Storage withdrawals seem to have been used in preference to LNG during parts of the winter, particularly during January. This does not appear to have been caused by a shortage of LNG but more of a market decision.

**Figure 8**
Flexible daily supply volumes winter 2024/25

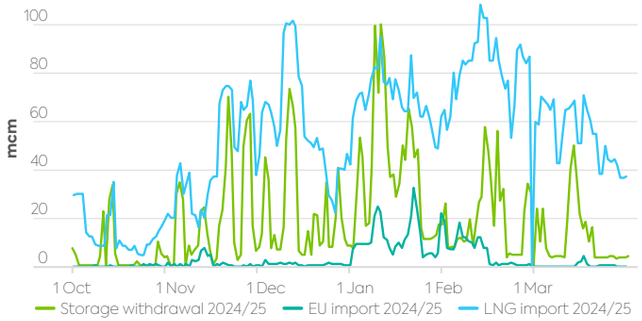
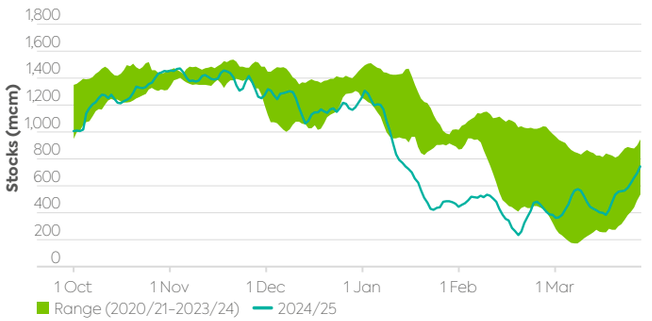



**Figure 9**
Storage stock levels for winter 2024/25 and historic 4-year range




MRS stocks only, excluding Rough to allow comparison with previous years before Rough was re-opened.

# Flexible supplies continued

Spotlight

Total LNG supplies for winter 2024/25 were higher than the previous winter (~18%).

As we've already covered, we saw higher overall demand last winter which led to increased LNG being imported to GB, particularly during the latter part of winter. The monthly increases in LNG deliveries when compared to the previous winter can be seen in figure 11.

The majority of LNG came from the US (figure 12) as new liquefaction projects, such as Plaquemines, ramp up production capability in the US.

The shorter transit times and higher price premiums coupled with reduced Asian demand saw the majority of US LNG exports delivered to GB and continental Europe in winter 2024/25 as shown in figure 10.

The US is likely to continue being the UK's main LNG supplier as major LNG liquefaction growth continues to build out across the US over the next 3-5 years.

**Figure 10**
US LNG exports (bcm) – winter 2024/25. Source: Argus Direct

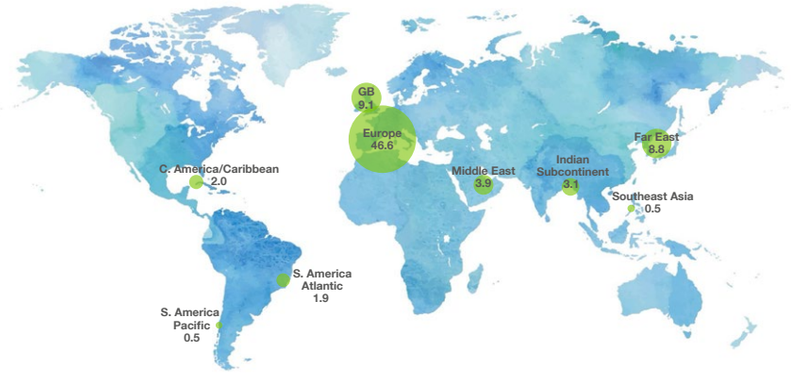



**Figure 11**
LNG deliveries into GB over the last 2 winters
Source: LNG Journal

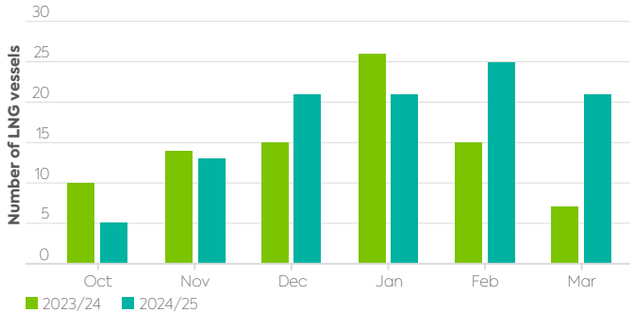
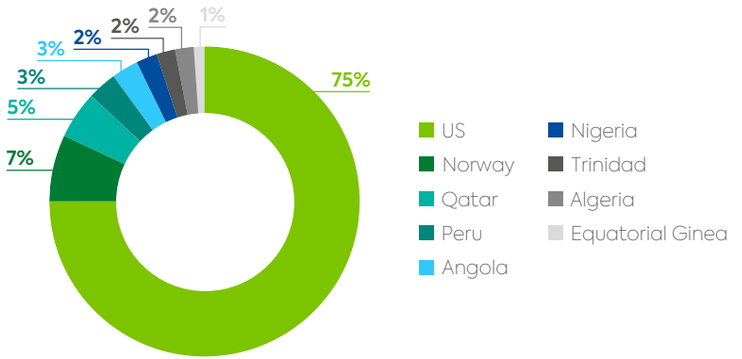



