Operating the Network

We will start at 13.02 to allow participants to finish previous meetings and join the call

Slido.com

#GT5

Gas Transmission

Welcome and Opening

Thank you for joining us today

Ian Radley

Director of System Operations

Who will be speaking?

Craig James

Head of National Control

Nera Lenden

Customer & Stakeholder Business Lead

Logistics

Should last for approximately about 60 min

Questions and polling via slido.com #GT5

Believe in children
Barnardo's

All callers will be placed on mute

We will circulate the slides and a recording of this webinar

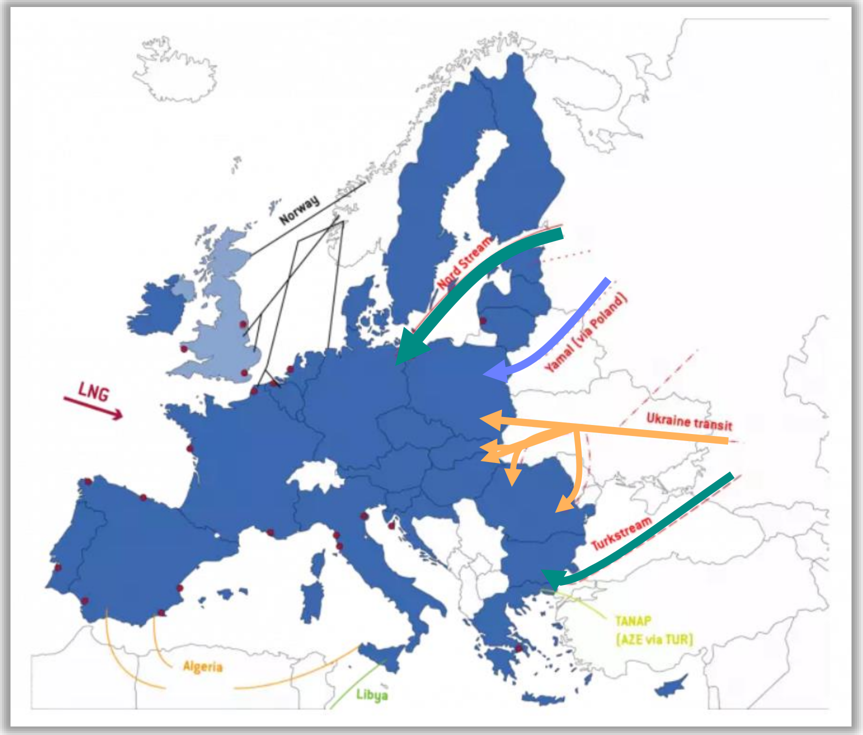
Agenda

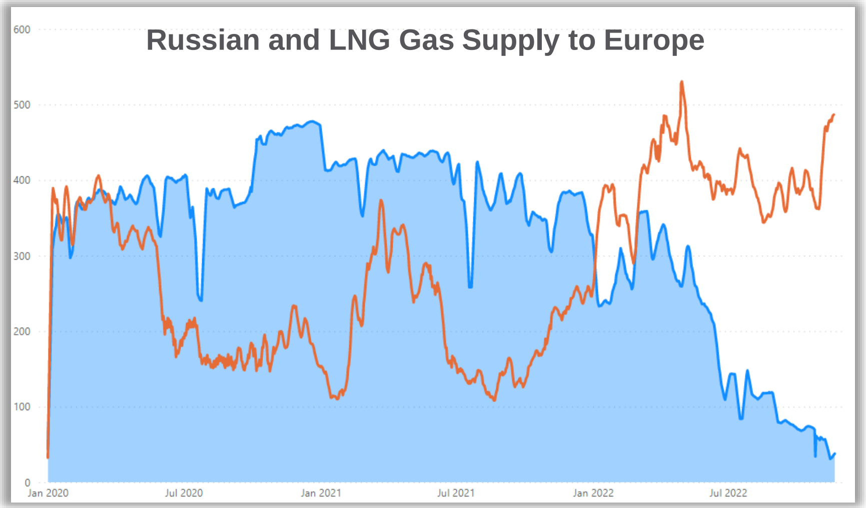
1. EU Gas Supply
2. Summer Operation
3. This Winter
4. Enhanced Tools for Winter

