Operating the network

We will start at 11.02 to allow participants to finish previous meetings and join the call

Slido.com

#gtx2

Gas Transmission

Welcome and Opening

Thank you for joining us today

Slido.com will be used for feedback and for Q&A

Slido.com

#gtx2

Who will be speaking?

Glenn Bryn - Jacobsen

Head of National Control

Nera Lenden

Customer & Stakeholder Team

Logistics

Should last for approximately about 60 min

Questions and polling via slido.com #gtx2

All callers will be placed on mute

We will circulate the slides and a recording of this webinar

Agenda

1. Current Summer Operations

2. Case Study – An interesting Day

3. Winter Outlook

4. Demand Side Response

Quick poll | slido.com #gtx2

Are there any other topics you would like us to cover in the future?

Answer on Slido

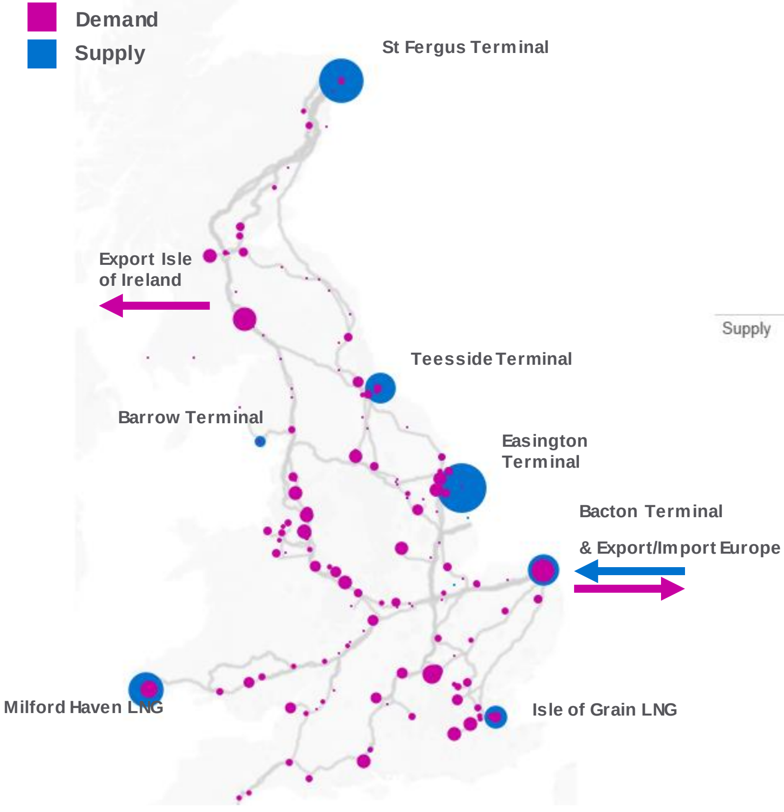
Summer Operations

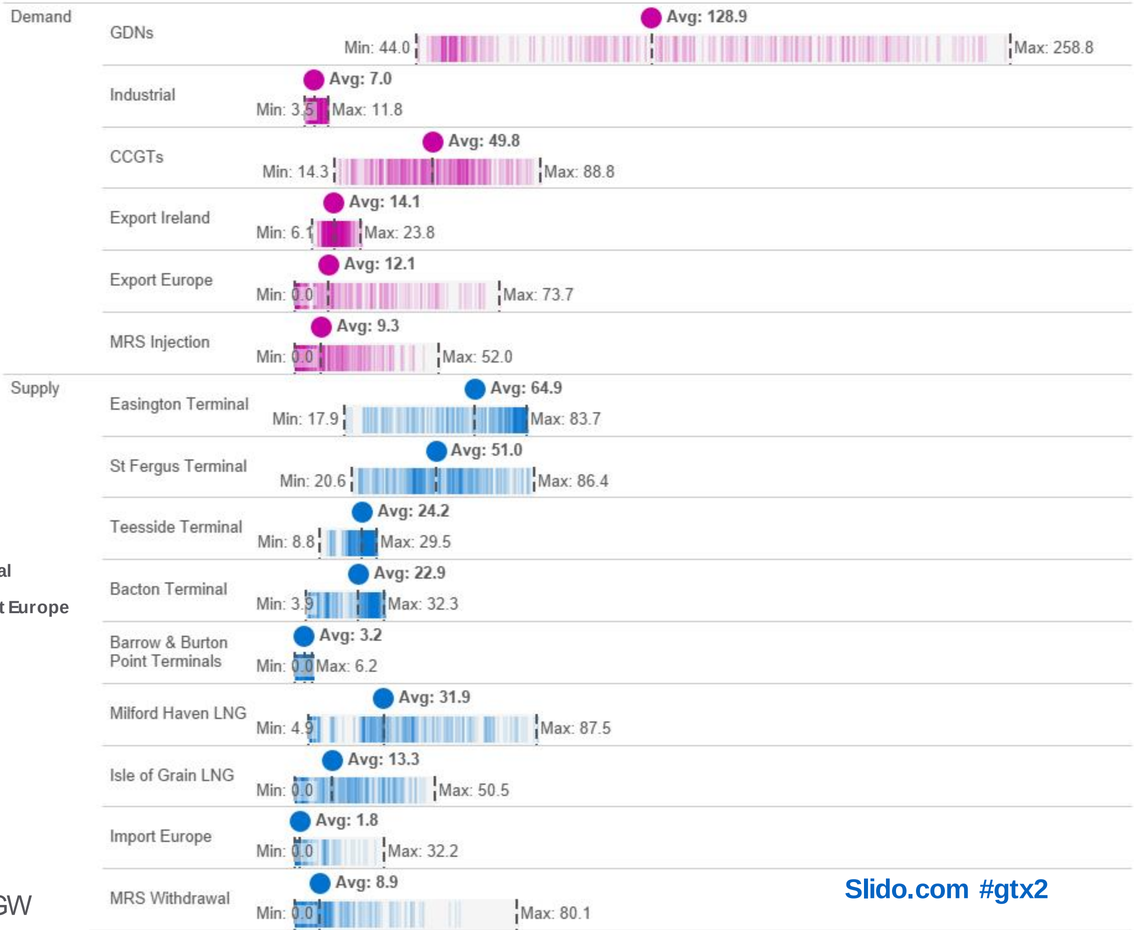
Gas
Transmission

Getting your eye in: The GB Supply & Demand Picture 21/22

Average supply and demand by location

Data shown is volume in mcm/d based on 01/04/21 to 31/03/22

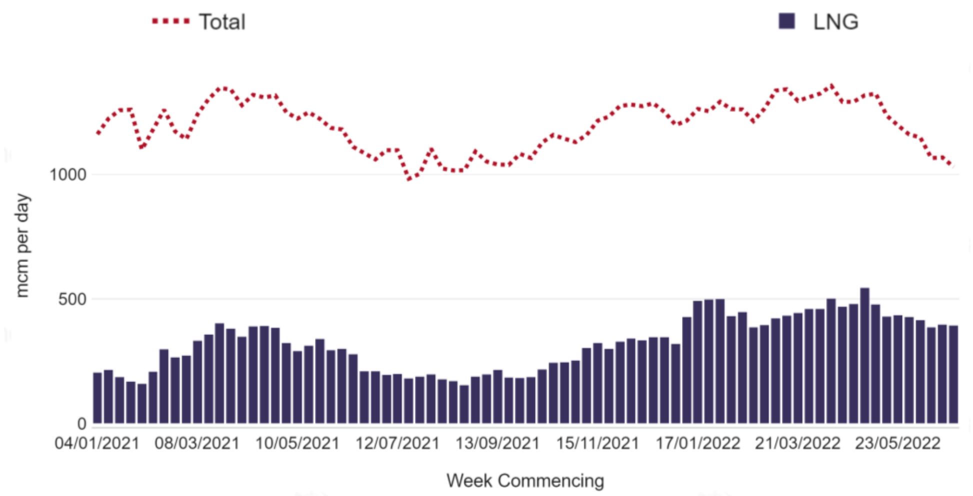




All units in presentation in mcm/d : 1mcm/d ≈ 11 GWh/d ≈ 0.5 GW

Slido.com #gtx2

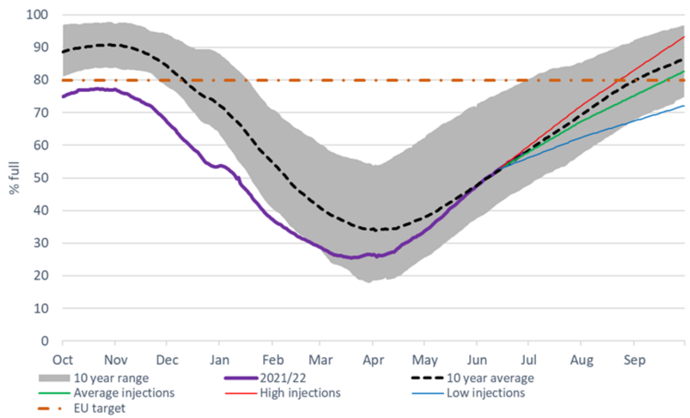
What’s the European Supply Picture?