**Figure 12**
LNG deliveries to GB by origin. Source: LNG Journal



# Network operability

Compressor utilisation & operating the network

Linepack

# Compressor utilisation & operating the network

## Key observations:

- **The use of our assets is continually changing due to the variation in supply and demand patterns that we see.**
- **Total compressor running hours in winter 2024/25 were higher than the previous winter. This was largely due to the increased supplies at Milford Haven.**

Figure 13 shows the total supply volumes into each terminal on the NTS (bcm, blue arrows), and the compressor utilisation (green circles) over the past two winters (2023/24 and 2024/25).

This helps to visualise how different supply and demand patterns can change how we operate the network, with different combinations of compressors utilised to move gas from an entry point to meet demand.

Great example during the recent winter is:

- LNG supplies at Milford Haven were significantly higher than the previous winter, meaning that a number of compressors were used for more hours in winter 2024/25 (Felindre, Wormington, Churchover & Peterborough) highlighted in blue
- The additional use of compression due to increased Milford Haven supplies contributed to the overall higher compressor usage hours as seen in figure 14.

The varying nature of supply and demand patterns and the consequential need to use our assets differently highlights the need to have healthy and resilient assets to ensure we can continue to meet the needs of our customers.

**Figure 13**
Variation in supply profiles and compressor running hours for winter 2023/24 and 2024/25

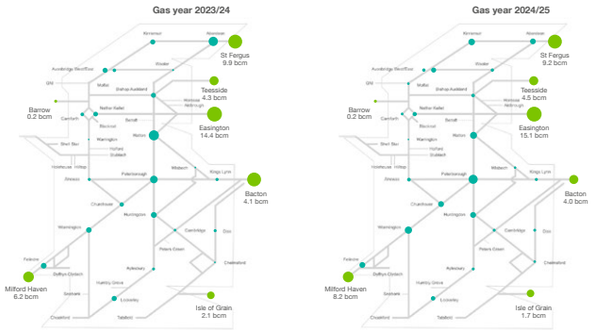
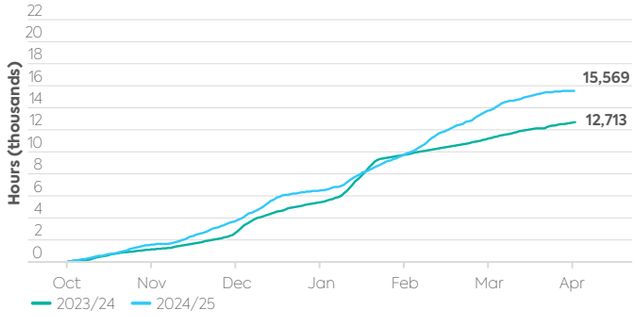



**Figure 14**
Compressor usage



# Linepack

## Key observations:

- **The level of maximum and average linepack utilisation was comparable to previous winters.**
- **Our customers continue to tell us that they value the ability to supply gas and/or take demand flexibly through the day.**

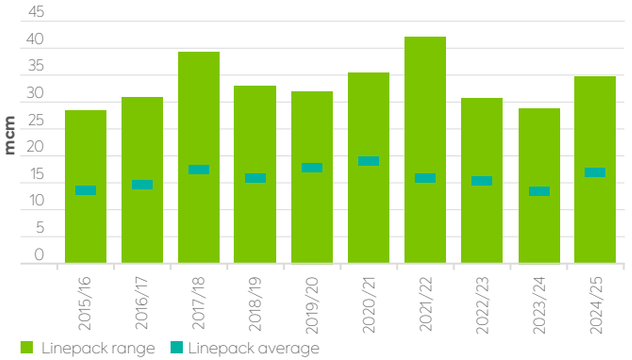
Linepack (the total volume of gas 'in the pipes' at any given time) is a critical tool in helping us manage within-day mismatches between supply and demand, the stock of gas in the system allows the network to operate when the volume of supply is different to the volume of demand.

During daily periods of peak demand (typically in the morning and early evening), demand often significantly outstrips supply, with the shortfall being supplied by the system linepack, which is then able to replenish during lower demand periods (such as overnight).

The linepack within the system is regularly utilised by our customers to flex their supply and demand profiles during the day. On the days where there is a high level of linepack swing, additional use of our compressors is needed to maintain gas pressures across the system.

Reliable and resilient assets are therefore crucial in ensuring we can manage linepack variability throughout the day and continue to move gas to where it is needed, all whilst ensuring system pressures are managed within safe operating limits.