EU Gas Supply

Gas Transmission

Impact of Reductions in Russian Gas Flow



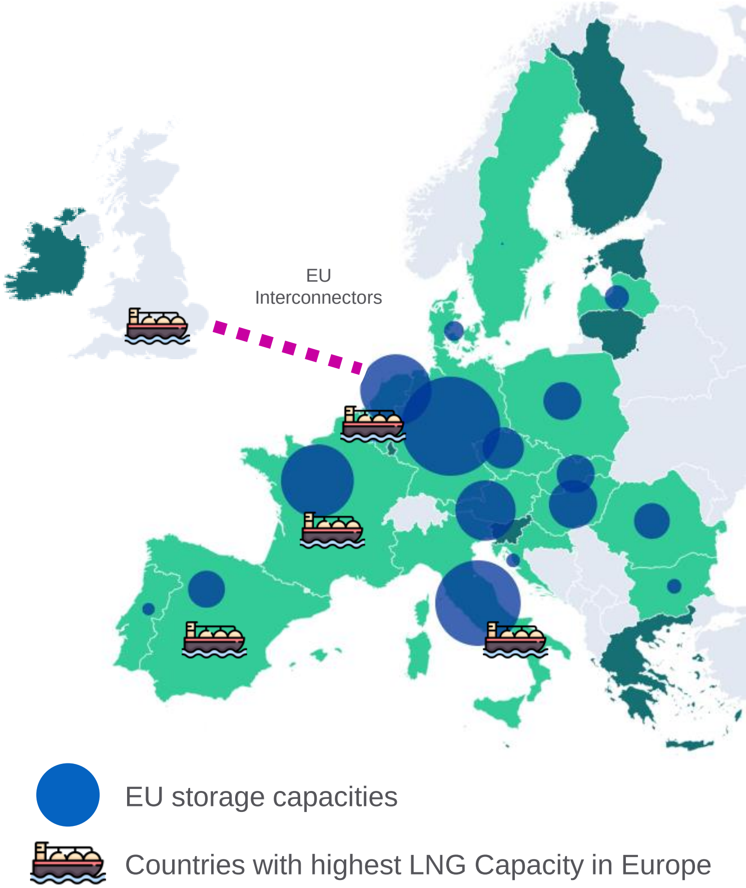


Russian Supply LNG Supply

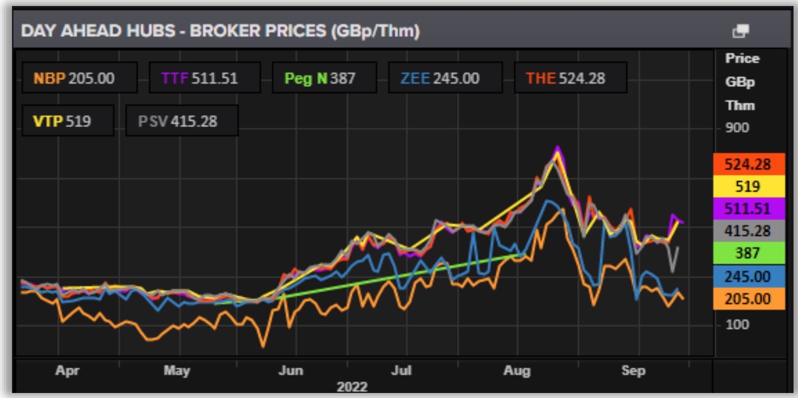
Significant loss of c450 mcm/d of Russian supply has been partially offset by increases in LNG

Gas Supply in the EU and GB

EU LNG Capacity	Billion m3	mcm/d
Spain	69	189.04
UK	48	131.51
France	34	93.15
Italy	15	41.10
Netherlands	12	32.88
Portugal	8	21.92
Greece	7	19.18
Poland	5	13.70
Lithuania	4	10.96
Belgium	3	8.22
Malta	1	2.74
	206.00	564.38



EU Demand Driving Interconnector Behaviours

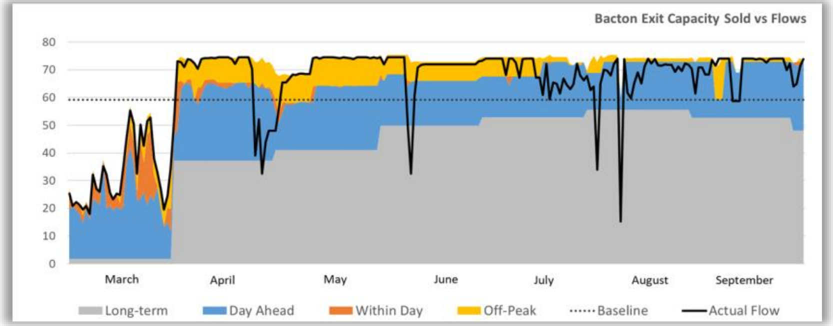


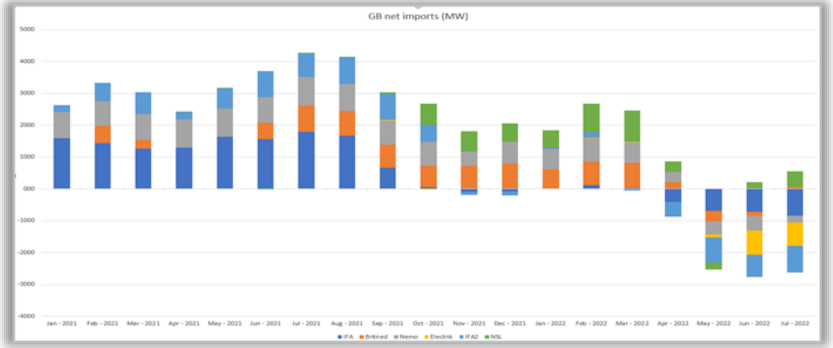
Gas costs £3 per therm more in the EU than it does in the UK. Driving….

