

# UK Energy System – Review of Resilience of Infrastructure and Supply

## Rich Smith – Director, Ofgem



**Rich Smith**  
1<sup>st</sup> March 2023

- 1. Wholesale market functioning & market participant financial resilience**
- 2. Gas storage**
- 3. Electricity contingency supply**
- 4. Demand Side Response**

# Wholesale market functioning & market participant financial resilience

Gas supply/demand balance  
market signalling

Information available  
to Ofgem and govt.

Assistance for market  
participants in  
financial distress.

**national gas**

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> Data and Operations

Gas Prevailing View | Report Explorer | Data Item Explorer | Links

**Gas Day: 27 FEBRUARY 2023**

**Gas System and Market Status ANS Message**

There are no ANS messages.

**TODAY: 27 FEBRUARY 2023**

Gas Balancing Notifications

Margins Notice Trigger  
**514.00 mcm**

Demand Forecast  
**334.18 mcm**

**TOMORROW (D-1): 28 FEBRUARY 2023**

Gas Balancing Notifications

Margins Notice Trigger

Demand Forecast

**IT Systems message**

There are no IT system messages.

**Forecast Margins Notice and Demand D-2 to D-7**

Date	01/03	02/03	03/03	04/03	05/03	06/03
Margins Notice	518	509	501			
Demand Forecast	314	309	302			

To view the Daily Margins Notice Report please visit the [Margins Notice page](#) on our website

**ofgem**  
Making a positive difference  
for energy consumers

**To:**  
Gas shipper licensees and generation licensees

Email: [energy\\_securityofsupply@ofgem.gov.uk](mailto:energy_securityofsupply@ofgem.gov.uk)

Date: 1<sup>st</sup> March 2023

**Dear Licensee,**

**Notice requiring the production of specified information under section 34A of the Gas Act 1986 ("the Gas Act") in relation to gas shipper licensee and Section 47A of the Electricity Act 1989 ("the EA89") in relation to monitoring the financial resilience of investment in generation capacities.**

This letter accompanies a formal Notice under section 34A of the Gas Act and Section 47A of the Electricity Act requiring the Licensee(s) to produce the information specified in the Notice. This information includes details of gas shipper licensee arrangements and generator licensee capacities. Please note that this information must be sent to [energy\\_securityofsupply@ofgem.gov.uk](mailto:energy_securityofsupply@ofgem.gov.uk) no later than **17<sup>th</sup> March 2023, 17:00 hrs.** However, if any situation develops within your company that causes or is likely to cause near-term financial stress or risk of insolvency or operational withdrawal from the market, please bring this situation to our attention immediately by contacting me at the email address above.

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News story

**Launch of the Energy Markets Finance Scheme**

HM Treasury and the Bank of England are opening the Energy Market Financing Scheme (EMFS) for applications.