**Figure 15**
Linepack utilisation




**This graph represents the maximum and average linepack swing, allowing for comparison across the years.**

# Preparing for winter

Scenarios for the coming winter

Preparing for the coming winter

# Scenarios for the coming winter

We have included scenarios in our Gas Winter Outlook publication for the past couple of years to help show how the NTS would balance under different supply and demand conditions. We are planning to continue to use them in our 2025/26 Gas Winter Outlook publication, as we believe they have been a useful addition for our customers and stakeholders.

We intend to use the same base scenarios for this winter (shown in the table), refining them based on what we have learnt from winter 2024/25. We'll also consider any other intelligence we gather ahead of publishing the Gas Winter Outlook in full.

If there are any specific sensitivities you'd like to see reflected in our scenarios, please do get in touch.

| Scenarios | Rationale |
|---|---|
| **Scenario 1: Typical winter (2019/20)** | We simulated demand based on the weather experienced in winter 2019/20 as being representative of the daily demand we would expect in a typical winter. |
| **Scenario 2: Typical winter (2010/11)** | We have simulated demands from winter 2010/11 as representative of a cold winter, as this period contains the highest-ever daily gas demand level seen on the NTS, with sustained high demands throughout the majority of the winter. |
| **Scenario 3: Typical winter (2017/18)** | We have simulated demands from winter 2017/18 as representative of demand levels during an extreme cold snap as this period contains the 'Beast from the East' which resulted in some of the highest daily gas demand levels seen in the last five years, and this period is the most recent example of market tightness. |

**Let us know here if there are any specific sensitivities you'd like us to consider in our scenarios**

# Preparing for the coming winter

**As a prudent system operator, we do many activities to ensure our network is ready for winter.**

During the summer period when demand is typically lower, we undertake maintenance activities on our assets. For summer 2025 we plan to undertake significant levels of asset maintenance on 900 km of pipe and all our 21 NTS compressor sites. Alongside this work, we're also undertaking inspections on over 700km of pipe.

Some examples of the work we're undertaking are (you can read more about this in our Summer Outlook):

- To set us on the pathway towards emissions compliance under RIIO-2, we are progressing works at three of our main compressor stations (Huntingdon, Peterborough and Hatton) to install Industrial Emissions Directive (IED) compliant units.
- New units at Peterborough and Huntingdon are now complete and operationally accepted, work will begin this summer to decommission the non-compliant units at both stations.
- The new unit at Hatton will enter the final stages of commissioning and testing early this summer.

In addition to these maintenance activities, we also carry out many other winter preparations activities, some examples include:

- monitoring completion of all essential maintenance ahead of winter
- completing assessments at all compressor sites to ensure we have the right asset spares in the right places
- ensuring support contracts are in place for support with essential machinery, should there be an asset failure
- reviewing standby/call-out rotas to ensure key sites have the ability to be manned 24 hours if required
- carrying out assurance tests at all compressor sites, ensuring operational issues are resolved before the higher winter demand period
- consistently monitoring offshore outages, LNG cargo deliveries and both GB and EU storage positions.

During the winter period we work closely with the Department for Energy Security and Net Zero (DESNZ), Ofgem, and NESO to continually monitor supply/demand patterns, as well as assess any potential scenarios and associated risks that may arise.

We have published our preliminary safety monitor publication for winter 2025/26, this defines the level of gas storage that must be maintained across the country through the winter period. The focus of the 'safety monitor' is public safety, rather than security of supply.

# Contact us

Consultation questions

Continuing the conversation

# Consultation questions

We've set out some questions below that we'd really like to hear your thoughts on:

1. **Do you find this publication useful?**
2. **Do you have any insights from winter 2024/25 you can share with us?**
3. **Is there anything specific that you would like to see included in our scenarios?**
4. **Is there anything that you are concerned about for this coming winter?**
5. **What else would you like to see in our future publications?**

**Please get in touch here if you would like to share your thoughts on any of these points, or anything else.**

**We'd be delighted to hear from you.**

# Continuing the conversation

**We look forward to continuing the conversation with you at our upcoming engagement forums. The dates for our next National Gas Energy Forums are available bottom left.**

The forum agenda varies from month to month depending on requests, operational events, and where we are in the gas year. In 2025 we will continue with themed forums, which will be hybrid events held online and in London, as well as our online only events and covering key standing items.

You can find details about the forums, and how to sign up to attend them on our website.

## Your feedback is so important to us

Letting us know what you think of the information we share with you, and how we're sharing it, helps us shape our future communications to ensure we're communicating what matters most, in a way that suits you. Send us an email to share your views and feedback on our publications.