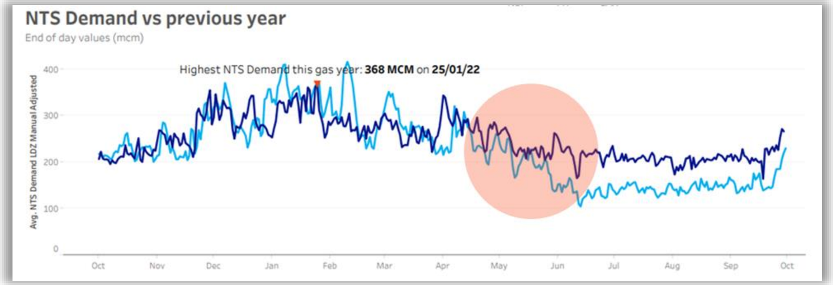
Record and maximum exports on the gas interconnectors

Large exports on the electricity interconnectors

Record summer demands across the UK



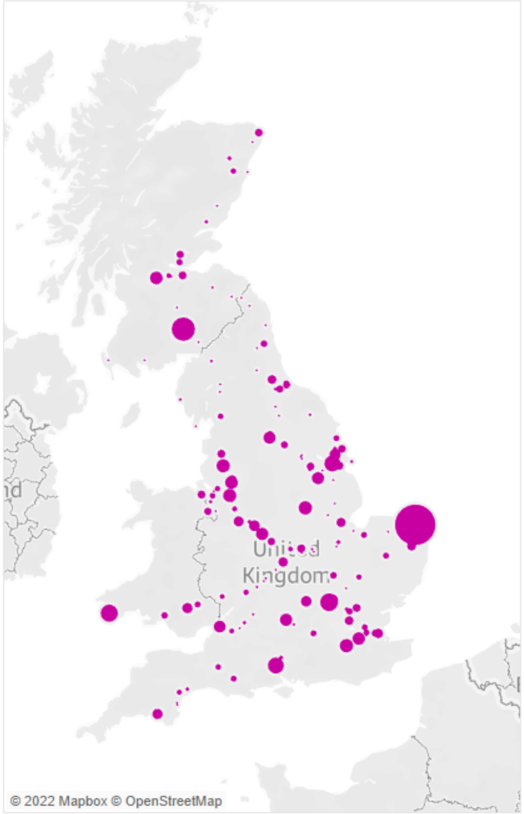


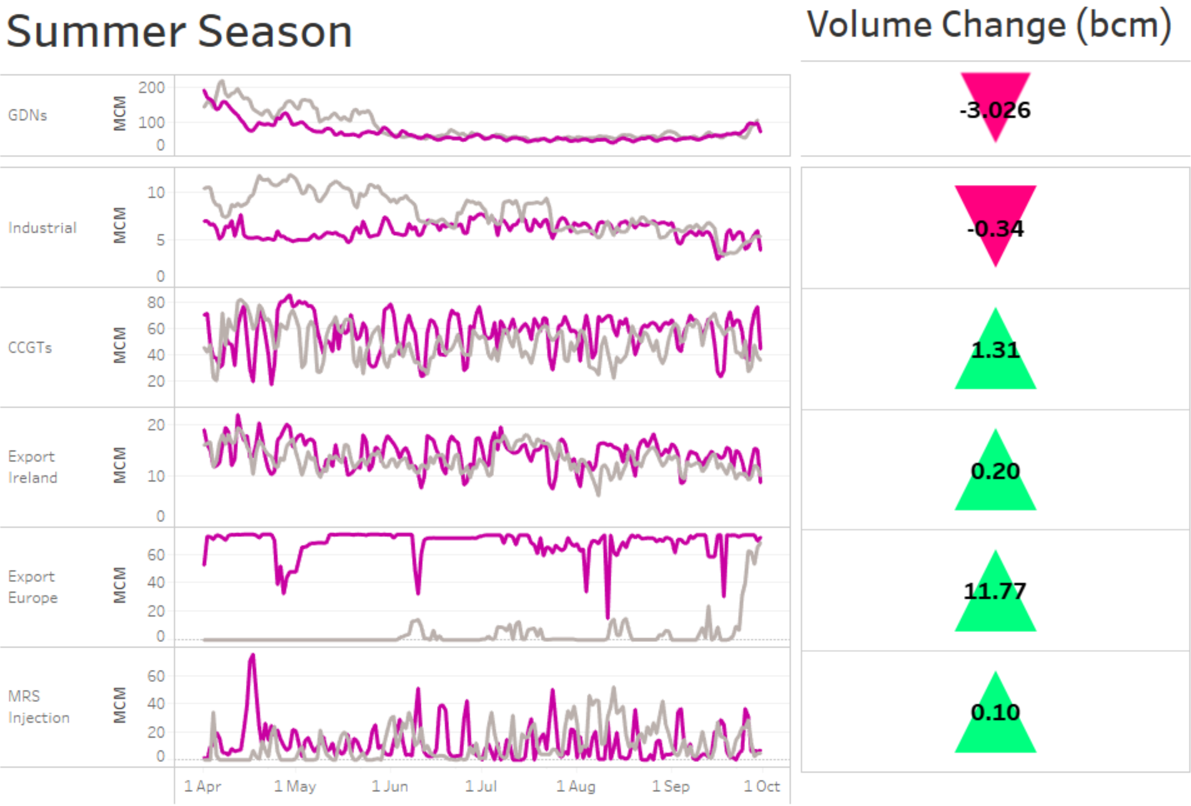


Impact on Summer Operations

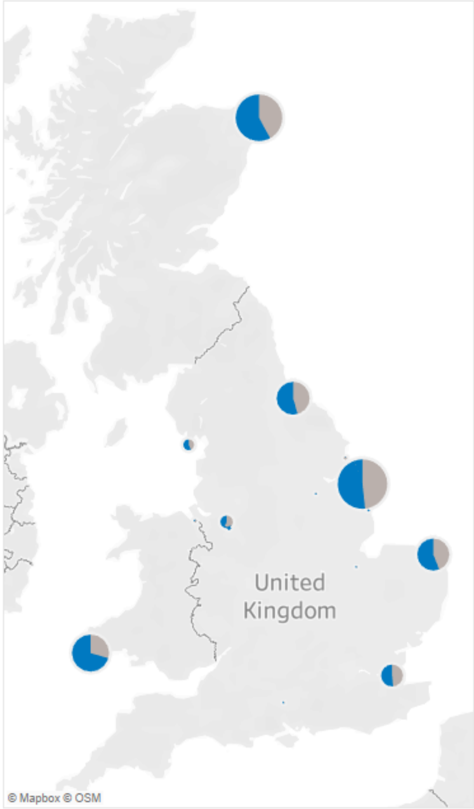