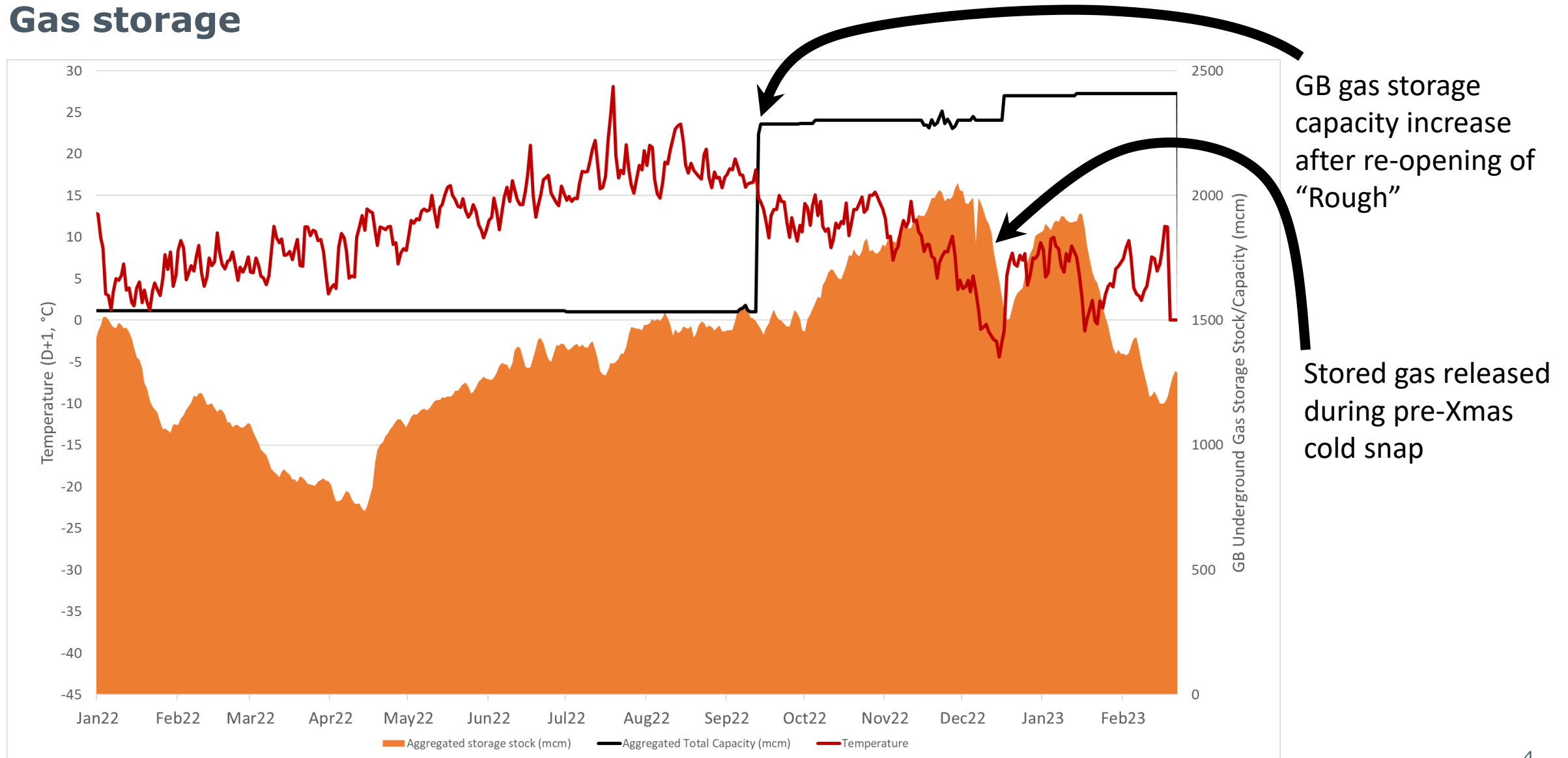
From: [HM Treasury](#)

Published 17 October 2022

Last updated 27 January 2023 — [See all updates](#)

