

brownfieldbriefing

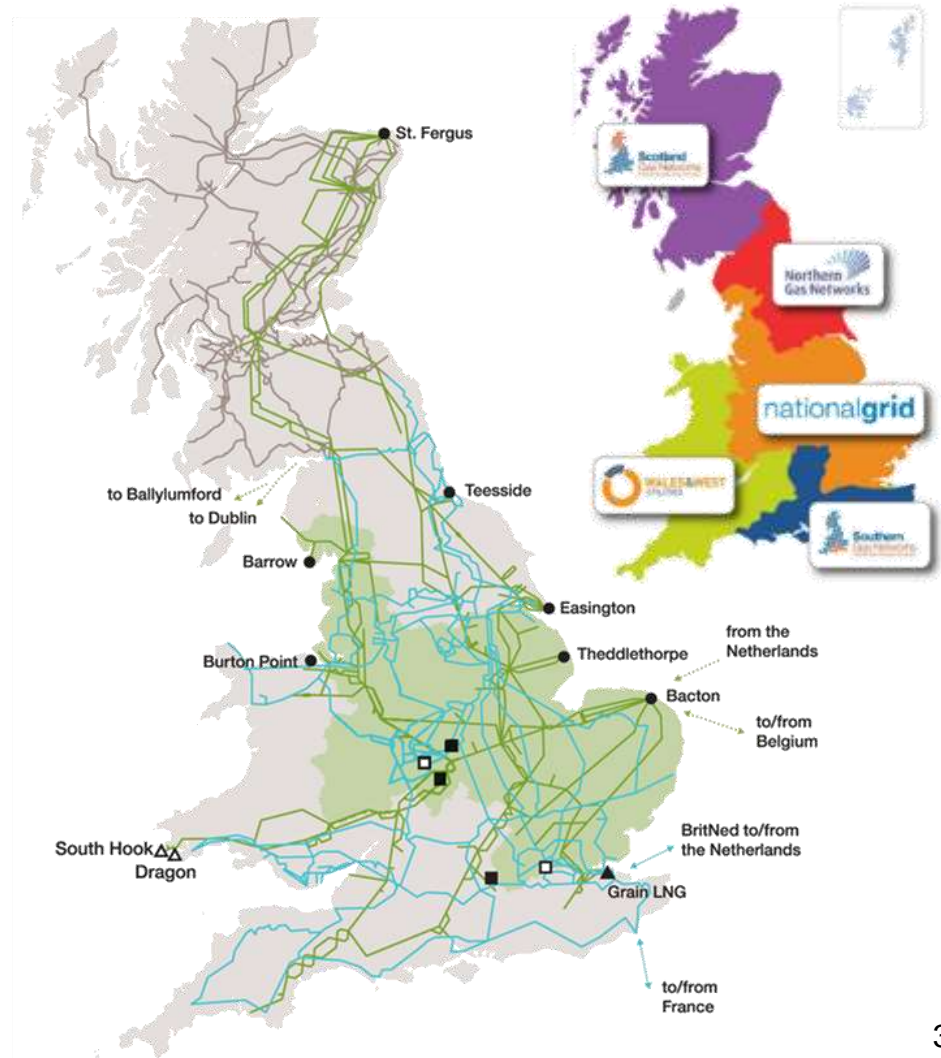
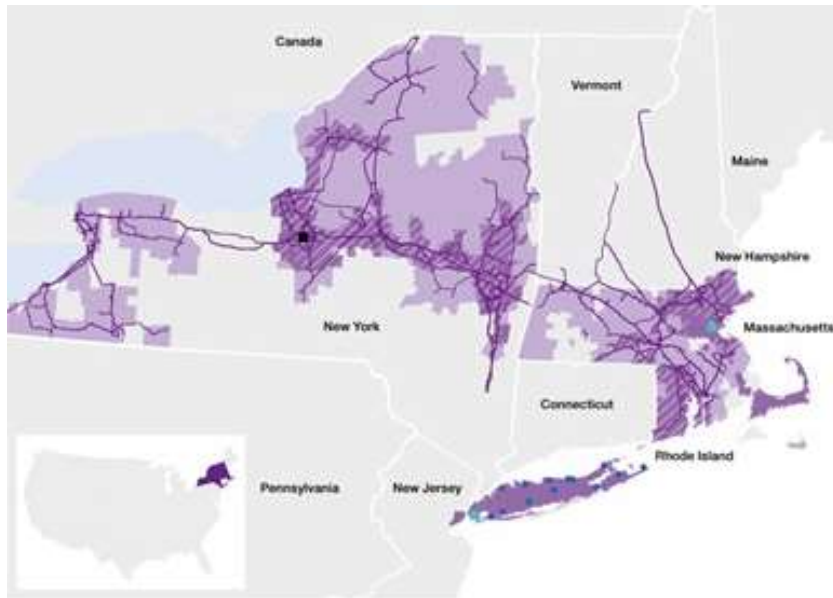
Supply and Connection: Assessing the challenges of connecting different unconventional gas sources to the grid

