

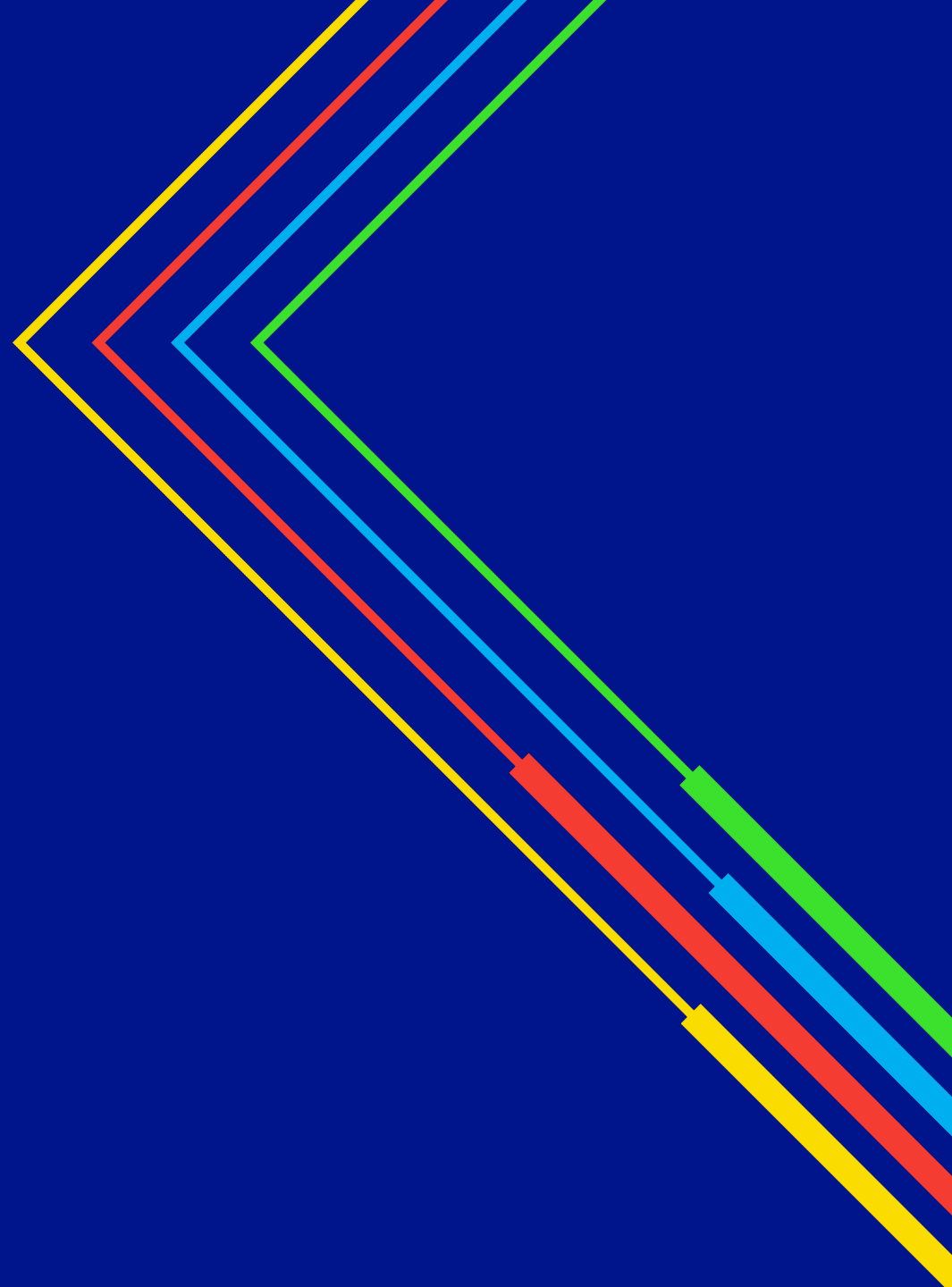
The Changing Role of the System for UK Energy Strategy & Security – the context of Gas