**Upcoming 2025 National Gas Energy Forums (NGEF)**

- **Online only* 12 June**
- **Three molecule special (hybrid) 17 July**
- **Online only* 11 September**
- **Winter focus (hybrid) 30 October**

* Our online only meetings will be a mixture of different topics including sharing of operational information, updates on key projects or regulation changes and feedback sessions, depending on what is happening at the time of the event. You can find details about the forums, and how to sign up to attend them on our website.

For any press enquiries, or if you have any comments or questions about the content contained within this publication specifically, please get in touch.

## Jake Tudge

**Contact Jake Tudge for any enquiries for our leadership team.**

**For general enquiries, please get in touch here.**

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# Further information on demand

- Non-Daily Metered demand
- Industrial and Daily Metered demand
- NTS gas demand for power
- Exports to Ireland
- Exports to continental Europe

# Non-Daily Metered demand

## What did we expect?

– A slight increase in weather corrected demand (circa 2%) based on the assumption that energy prices would be slightly lower than the previous winter.

## What did we see?

– A slight increase in weather corrected demand (circa 1%), which we believe is as a result of energy prices being lower than the previous winter.

– Actual demand (as shown in figure 17) increased by 5% (1.3 bcm), this was mostly due to winter 2024/25 being colder than the previous winter. Read more about this here.

**Figure 16**
Non-Daily Metered daily demand

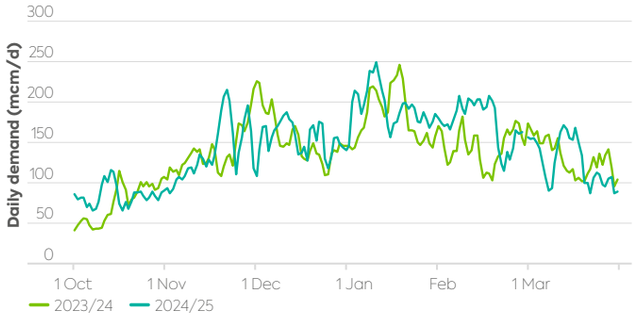
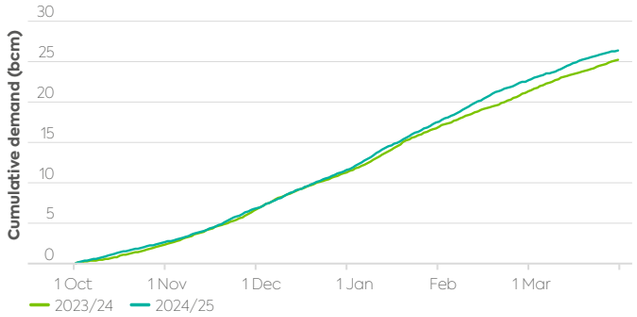



**Figure 17**
Non-Daily Metered cumulative demand




# Industrial and Daily Metered demand

## What did we expect?

– Similar flows to previous years.

## What did we see?

– As expected, we saw very similar flows to the previous summer. Demand for these categories tends to be fairly consistent.

**Figure 18**
Industrial and Daily Metered daily demand

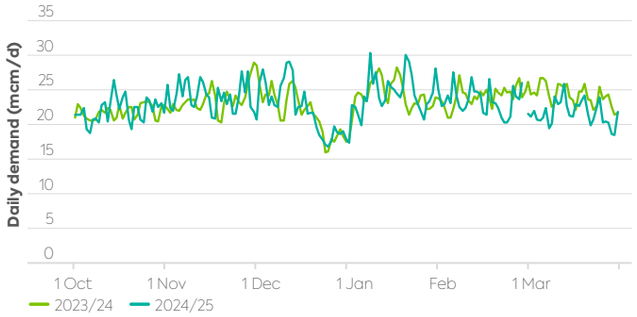
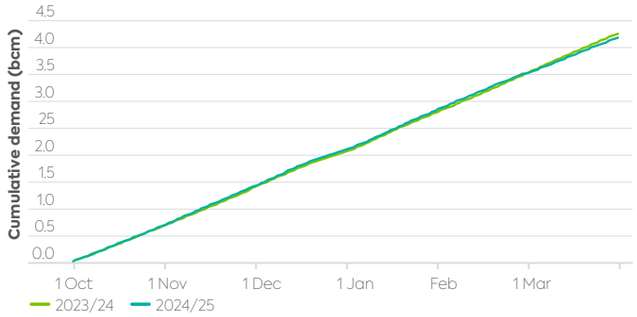



**Figure 19**
Industrial and Daily Metered cumulative demand



# NTS gas demand for power

### What did we expect?

– A slight reduction in the total demand for winter due to the continued increase in renewable generation.

### What did we see?

– Total NTS gas demand for power increased during the last winter period, by around 18%. This was due to several factors; firstly, as with gas, colder weather increased overall demand. There were also significant still periods which saw wind output fall; alongside this, coal generation fell as the last coal plant stopped operations. Read more about this in our NTS gas demand for power.