Gas Transmission

Changes in Summer Demand

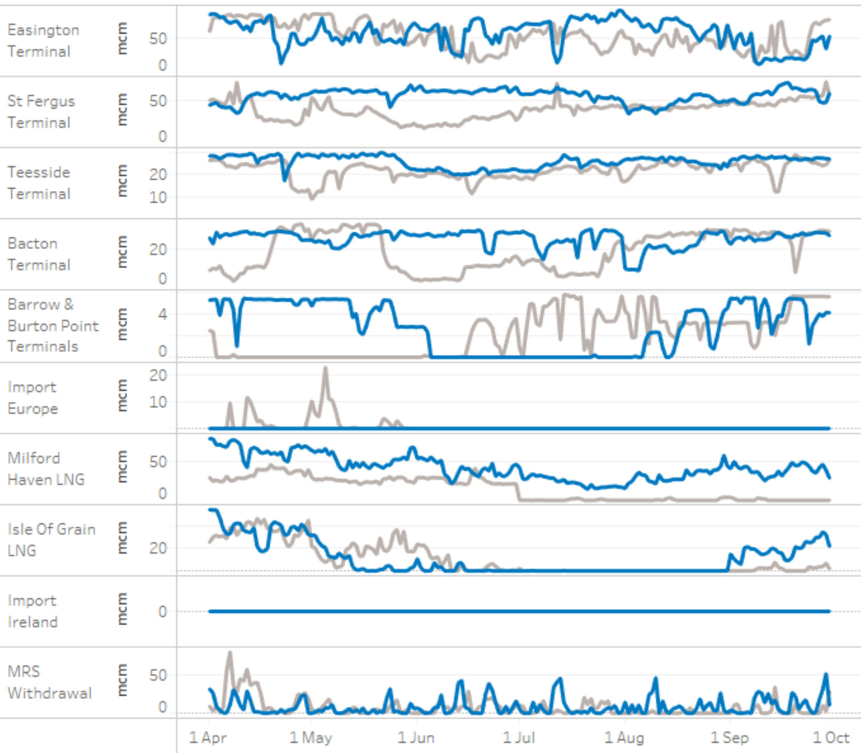




Changes in Summer Supply



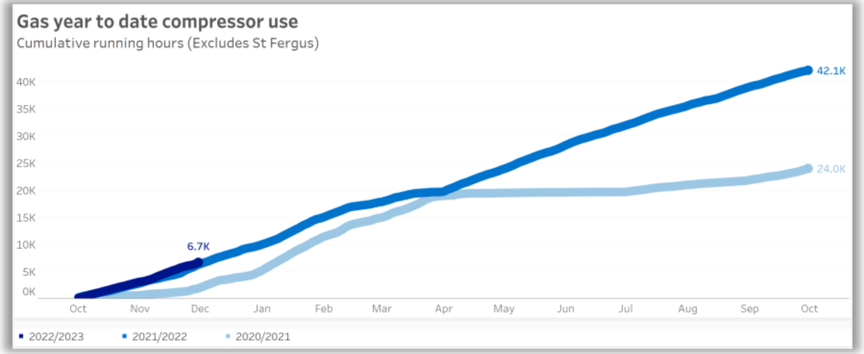
Summer Season

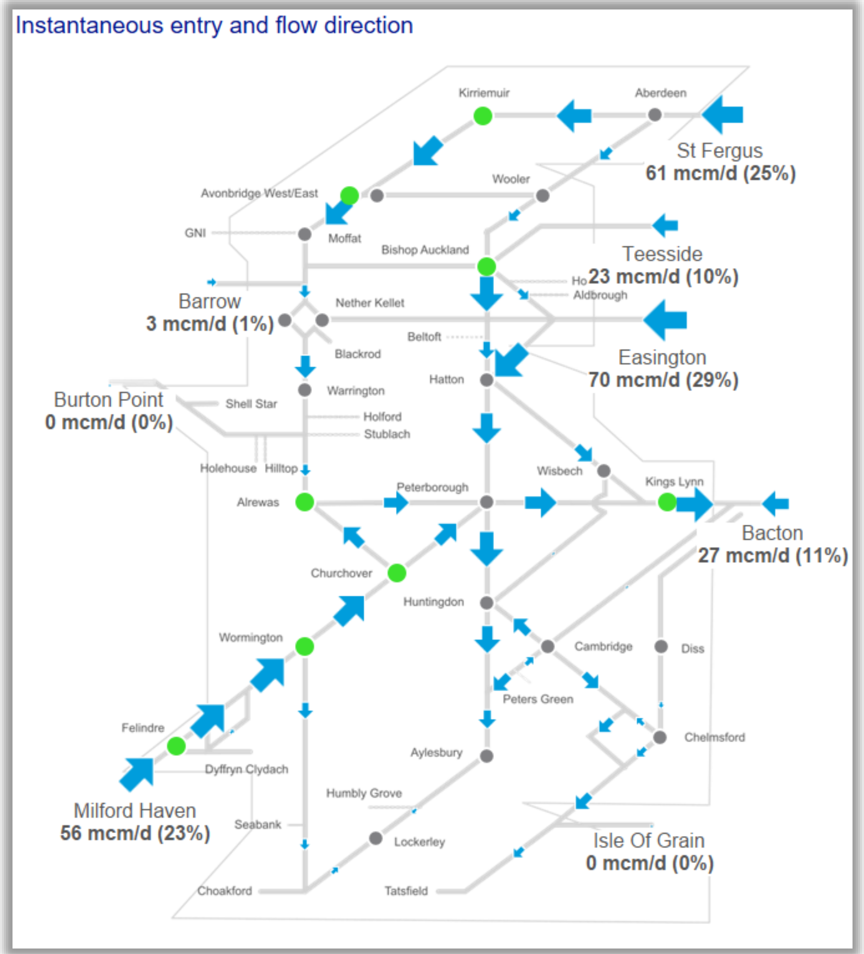


Volume Change (bcm)

Terminal	Volume Change (bcm)
Easington Terminal	0.64
St Fergus Terminal	2.81
Teesside Terminal	0.76