Russian Supplies Total

Nordstream : 69, Ukraine : 39, Yamal (BY,PL) : 0, Turkstream : 35mcm/d

EU Storage



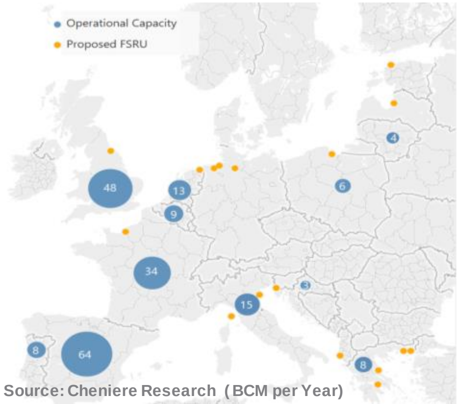
- Significant reduction in Russian Flows
- Total supply impact offset mainly through increased European LNG
- EU Storage continues to fill - Impact of recent flow reduction on Nord-Stream 1 in meeting EU targets to be determined

Source: ENTSO-G, https://transparency.entsog.eu/#/map

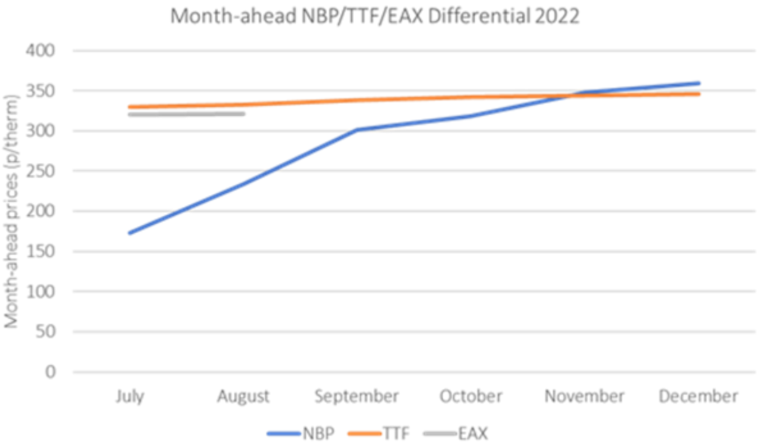
Source: AGSI: https://agsi.gie.eu/#/

What's the impact on GB ? Historically high summer demand

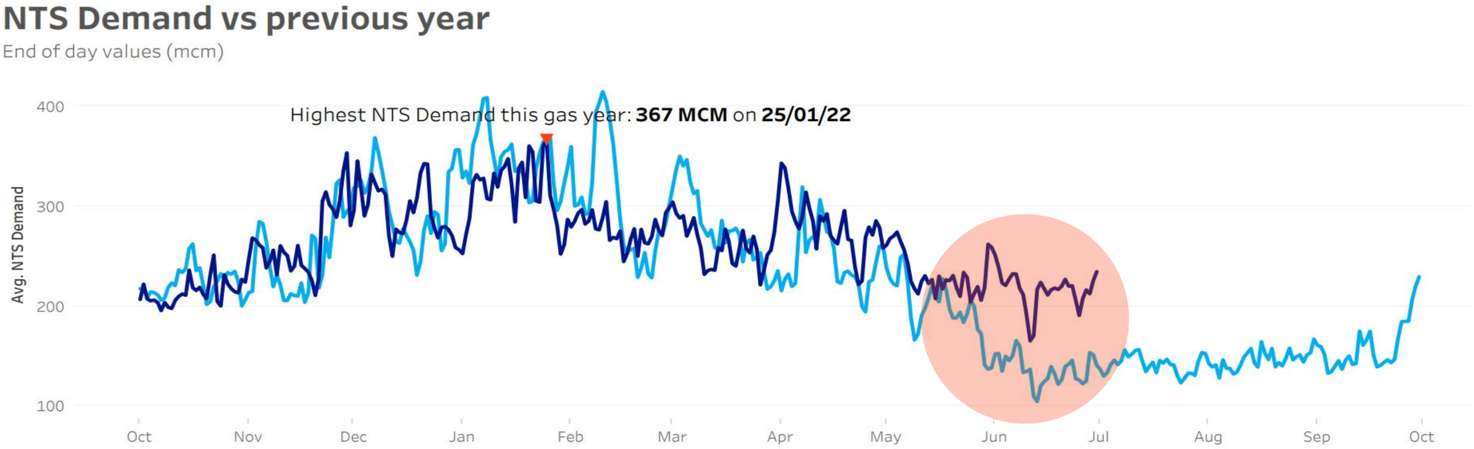
Operational Capacity in Europe



Source: Cheniere Research (BCM per Year)