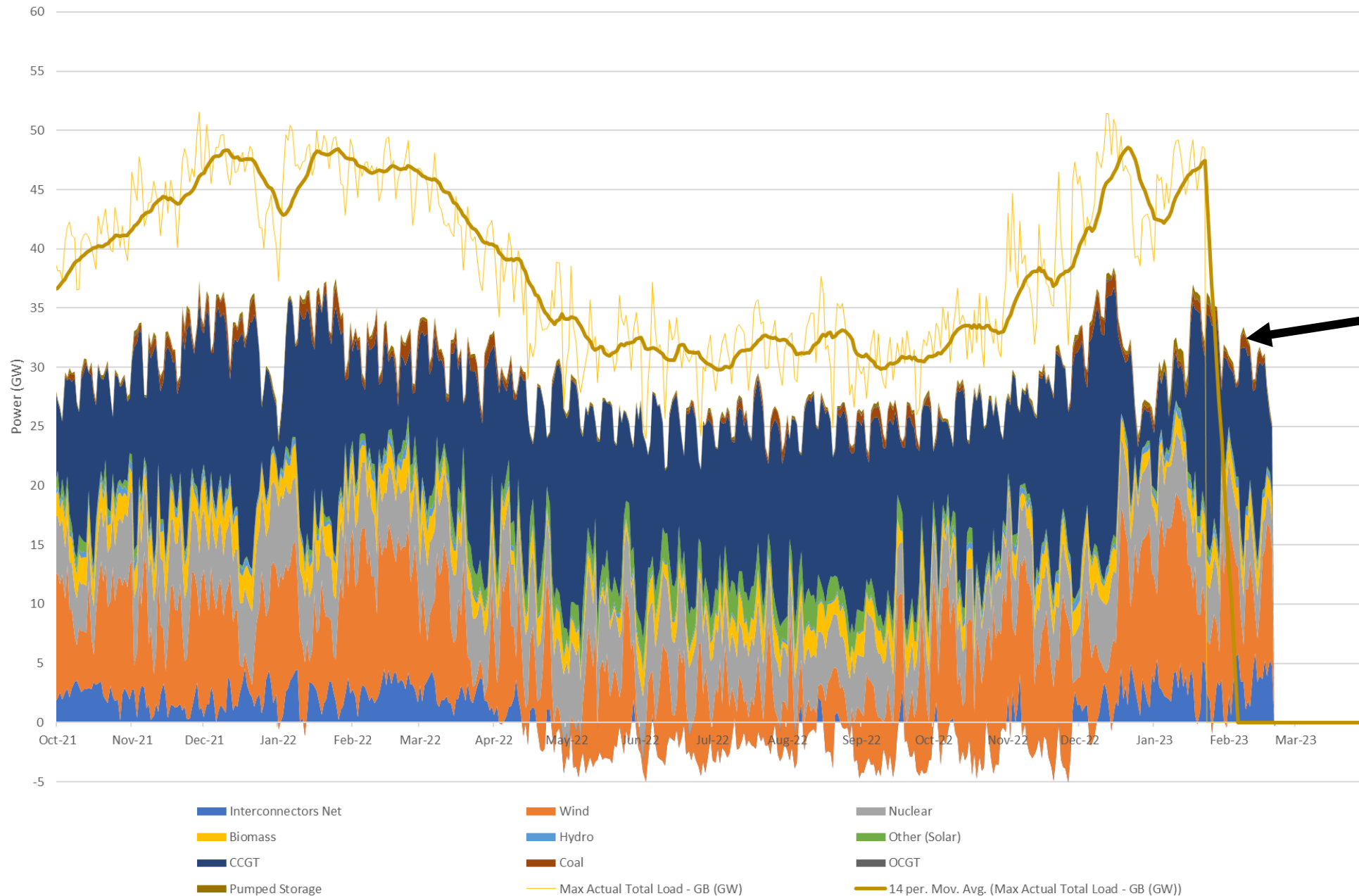
**HM TREASURY**

## Gas storage



## Electricity contingency supply





Coal is tiny, all of it was merchant coal, coal contingency never used in anger



## Demand Side Response

### Demand Flexibility Service overview

- The Demand Flexibility Service (DFS) has been developed to allow the ESO to access additional flexibility when the national demand is at its highest – during peak winter days – which is not currently accessible to the ESO.
- This innovative service will support suppliers/aggregators, as well as I&C customers, to incentivise end consumers for voluntarily reducing/flexing their electricity usage.



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### Demand Side Response (DSR)

Demand Side Response is a service that was developed by gas industry representatives to encourage daily metered (DM) consumers to offer to reduce their gas demand during times of system stress. On this page you will find out more about DSR and how you can become involved.

By providing DSR prior to entering a gas supply emergency, DM consumers have the potential to protect their most critical loads by turning down elsewhere and receive compensation for doing so. This has the potential to minimise the cost of demand interruptions and may reduce the likelihood of entering into an emergency.

We have developed a [DSR Guidance Brochure](#) to help consolidate information on gas DSR in one place and to provide a useful guide for anyone new to the scheme.

We have also recorded a [webinar](#) that provides an overview of what Gas DSR is and its purpose. It demonstrates how DSR works and can be used by explaining who is eligible to take part and how you can get involved.

The following document forms part of a suite of documents created to provide **operationally focused guidance material**; the aim of which is to support Shippers in increasing their understanding of non-routine commercial tools utilised by National Gas so that Shippers can be suitably prepared and ready to participant ahead of an event.

#### DSR enquiries

If you have any further questions or comments about DSR please contact us by email.