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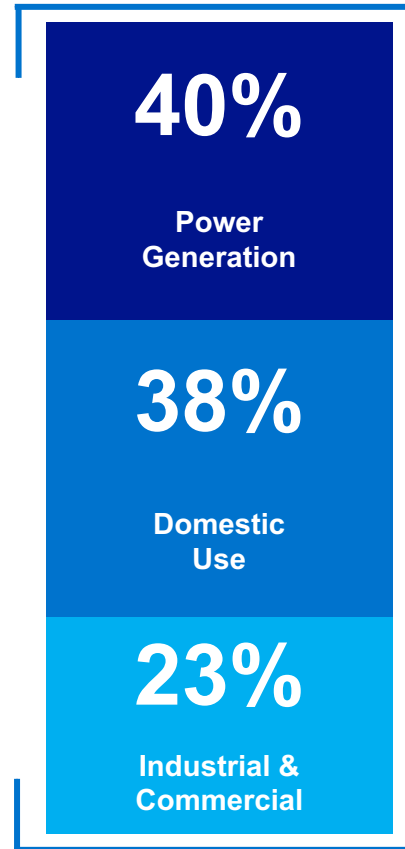
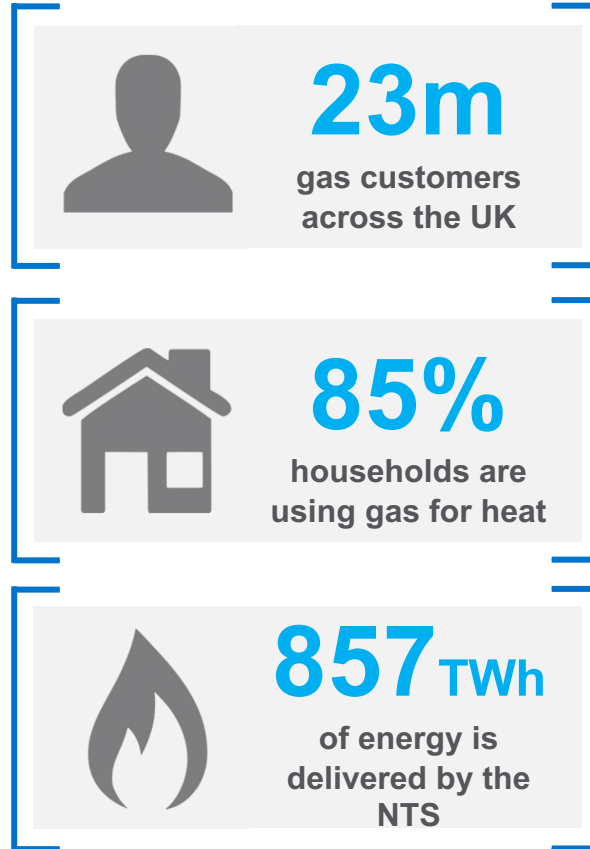
National Grid Gas Transmission & Metering

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The important role of gas in the GB energy system

Gas Demand in the UK today:

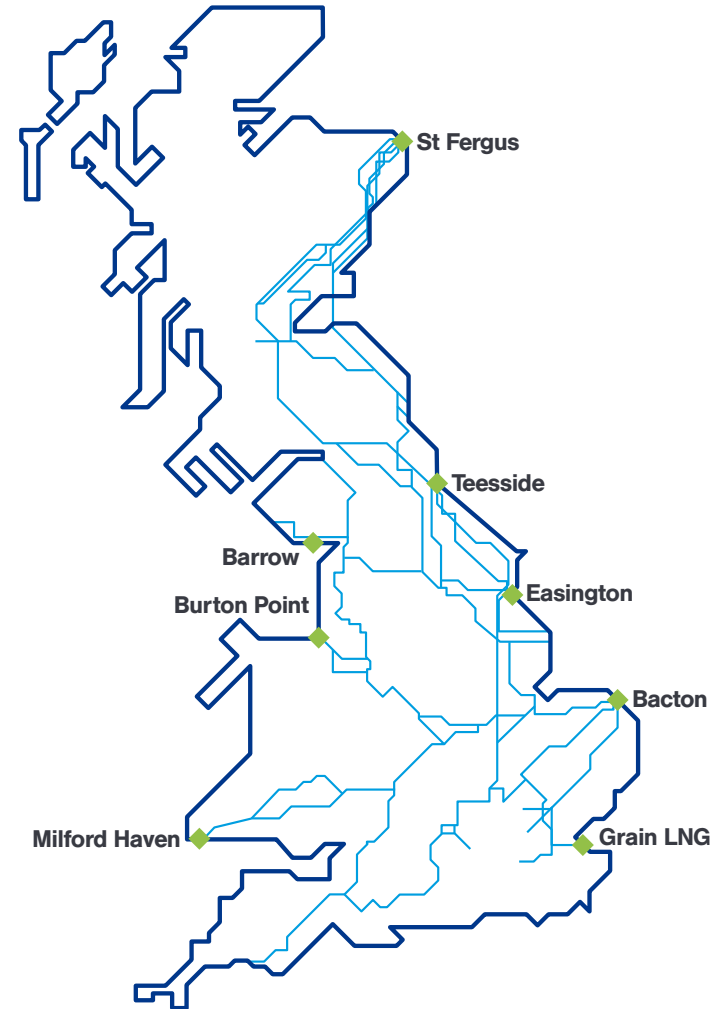


857 TWh

2021: Total gas demand

334 TWh

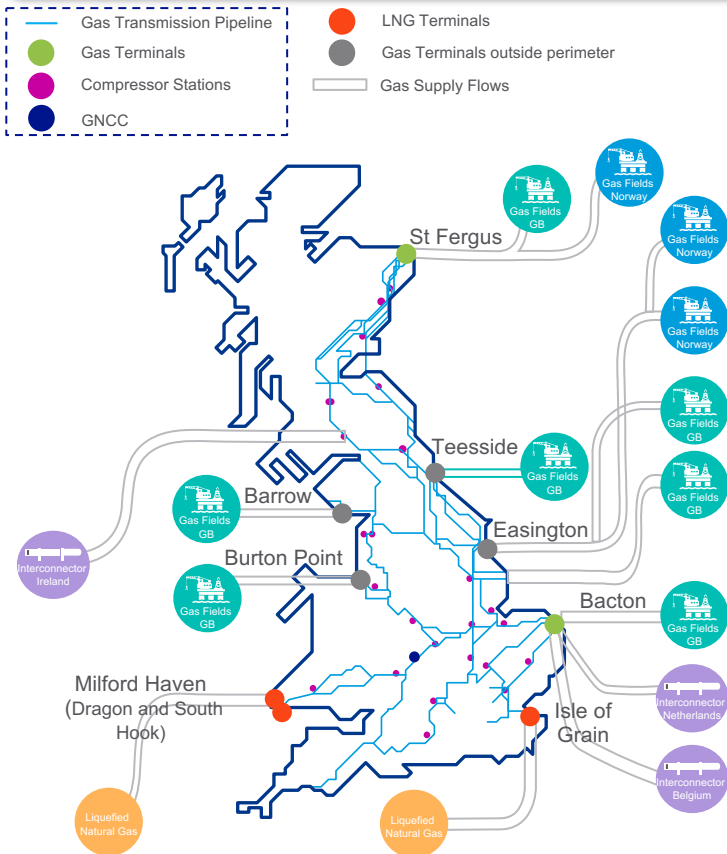
2021: Total electricity demand



An overview of Gas Transmission & Metering

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GT&M

Gas Transmission



68
Compressors



7,627km
Network length



8
Connected
distribution
networks



£6.6bn
RAV (Mar-22)



~530
Above-ground
installations



Gas National
Control Centre



Pipelines
Maintenance
Centre



£576m
EBITDA (Mar-22)