Bacton Terminal	1.11
Barrow & Burton Point Terminals	0.12
Import Europe	-0.15
Milford Haven LNG	4.57
Isle Of Grain LNG	0.12
Import Ireland	0.00
MRS Withdrawal	0.24

Summer Operations





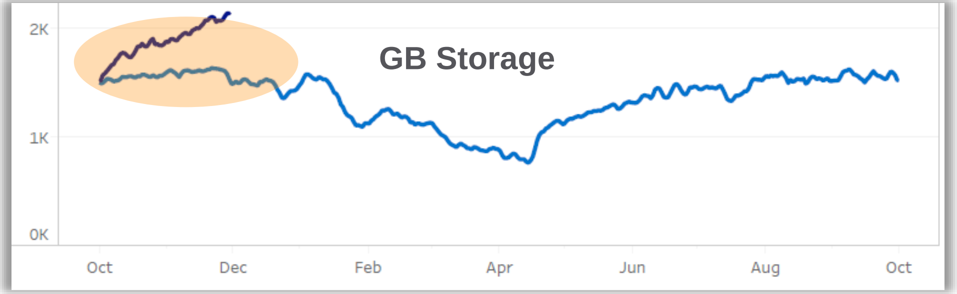
Poll Question

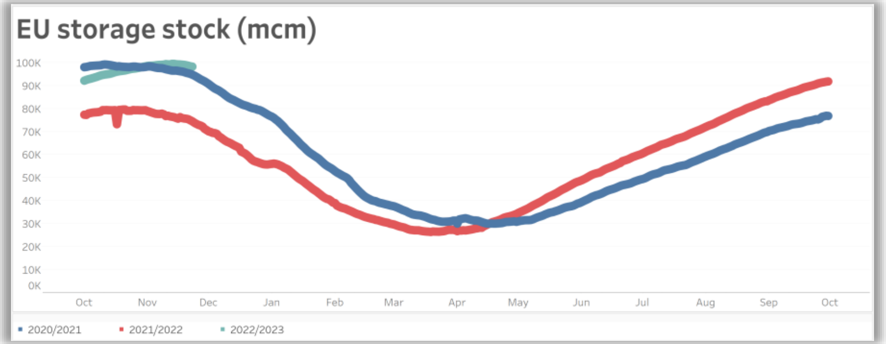
What would you like to hear about in future sessions?