Lorna Millington
Design Manager
National Grid

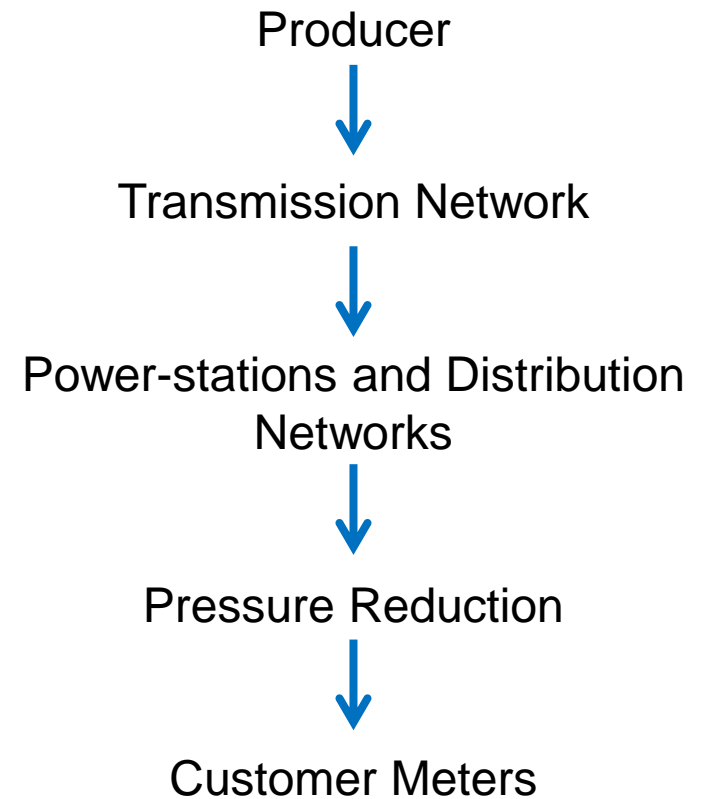
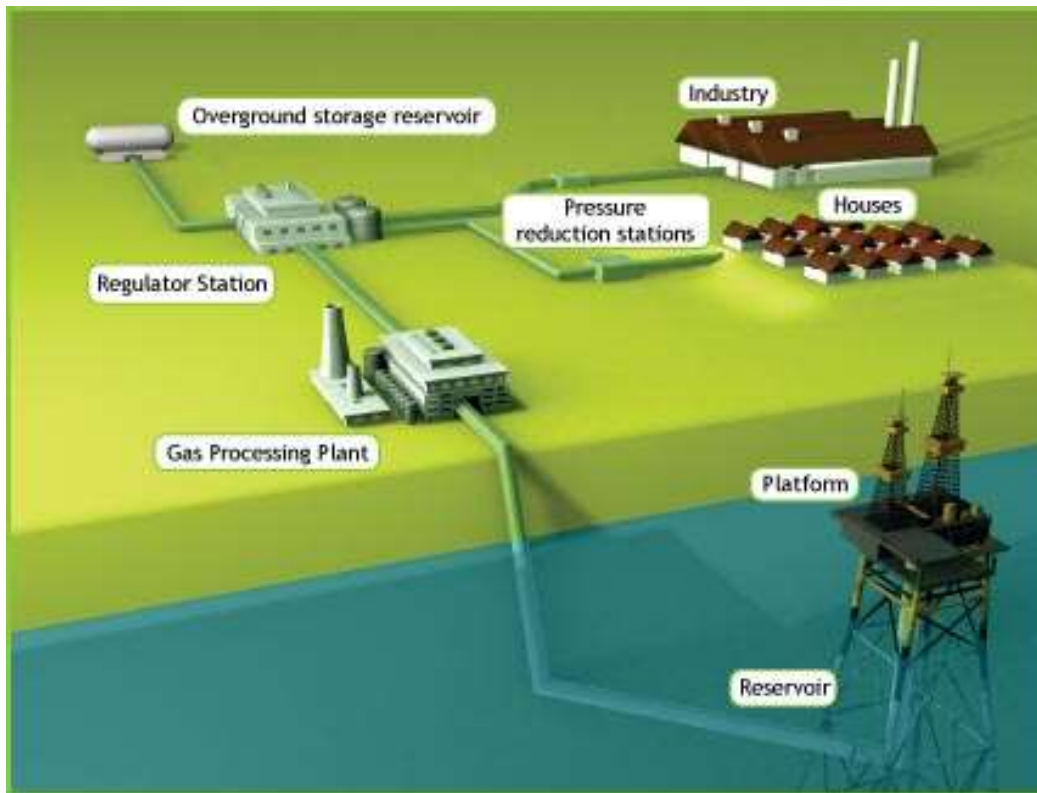
Connecting Unconventional Gas Sources