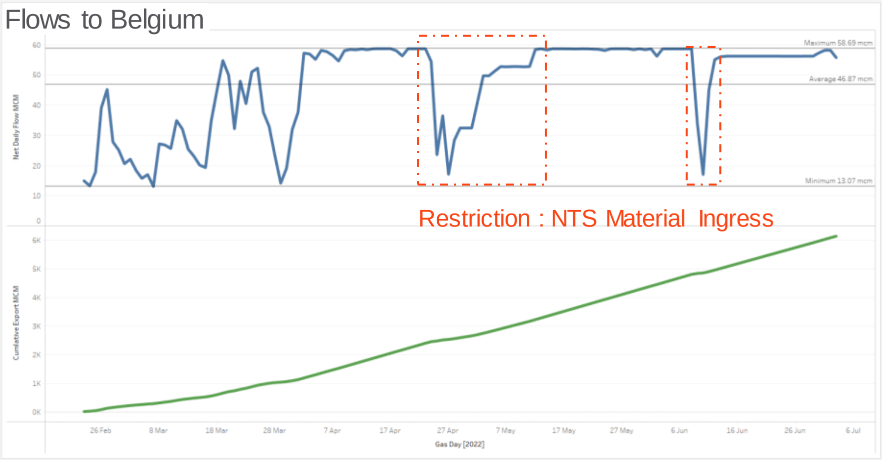
- UK has significant LNG gasification capability
- EU maximising current LNG capability with a significant number of proposed projects
- UK well supplied – Positive EU pricing differentials extending into the winter
- Volatile prices