Metering



~7.6 million
Meters in the UK



~95%
Domestic meters



~5%
I&C meters

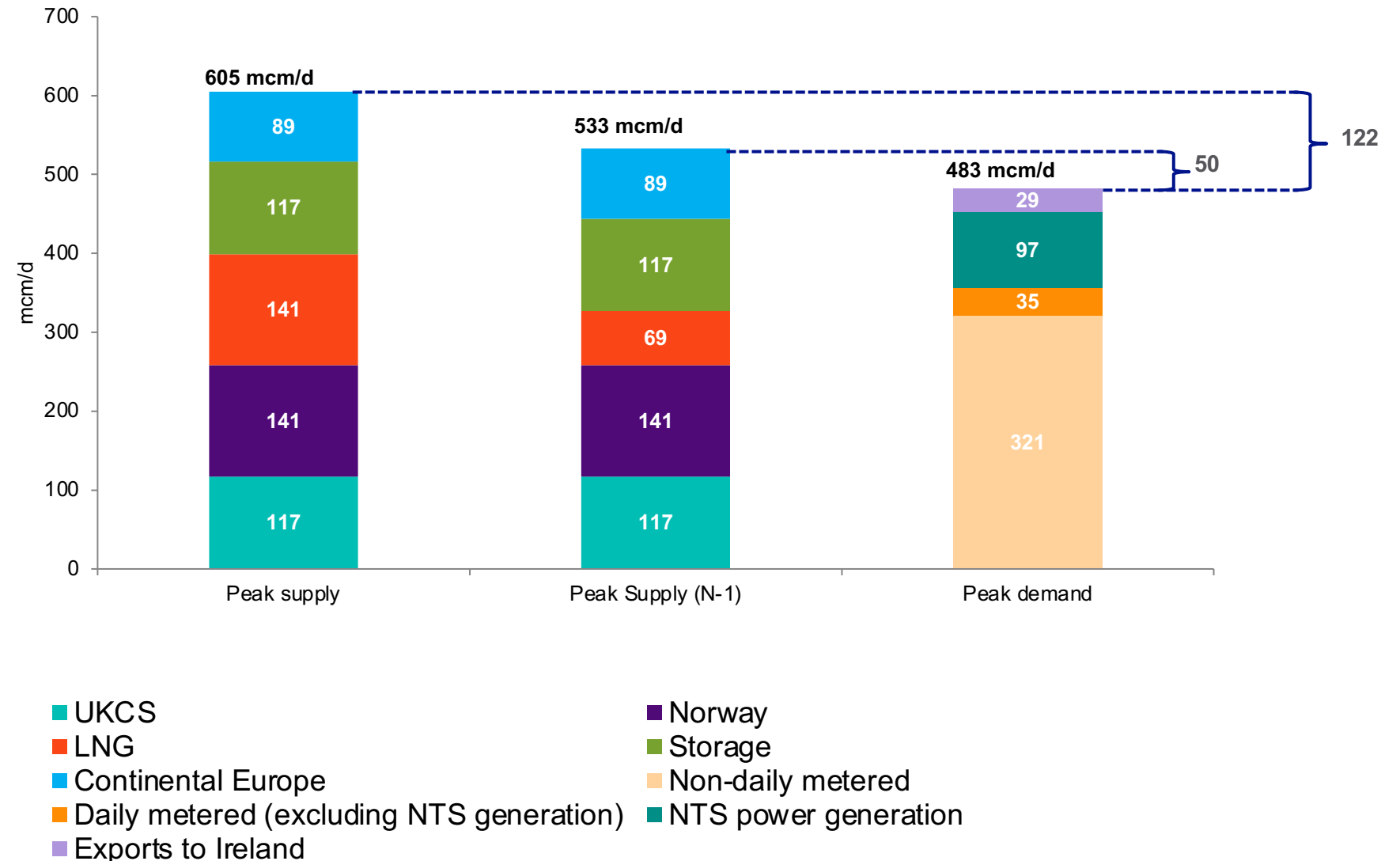


£175m
EBITDA (Mar-22)



Our Winter Outlook supply margin for a peak day

- 1-in-20 peak day supply (605 mcm/d) is comparable to last winter
- Peak day demand has decreased from 505 to 483 mcm/d.
- The peak 1 in 20 supply margin is 122 mcm/d
- We retain a positive supply margin (50 mcm/d) under N-1 conditions.