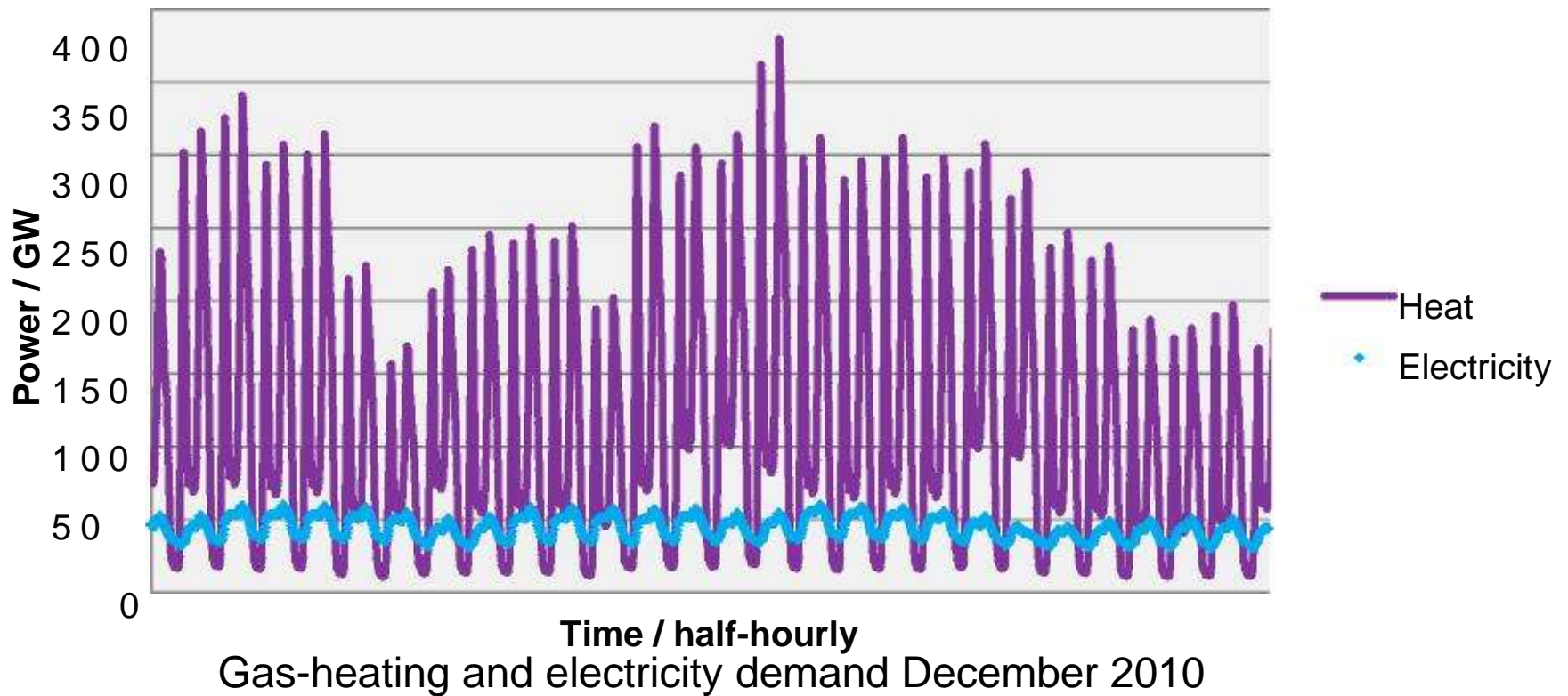
National Grid



Gas System