This Winter

Gas Transmission

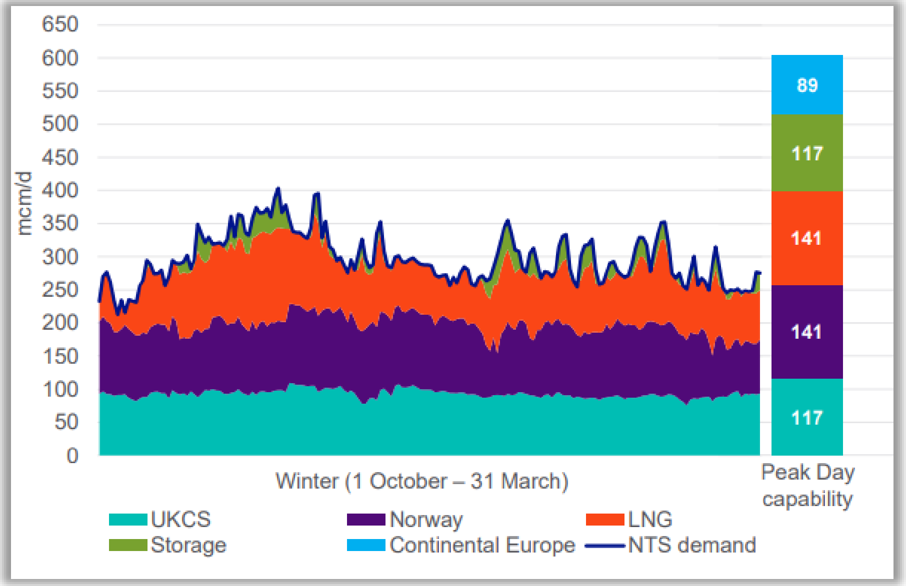
Driving Storage

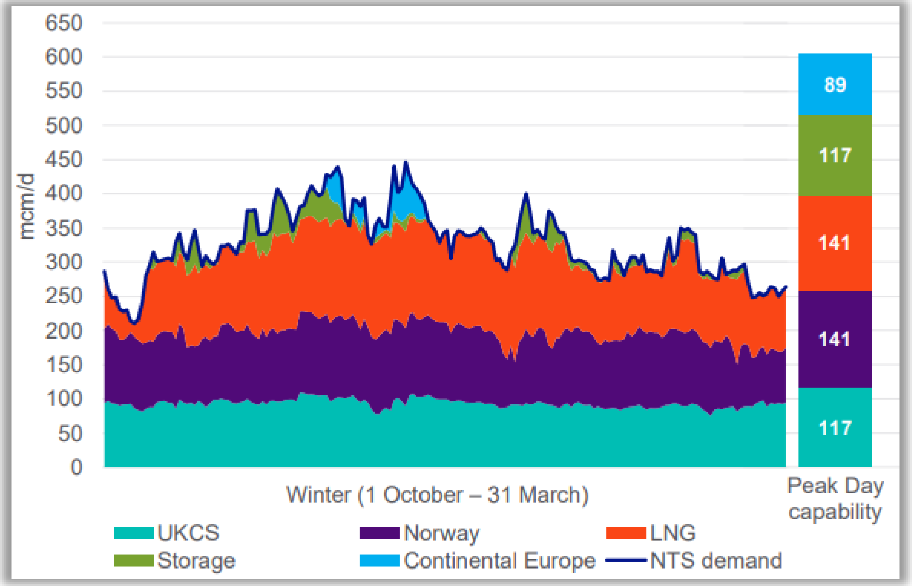




- EU and GB storage at a higher stock position than typical for this time of the year
- A large component of the total gas in GB storage is a consequence of Rough reopening in November

What does this mean for Winter





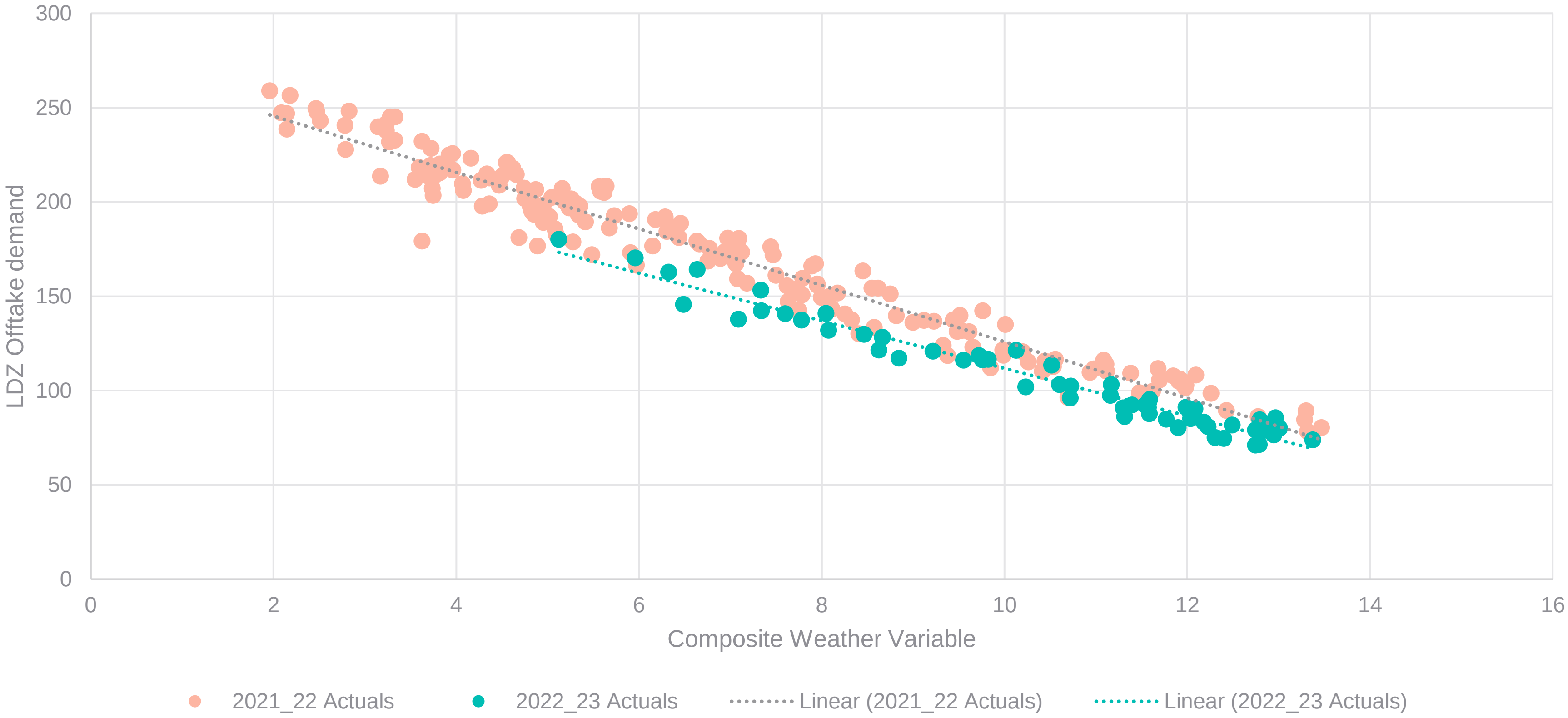
Typical winter: UK demand does not require EU imports via the interconnectors.