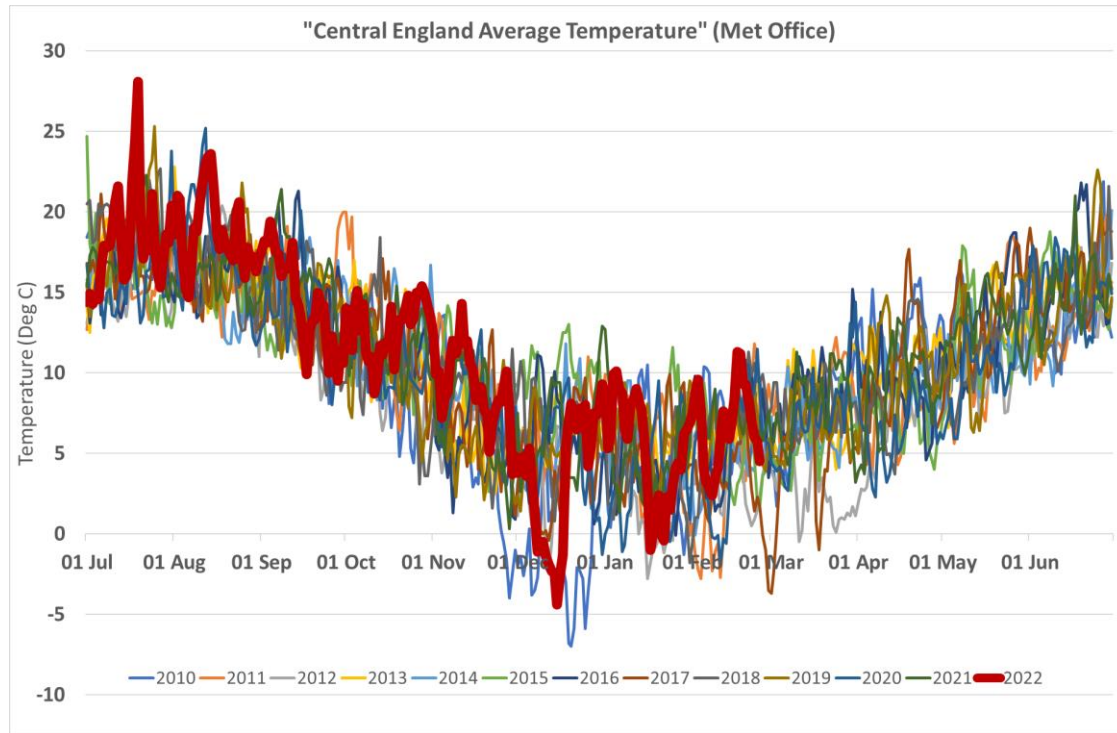
✉ [Box.OperationalLiaison@nationalgas.com](mailto:Box.OperationalLiaison@nationalgas.com)