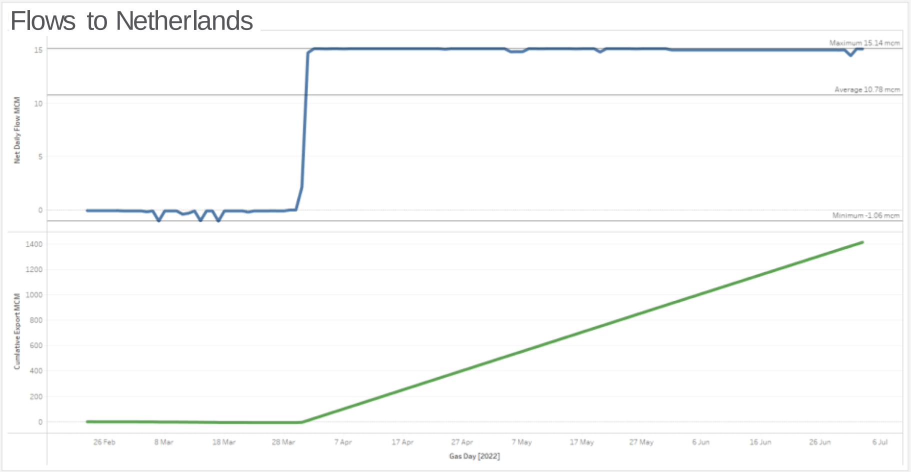


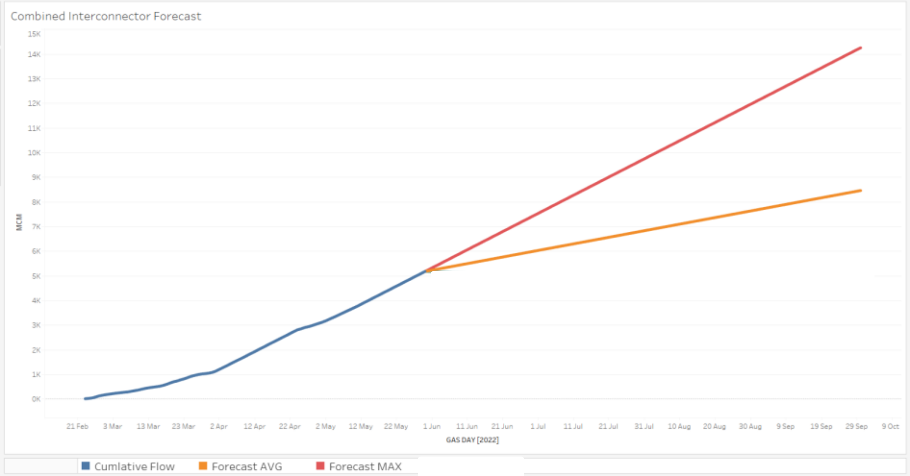
Slido.com #gtx2

The UK Impact : EU Export Demand

1 mcm/d ≈ 11 GWh/d ≈ 0.5 GW



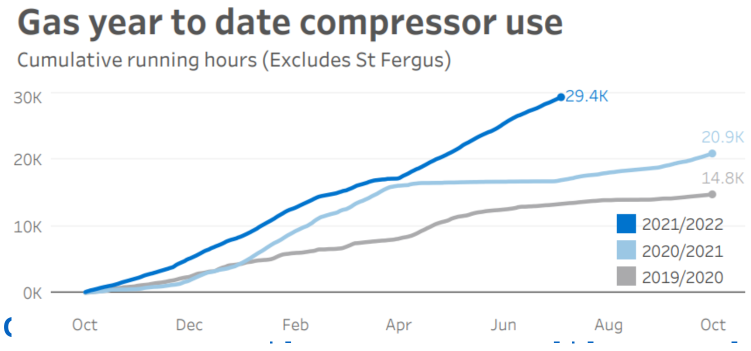


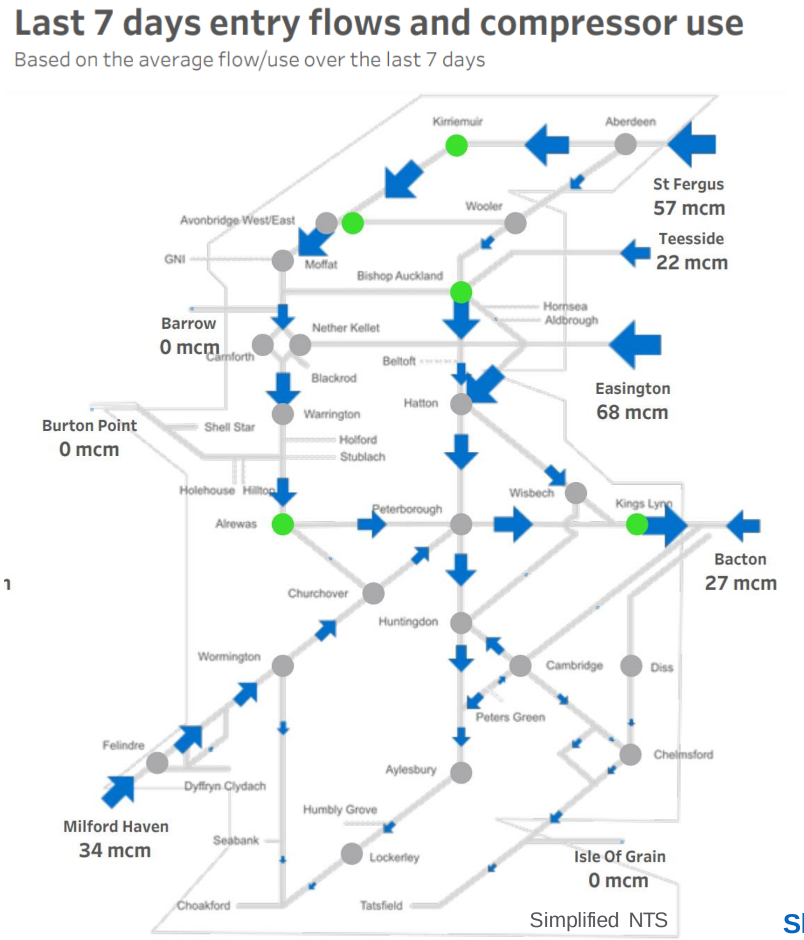


- Strong EU Export Demand : Approx.74mcm/d
- Export above obligated exit capacity levels (60mcm/d)
- Higher flows resulting in higher velocities increasing potential of delivery of material. Operational mitigations in place to reduce likelihood of future interruptions
- Significant contribution to EU's Storage refill targets

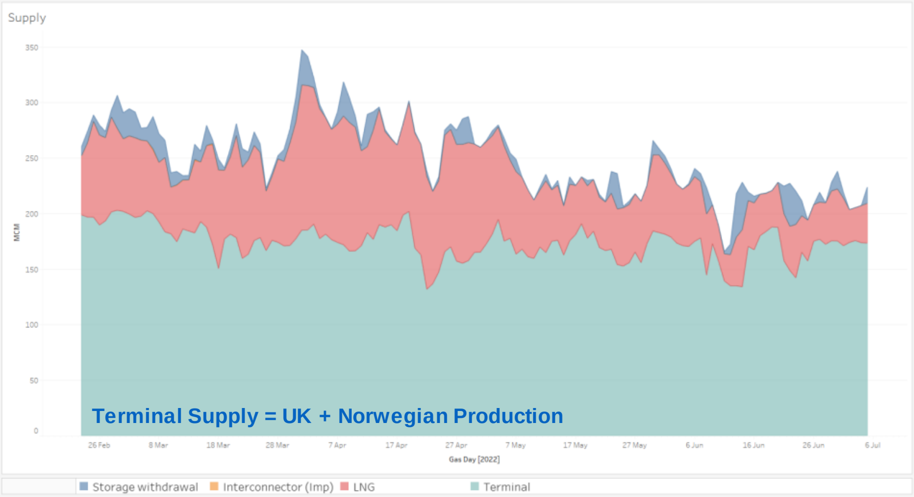
Typical Summer System Configuration: Snap Shot