Our Winter Outlook summary for each scenario

- GB Gas Infrastructure has sufficient capability to meet peak demand, with a positive supply margin under both intact and N-1 network conditions
- We have presented three balanced scenarios which look to illustrate the extent to which GB security is dependent on flexible sources of imported gas supplies, prioritising LNG, to illustrate any resultant dependency on EU imports:

In a typical winter

- Imports from continental Europe may not be required in a typical winter if sufficient LNG is attracted to GB in-line with levels seen in previous winters.
- GB may also be able to export energy to Europe.

In a cold winter

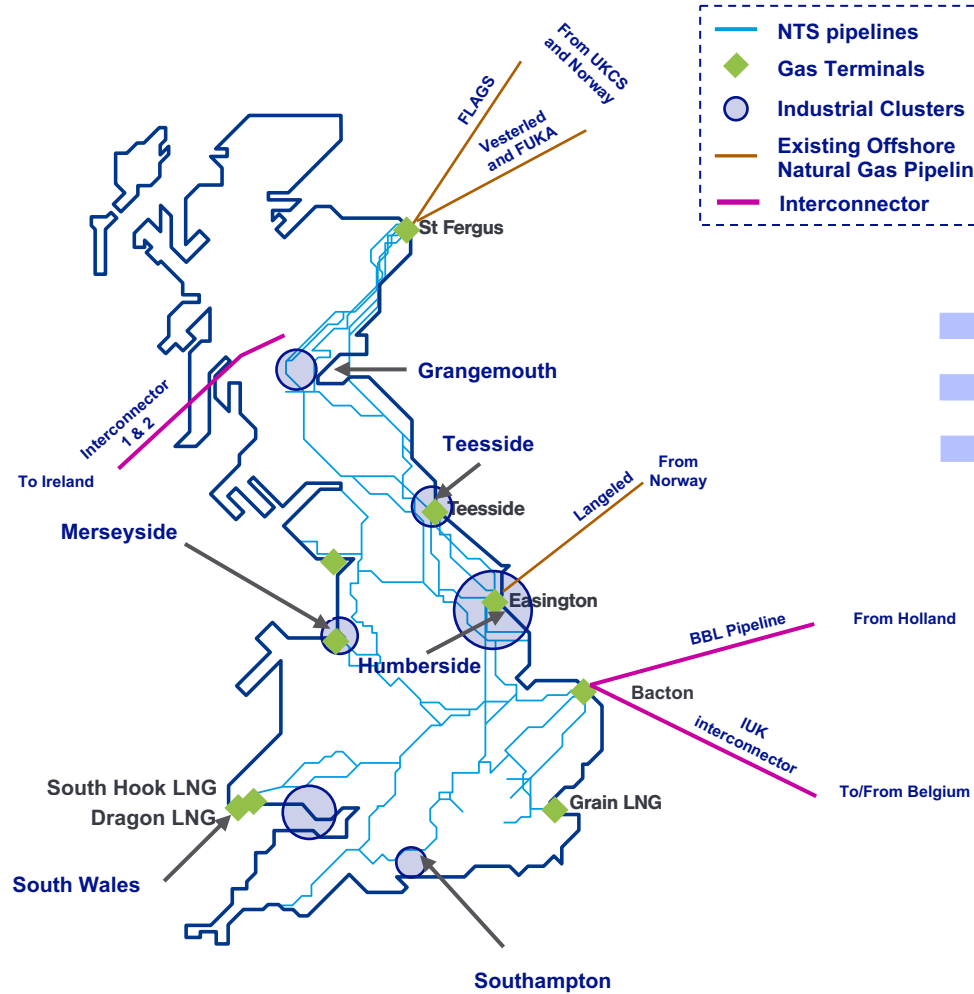
- LNG reaches maximum capability on a number of days, meaning other flexible supplies such as imports from Europe may be required.
- More supplies from UKCS and Norway, or exporting less to Europe during the early part of winter, may reduce the need for imports from Europe.