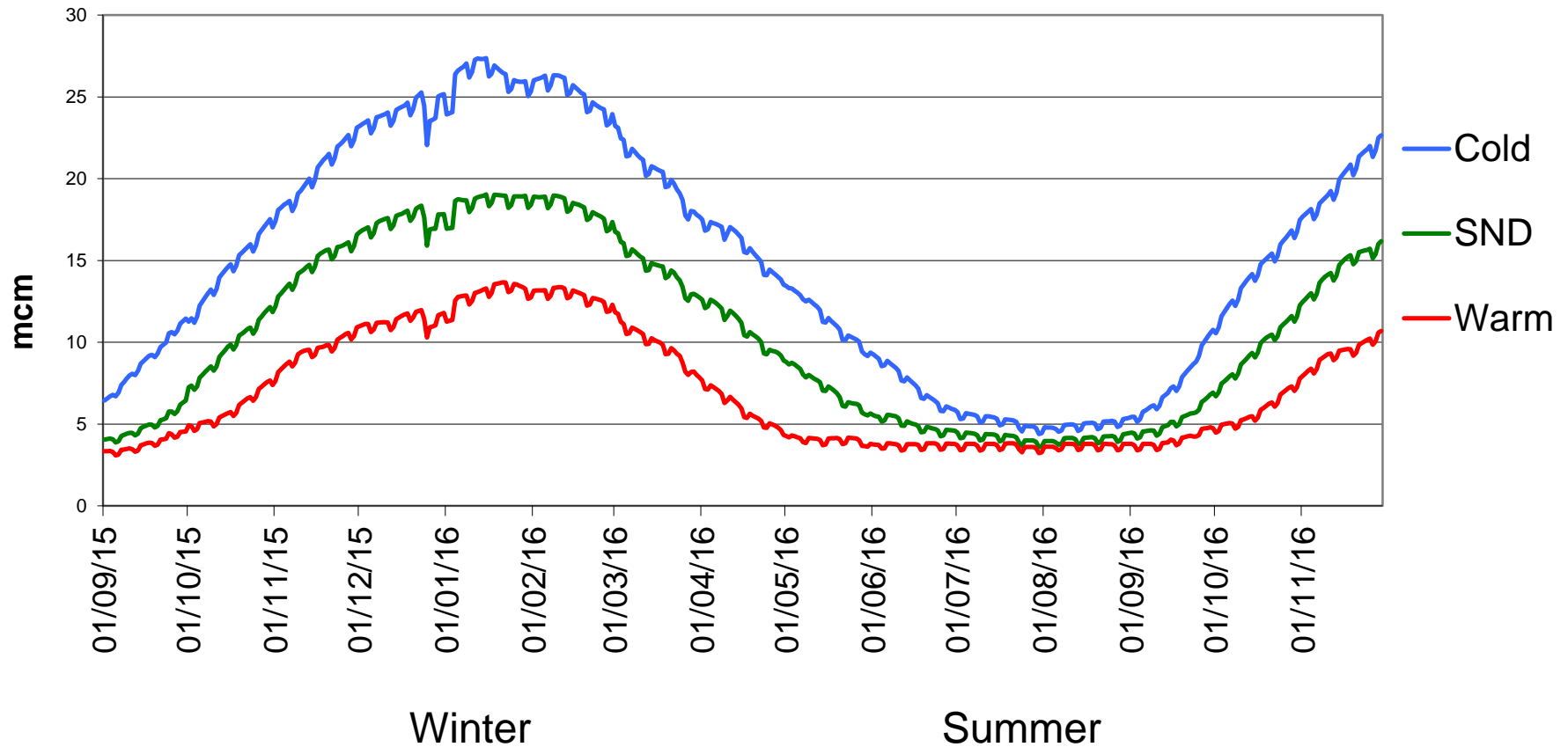


Gas vs Electricity