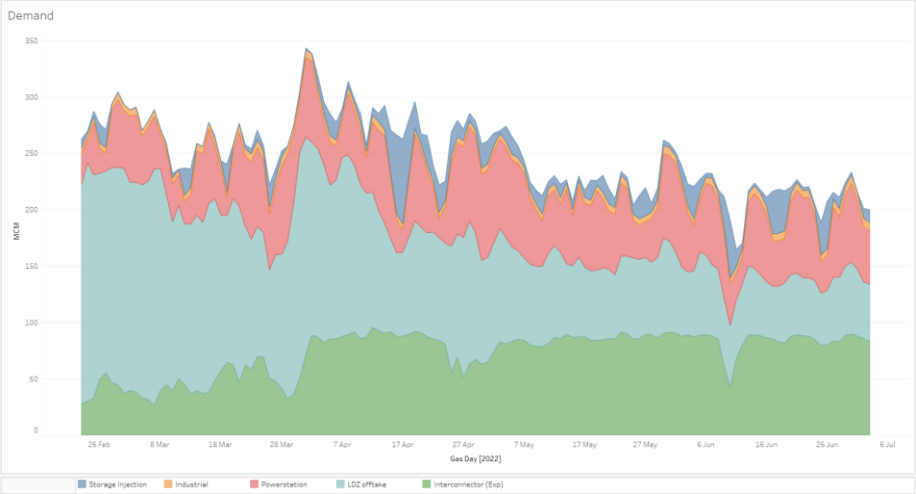
- Overall summer strategy supply driven rather than domestic winter load driving compression
- Significant summer maintenance on the NTS delivering vital asset health investments
- Increased compression to support storage & high EU exports to meet overall customer requirements

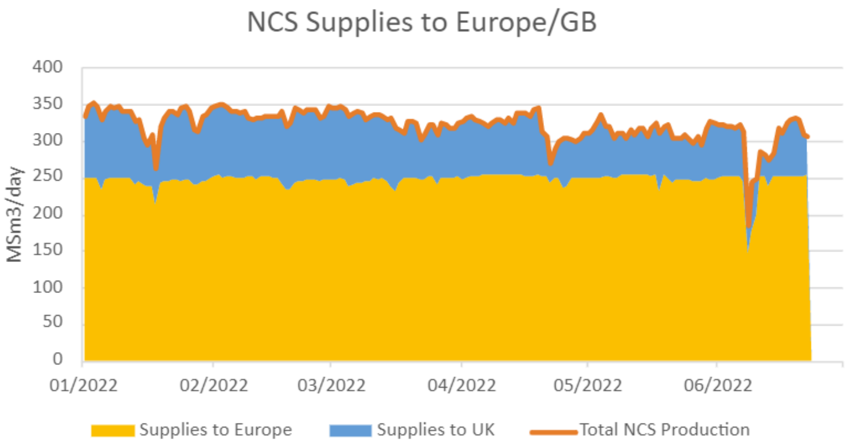




Overall GB Supply & Demand Picture







- Norwegian supplies to UK balance of production
- Dynamic storage response to supply & demand balance
- Interconnector exports & (at times) storage injection / withdrawal greater than overall GB distribution demand
- LNG flows remain below system capability

Slido.com #gtx2

1 mcm/d ≈ 11 GWh/d ≈ 0.5 GW

Summer Low Demand Scenario

	Demand
Summer Domestic	45 mcm
High Renewable Power	15 mcm
Industrial	5 mcm
Full Storage, No Injection	0 mcm
Summer Ireland Export	10 mcm
Max EU Export	75 mcm
Summer 22 Low Demand Forecast	**150 mcm**

	Supply
LNG Min Boil-Off	5 mcm
Average UK + Norway (Summer 22 to date)	170 mcm
Total	**175 mcm**
Surplus without LNG	**25 mcm**

On warm summer days with high renewables little to no LNG would be required to meet GB demand + Max Exports