**Figure 20**
Daily NTS gas demand for power

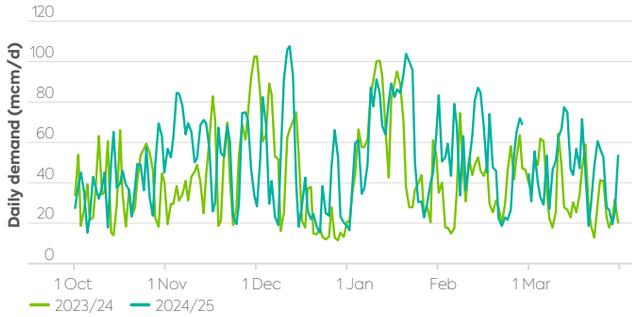
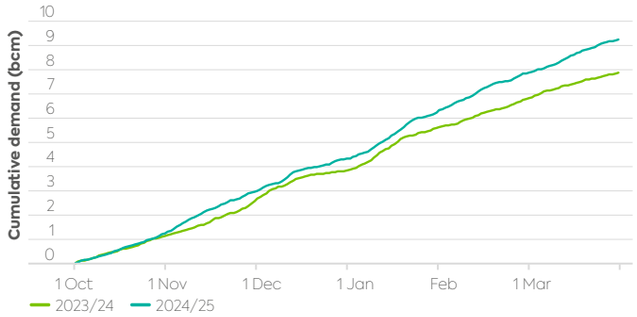



**Figure 21**
NTS gas demand for power cumulative demand




# Exports to Ireland

### What did we expect?

– An increase in gas demand for power generation in Ireland.

### What did we see?

– As expected we saw an increase in demand (12%).

– This increase was mostly due to an increased level of gas demand for power generation.

**Figure 22**
Daily exports to Ireland

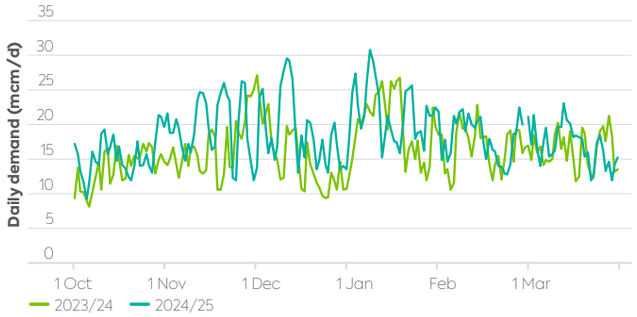
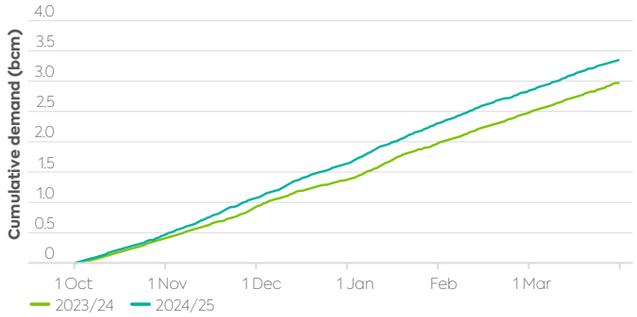



**Figure 23**
Cumulative exports to Ireland



# Exports to continental Europe

## What did we expect?

– A lower level of exports (0.4 bcm) when compared to the previous winter (1.7 bcm) as exports were expected to return to more normal levels post the energy crisis.

## What did we see?

– Exports were lower than the previous winter, as expected.
– EU has managed to largely rebalance supply since the major cut off from Russian piped gas in 2022.
– EU LNG regasification capacity has increased, a reduction in demand along with storage refill targets have contributed to this.
– We are transitioning back to a new normal level of flows to continental Europe following the energy crisis of 2022.

**Figure 24**
Daily exports to continental Europe

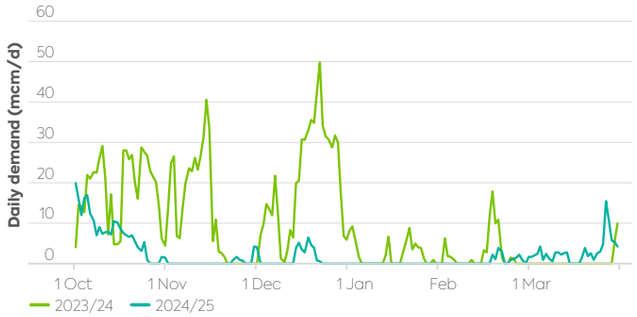
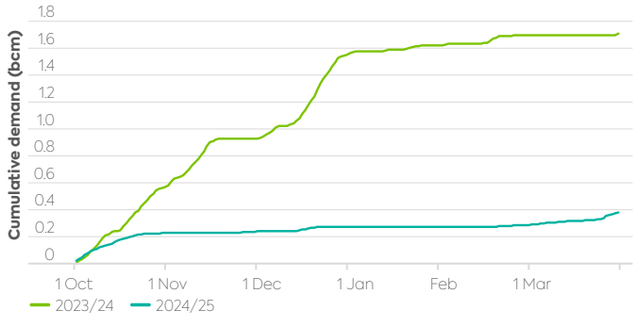



**Figure 25**
Cumulative exports to continental Europe



# Further information on supply

# UKCS supply

## What did we expect?

– Steady flows of circa 85 mcm/d, which is slightly lower than previous winters as UKCS production continues to decline.