In a short duration cold snap

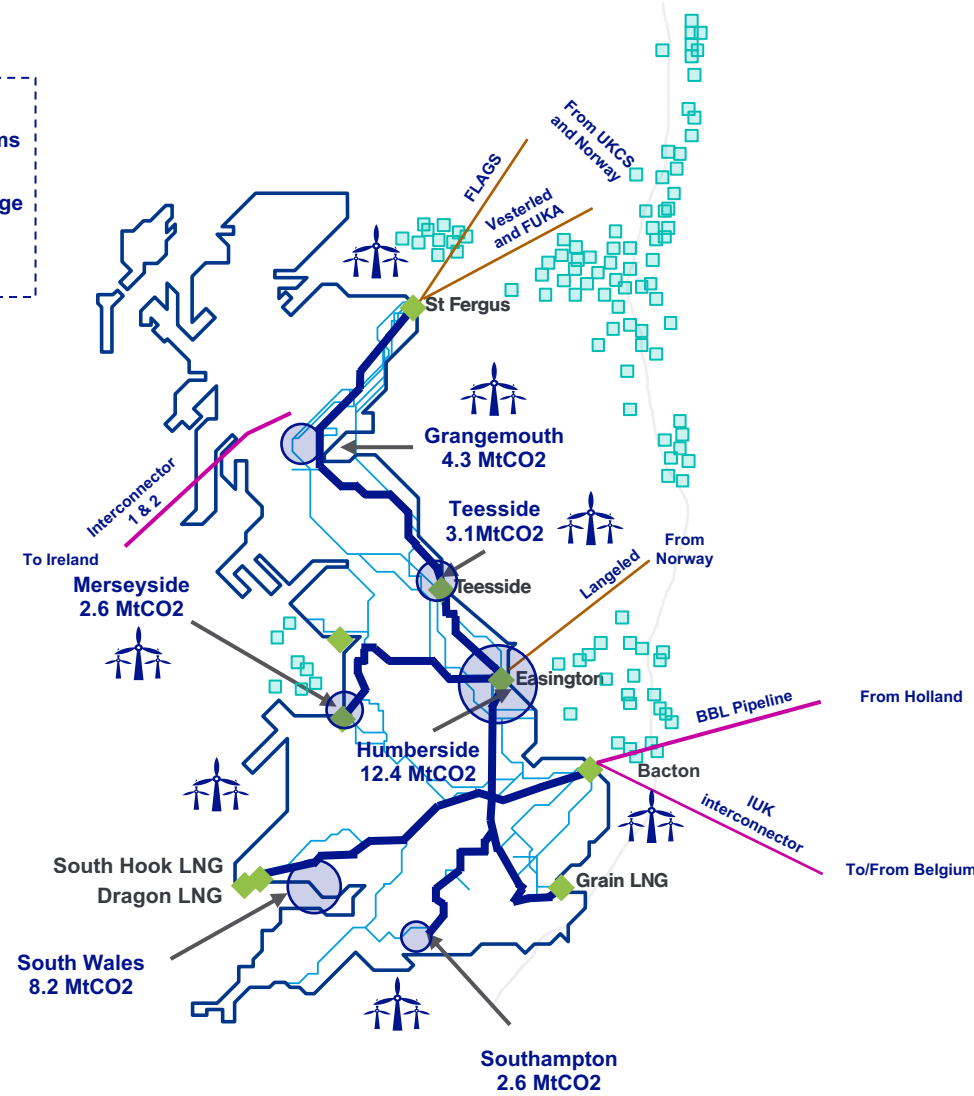
- GB storage supplies may act to balance the system during short-term periods of high demand.
- If GB storage supplies are low going into a cold snap, LNG supplies could reach maximum capability, meaning imports from Europe may be required to meet the shortfall.

Delivering a whole energy system with hydrogen

The current NTS



Project Union: the initial hydrogen backbone



Thank you

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