#### Gas DSR links

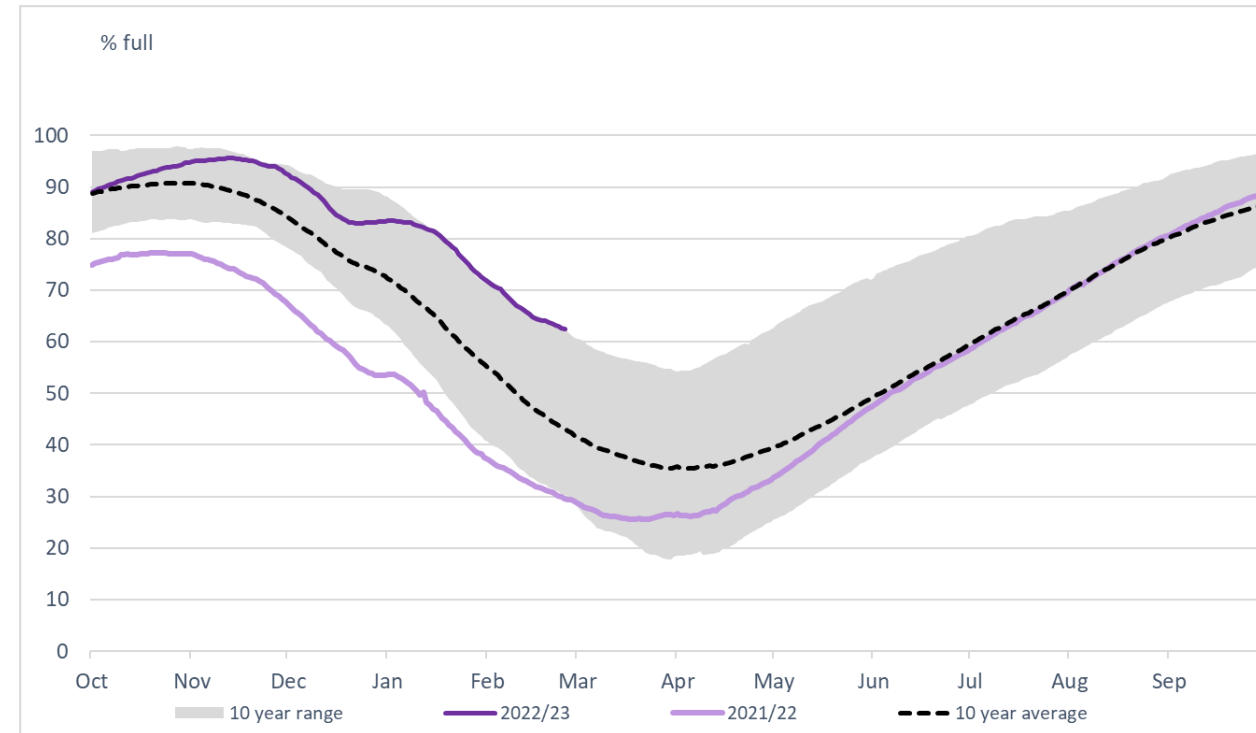
- [Gas DSR Methodology](#)
- [Gas DSR Guidance Brochure](#)
- [Gas DSR Methodology Consultation Report 2022/23](#)
- [Gas DSR Operational Guidance](#)

## Winter 22/23 has gone well – so far:

The weather has been kind to us, which has been helpful, but this not a basis for future energy security policy!



Interventions in across the EU have been effective in ensuring security of supply in a very uncertain context.