## What did we see?

– Steady baseload supplies of circa 84 mcm/d as expected.

**Figure 26**
UKCS daily supply

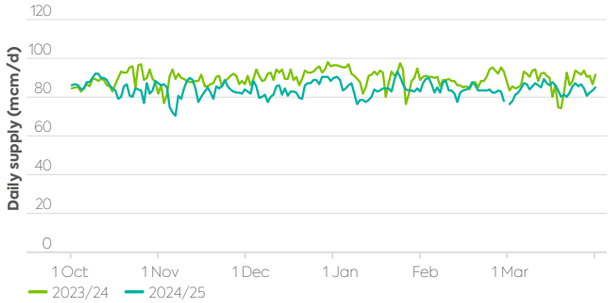
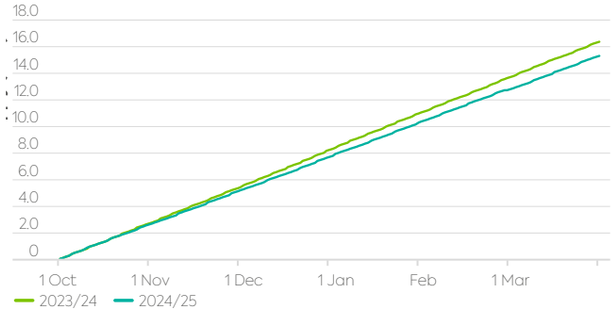



**Figure 27**
UKCS cumulative supply




# NCS supply

## What did we expect?

– Steady flows of circa 80-100 mcm/d

– Higher flows to GB when the price favours GB over continental Europe.

## What did we see?

– Norwegian production was steady over the winter and we saw averaged flows of 88 mcm/d as expected.

– During December and January we saw higher levels of NCS supply to coincide with the higher levels of demand due to the colder weather. Supplies dropped off as demand reduced.

**Figure 28**
Daily NCS supply

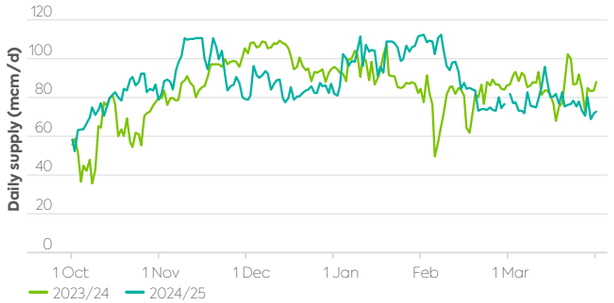
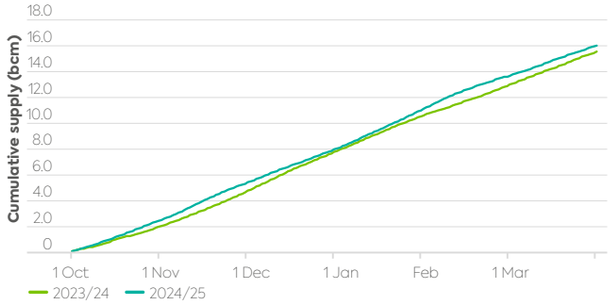



**Figure 29**
Cumulative NCS supply



# LNG supply

## What did we expect?

– LNG to be the primary source of flexible supply, with the overall level highly dependent on demand.

## What did we see?

– Supplies were slightly higher than the previous winter, largely to meet the increased total gas demand. Read more about this in our Flexible supplies spotlight.

**Figure 30**
Daily LNG supply

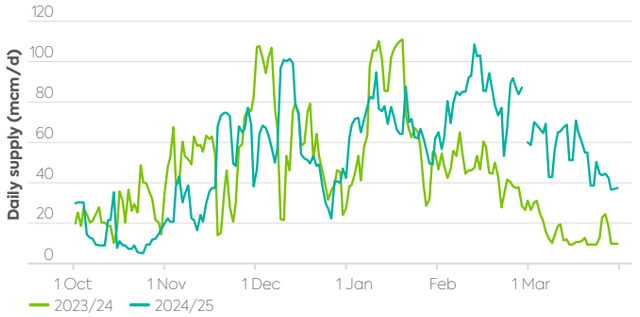
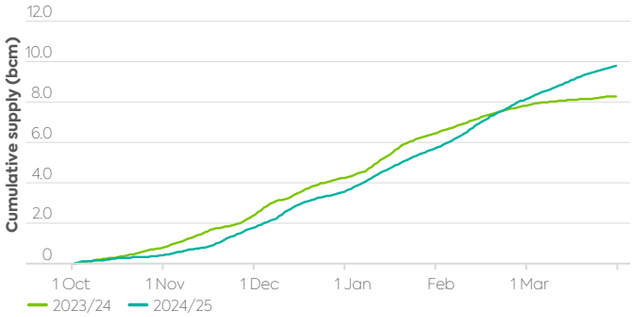



**Figure 31**
Cumulative LNG supply



# Imports from continental Europe

## What did we expect?

– A low level of imports similar to the previous winter.
– Higher levels of supplies on some days in response to market signals, either due to cold weather or making up for short term changes to other supplies.