Demand is balanced predominantly by LNG and GB storage

Very cold winter: UK requires import from the EU to meet demand during the coldest periods

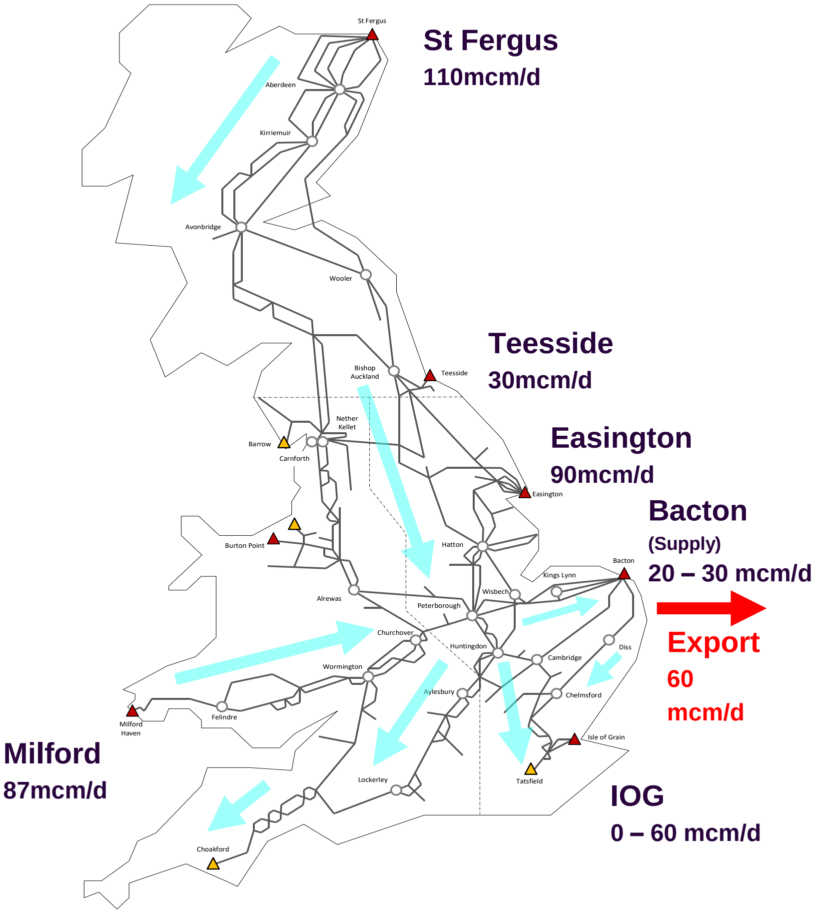
LNG remains very high throughout the period to balance high domestic gas demands

UK Demand Suppression



Winter challenges

- Continued EU exports driving higher than typical demands
- Significant levels of LNG expected to be delivered
- High utilisation of compression across the network



Enhanced Tools for Winter

Gas
Transmission

Gas Demand Side Response (DSR)

Gas DSR enables consumers to offer to reduce their gas demand via their shipper/supplier at times of gas system stress, in return for a payment which they define

During times of insufficient gas supply, the use of gas DSR could **reduce the likelihood, severity and duration** of a gas deficit emergency