## Winter 22/23 has gone well – so far:

### LNG

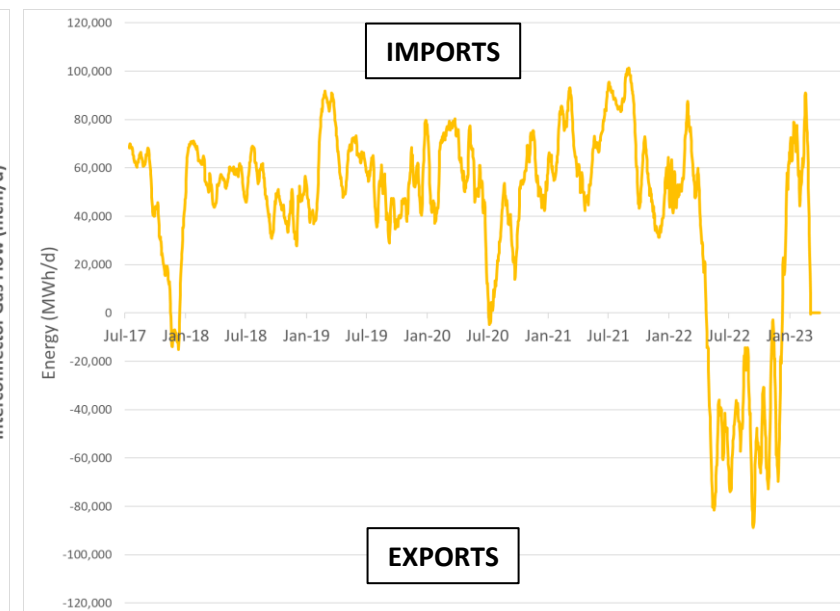
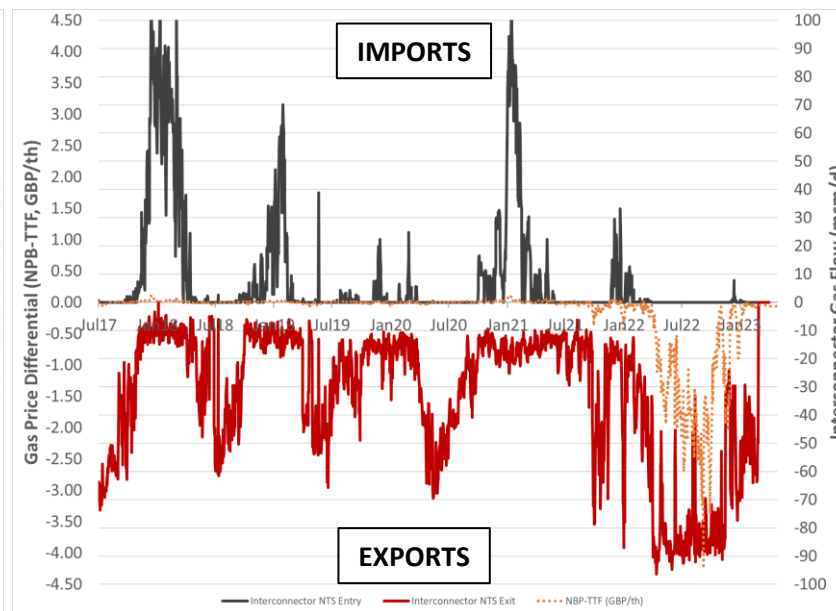
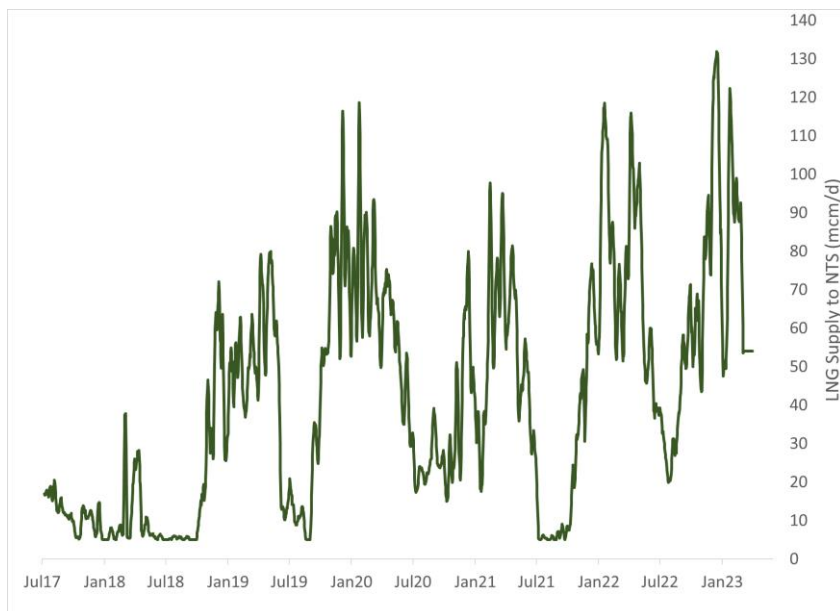
Europe paid a gas price premium over Asia and GB was well supplied with LNG this winter.

### Gas Interconnectors

GB never ran short of gas, continuously exporting to Europe, providing c. 15% of European stored gas.

### Electricity Interconnectors

GB generally exported power to France but imported enough via interconnector when needed.