## What did we see?

– Higher levels of imports when compared to the previous winter of circa 0.5 bcm.
– For most of the winter, there were no imports, we saw imports increase during the very cold periods in January 2025. The behaviour of interconnectors is extremely price sensitive and therefore driven by market participants commercial decisions.

**Figure 32**
Daily imports from continental Europe

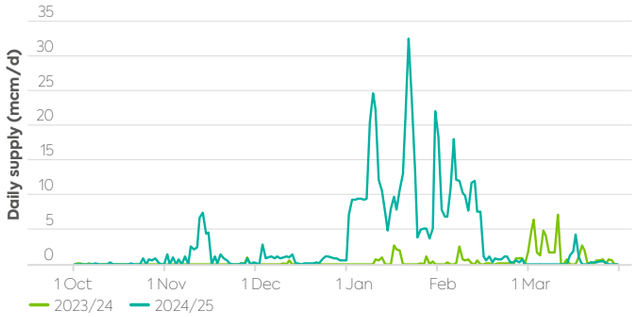
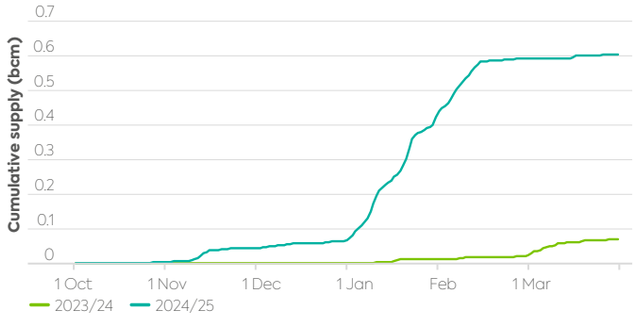



**Figure 33**
Cumulative imports from continental Europe



# Storage

GB storage facilities behaved as expected, providing flexible supplies on to the NTS when needed. This was particularly evident during the cold weather in January 2025 (figure 34).

GB storage played a crucial role over winter, providing supply flexibility (driven by market signals) during periods of high demand and then re-filling during lower demand periods.

**On 8 and 10 January, storage delivered over 100 mcm/d – these were the two highest demand days of the winter at 386 and 392 mcm/d respectively.**

Storage stocks at the end of winter 2024/25 are comparable to the previous winter, both including and excluding Rough (figure 35).

**Figure 34**
Storage withdrawals

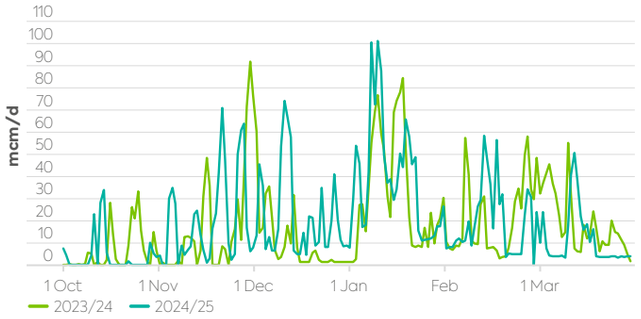
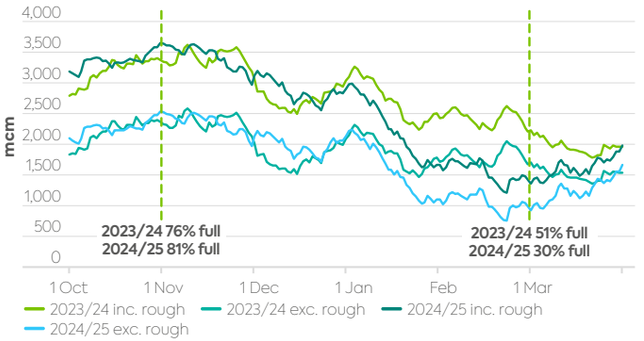



**Figure 35**
Storage stock levels



# Appendix

Data tables in TWh and GWh/d

# Appendix – Data tables in TWh and GWh/d

**Table A**
Demand summary (weather corrected)

| Demand in TWh | 2022/23 weather corrected demand | 2023/24 weather corrected demand | 2024/25 forecast | 2024/25 weather corrected demand |
|---|---|---|---|---|
| NDM | 285 | 294 | 301 | 296 |
| DM & Industrial | 47 | 49 | 42 | 45 |
| Power | 102 | 86 | 85 | 102 |
| GB total | 435 | 429 | 429 | 443 |
| Ireland | 33 | 33 | 39 | 37 |
| Interconnector export | 84 | 19 | 5 | 4 |
| Storage injection | 28 | 25 | 19 | 26 |
| Total demand | 579 | 506 | 492 | 510 |