Current GB Stock Position

LNG

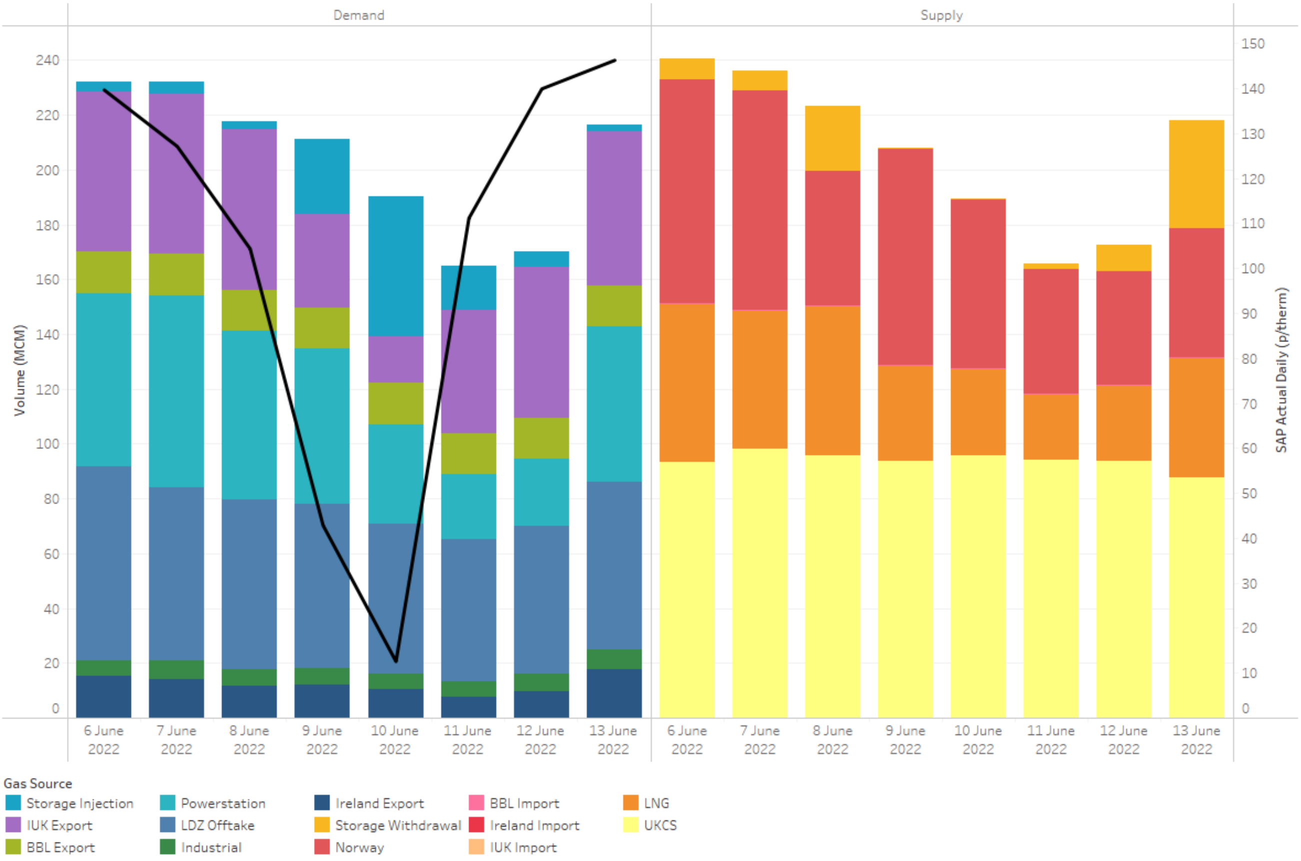
Storage Stock

- GB Storage stocks > Approx. 85% full in aggregate
- Significant injection & withdrawal rates responding to overall GB imbalance
- Slower Injection rate sites continue to fill and/or close to maximum stocks

Case Study

Gas Transmission

Summer Case Study: Operational disruption to EU Exports



- NTS material ingress leading to interruption of Interconnector flows
- Storage well stocked : Relatively limited flexibility to absorb demand change
- Significant On-the-day price impact
- Response from Storage (Injection & Withdrawal after demand re-established) & reduction in Norwegian flows over the period

Winter Outlook

Gas
Transmission

Scope of Winter Outlook

- Previous Winter Outlook publications focussed on upstream and onshore physical capability
- This still remains an essential element of looking at the operations for the winter period
- Given the recent geo-political situation and market volatility we recognise the need to provide additional insight and information into how supplies may be needed to meet varying demand