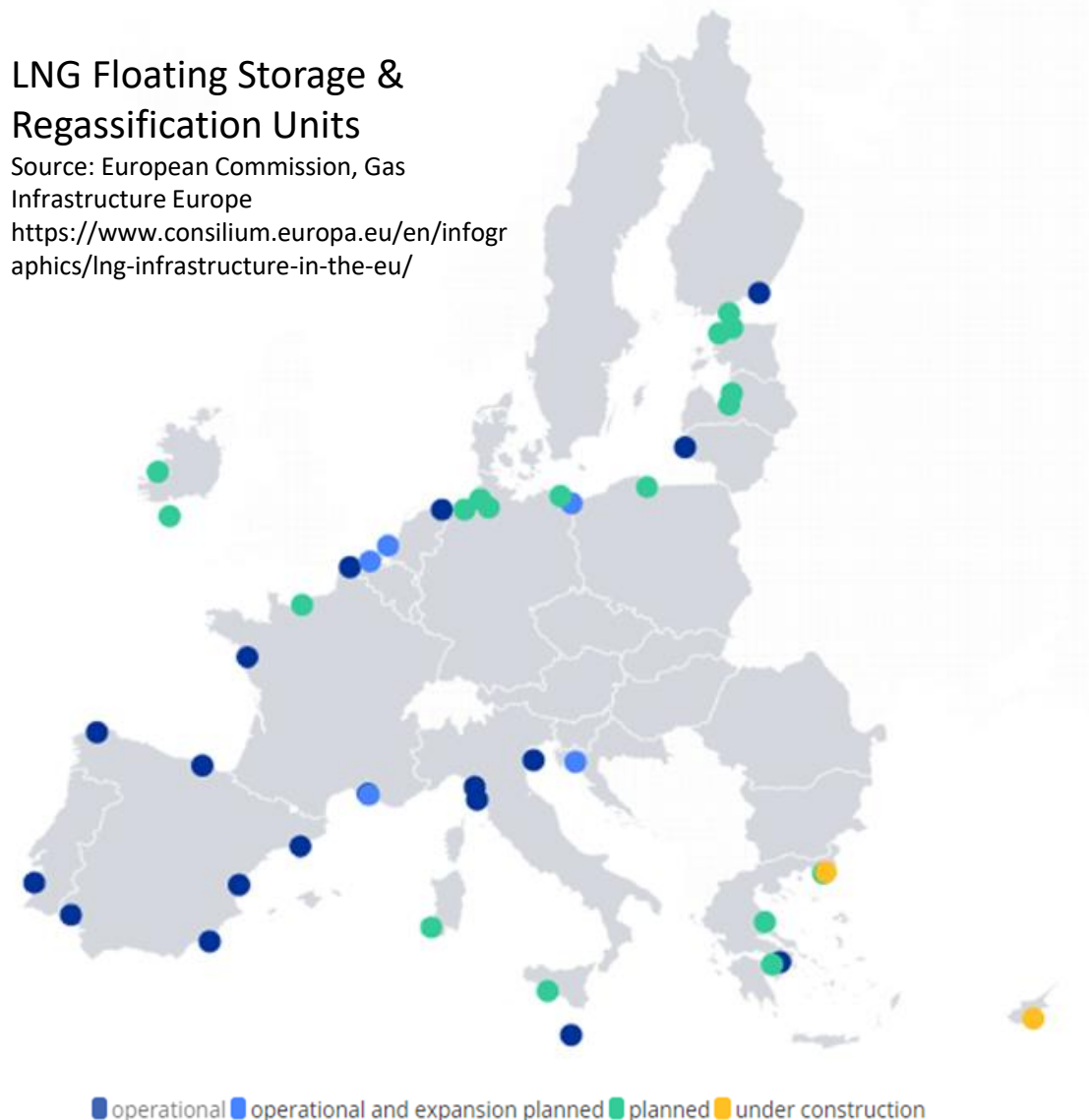
**Uncertainty remains and more work is required to ensure continued energy security for winter 23/24.**

## Looking ahead to winter 23/24:

- European storage with minimal Russian supply could be significantly lower going into winter 23/24 compared to winter 22/23.
- Winding down of Covid restrictions in China may mean more competition between Europe and Asia to purchase LNG in the global market.
- New LNG Floating Storage & Regasification Units will increase competition between GB and Europe for LNG deliveries.
- Work is underway to explore potential interventions to increase gas storage and LNG deliverability.
- More work is needed on Demand Side Response to expand scope and access on both gas and electricity sides.

## LNG Floating Storage & Regasification Units

Source: European Commission, Gas Infrastructure Europe  
<https://www.consilium.europa.eu/en/infographics/lng-infrastructure-in-the-eu/>



**Ofgem is the Office of Gas and Electricity Markets. We are a non-ministerial government department and an independent National Regulatory Authority, recognised by EU Directives. Our role is to protect consumers now and in the future by working to deliver a greener, fairer energy system.**

**We do this by:**

- **working with Government, industry and consumer groups to deliver a net zero economy at the lowest cost to consumers.**
- **stamping out sharp and bad practice, ensuring fair treatment for all consumers, especially the vulnerable.**
- **enabling competition and innovation, which drives down prices and results in new products and services for consumers.**