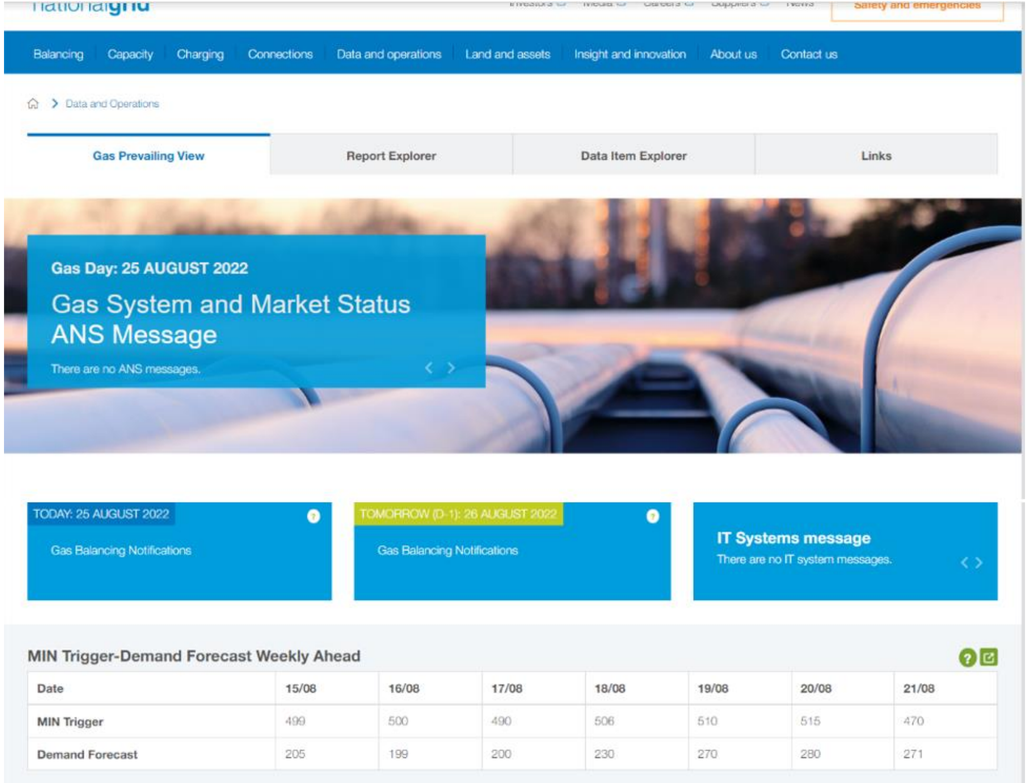
Intended to provide a 'route to market' for large consumers to receive **greater financial compensation** by **voluntarily curtailing** demand ahead of an emergency than if they were **involuntarily curtailed** in an emergency.

Envisaged to be more suitable for **large industrial and commercial sites** rather than power generation

Shippers may place offers to sell quantities of gas on the OCM DSR locational market which NGG may accept as a pre-emergency action.

Margins Notice and Demand Forecast Week Ahead View

Enhancing our forecasting provision and providing a view on likely supply margins out to a week ahead



Date	15/08	16/08	17/08	18/08	19/08	20/08	21/08
MIN Trigger	499	500	490	506	510	515	470
Demand Forecast	205	199	200	230	270	280	271

Gas Operating Margins for Winter 22/23

- During summer 2022 a reassessment was made of the requirement for 22/23, following developments in the gas market since February
- The reassessment included analysing different supply flow patterns to meet the winter peak demand day
- The outcome was that an additional **75GWh** (minimum Operating Margins Gas may be required to support the additional scenarios identified*)

OM Requirements 2022/23 (GWh)*			
Category	Current Requirement	Revised Requirement	Change
Supply Loss	545	605	+60
Locational South West	101	101	
Locational South East	39	39	
Non Locational	145	160	+15
Orderly Rundown	38	38	
TOTAL	869	944	+75

** All requirements are indicative and subject to technical, contractual and economic assessment. Requirements may vary depending on bids received*

Poll Result

What would you like to hear about in future sessions?

Questions

Webinar Programme

https://ngrid.com/3ESgN1t

Event Name	Date / Time	Presenters
Facilitating Commercial & Regulatory Change	Tuesday 29th November @ 09:30	Ian Radley, System Operations Director
Sustainable Construction	Wednesday 30th November @ 09:00	Mark Lissimore, Construction Director
Accessing Energy Data	Thursday 1st December @ 11:00	Mark Lissimore, Construction Director
Operating the Network	Friday 2nd December @ 13:00	Ian Radley, System Operations Director
Blending	Monday 5th December @ 10:00	Tony Green, Hydrogen Director
Transitioning to 100%	Tuesday 6th December @ 11:00	Martin Cook, Commercial Director
Hydrogen Regulatory Framework	Wednesday 7th December @ 12:00	Tony Nixon, Regulation Director
Monitoring and Mitigating Methane Emissions	Thursday 8th December @ 13:00	Steven Vallender, Asset Director
Future of Heat	Friday 9th December @ 13:30	Tony Green, Hydrogen Director
FutureGrid - Progress Report	Monday 12th December @ 14:00	Tony Green, Hydrogen Director
Innovation	Tuesday 13th December @ 13:00	Tony Green, Hydrogen Director
Driving a Positive Environmental & Community Impact	Wednesday 14th December @ 10:00	Jake Tudge, Corporate Affairs Director

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

Thank you for joining us

Gas Transmission