**Table B**
Demand summary

| Demand in TWh | 2022/23 actual demand | 2023/24 actual demand | 2024/25 actual demand |
|---|---|---|---|
| NDM | 273 | 276 | 290 |
| DM & Industrial | 47 | 47 | 45 |
| Power | 102 | 86 | 102 |
| GB total | 422 | 409 | 437 |
| Ireland | 33 | 33 | 37 |
| Interconnector export | 84 | 19 | 4 |
| Storage injection | 28 | 25 | 26 |
| Total demand | 567 | 485 | 504 |

**Table C**
Min, max and average daily NTS gas demand for power for the last four winters

| Winter (GWh/d) | Max | Avg | Min |
|---|---|---|---|
| 2020/21 | 1026.3 | 632.2 | 198.0 |
| 2021/22 | 1014.2 | 569.9 | 168.3 |
| 2022/23 | 1108.8 | 562.5 | 122.1 |
| 2023/24 | 1128.6 | 471.0 | 127.6 |
| 2024/25 | 1181.4 | 557.3 | 169.4 |

**Table D**
Supply summary

| Supply sources (TWh) | 2023/24 actual | 2024/25 forecast | 2024/25 actual |
|---|---|---|---|
| UK Continental Shelf | 181.3 | 170.1 | 169.6 |
| Norway | 171.8 | 172.2 | 176.9 |
| LNG import | 91.1 | 117.9 | 107.4 |
| EU import | 0.8 | 2.3 | 6.6 |
| Storage withdrawal | 35.5 | 27.2 | 38.8 |
| Total | 480.5 | 489.7 | 499.4 |

**Notes:**
A good guide for converting to energy in watt hours from gas volume in cubic metres is to multiply by 11. So, for example, 4 mcm approximates to 44 GWh/d, and 80 bcm approximates to 880 TWh.

# Glossary

# Glossary

**bcm**
Billion cubic metres.

**Compressor**
Compressors are used to move gas around the transmission network through high pressure pipelines. These compressors move the gas from entry points to exit points on the gas network.

**Daily Metered (DM) demand**
A classification of customers where gas meters are read daily. These are typically large-scale consumers.

**Export to continental Europe**
Gas exported to continental Europe via interconnectors.

**GB demand**
Demand excluding interconnectors, storage injection and exports to Ireland.

**GWh**
Gigawatt hours.

**Injection**
Gas for storage injection. This is gas which is put ('injected') into a gas storage facility.

**Interconnector**
Two pipelines connecting GB and the EU. The Interconnector (UK) Limited is a bi-directional gas pipeline connecting Bacton in the UK and Zeebrugge in Belgium. BBL is a bi-directional gas pipeline connecting Bacton in the UK and Balgzand in the Netherlands.

**LNG**
Liquified natural gas that has been converted to liquid form for ease of storage or transport. It is formed by chilling gas to -161°C so that it occupies 600 times less space than in its gaseous form.

**mcm**
Million cubic metres.

**Non-Daily Metered (NDM) demand**
A classification of customers where gas meters are read monthly or at longer intervals. These are typically residential, commercial or smaller industrial consumers.

**Norway/Norwegian Continental Shelf (NCS)**
Gas supplied to the NTS via pipelines from Norway.

**Power**
Gas demand for power stations connected to the electricity transmission system. This includes all power stations connected to the NTS, along with some connected to the gas distribution network.

**NTS shrinkage**
NTS shrinkage is made up of 3 components. Unaccounted for gas (UAG) is unallocated gas or gas that is lost or stolen from the system. Own use gas (OUG) is gas that is used in the running of the system e.g. compressor fuel. And calorific value shrinkage (CVS) is where gas of a particularly low or high CV enters the distribution network which differs with the flow weighted average CV of gas entering that network.

**Seasonal normal demand (SND)**
The level of gas demand that would be expected on each day of the year. It is calculated using historically observed values that have been weighted to account for climate change.

**Total demand**
All NTS demand, including interconnectors, storage injection and exports to Ireland.

**UK Continental Shelf (UKCS)**
UKCS is made up of the areas of the sea bed and subsoil beyond the territorial sea over which the UK exercises sovereign rights of exploration and exploitation of natural resources.

**Weather corrected**
The demand expected with the impact of weather removed. Actual demand is converted to demand at seasonally normal weather conditions, by multiplying the difference between actual CWV and expected CWV by a value that represents demand sensitivity to weather.

**Withdrawal**
Gas which enters the NTS from a storage facility.

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