Proposed Winter Outlook Content

- Additional demand scenarios to set out the basis on which supply can be assessed
- Supply scenarios which test Security of Supply and the requirement for flexible supplies
- Detail on new/additional tools, monitoring and reporting that has been developed for this coming winter
- Provision of more information on what monitoring and reporting we undertake throughout the winter and quick links to find it

Next Steps

- Collating all the feedback
- Early drops of Winter Outlook in July and August
- Including a playback of feedback
- Full Winter Outlook early October along with the Ofgem led Winter Outlook Launch

box.operationalliaison@nationalgrid.com

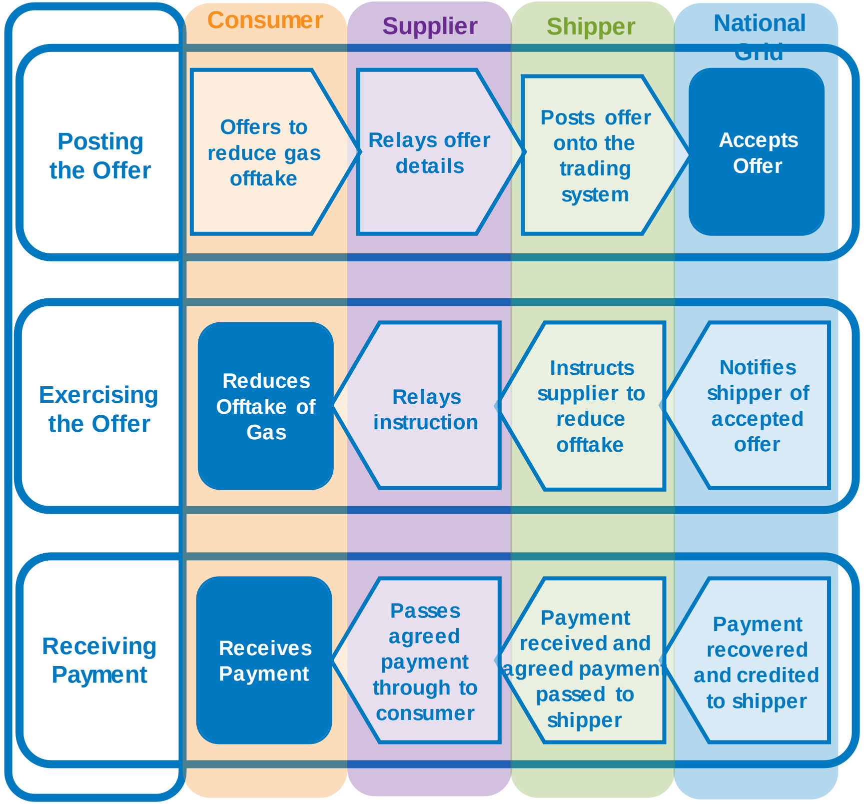
Demand Side Response

Gas
Transmission

Gas DSR

Gas DSR enables large consumers to offer to reduce their demand via their shipper / supplier during the build up to a gas emergency, in return for a payment which they define

- Introduced in 2016, during times of insufficient gas supply, the use of gas DSR could reduce the likelihood, severity and duration of a gas deficit emergency
- Shippers may place offers to sell gas volumes on the OCM DSR market which NGG may accept after a Gas Balancing Notification (GBN) has been issued prior to declaration of a Stage 2 emergency



Gas DSR: Recent Feedback and Planned Next Steps

Recent feedback from market participants suggests that:

- Incentives for consumers to participate in Gas DSR via their shipper/supplier are currently insufficient
- It is therefore unlikely that DSR offers would be available if a GBN is issued
- Option payments to consumers could help to stimulate this market and provide assurance that curtailment volumes would be available, if needed

We are therefore planning a 'twin-track' engagement approach over the coming weeks to assess the case for DSR reform this winter

Consumers, shippers & suppliers:

- Better understand the current blockers to DSR
- Identify what changes to the current rules would be needed to stimulate participation

UNC parties:

- Discuss the issues associated with introduction of option payments
- Engagement to inform a potential UNC Modification

Poll update

Are there any other topics you would like us to cover in the future?

Questions

What next?

You will receive the recording and material from today’s session

If you have any further questions or would like to discuss anything specific please get in touch with Nera.Lenden@nationalgrid.com

Feedback is important to us, therefore if you have not already taken part, we would like to put you forward for a survey

Keynote speech

Watch again

Digital strategy and information provision

Monday 11th July

Register Here

Future Regulation

Tuesday 12th July

Register here

Future of energy

Thursday 14th July

Register here

Thank you for joining us

Gas Transmission