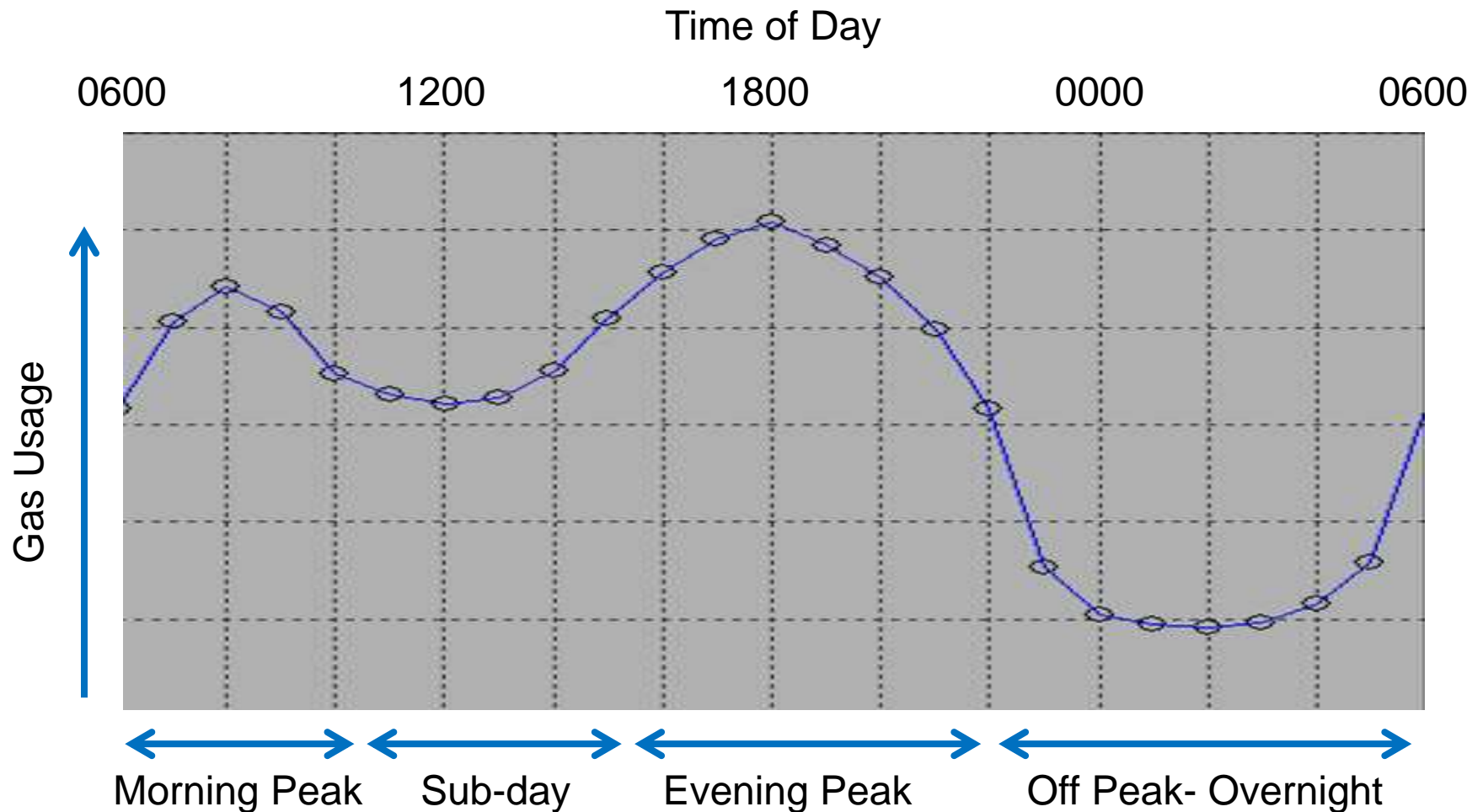


Annual Demand Profile

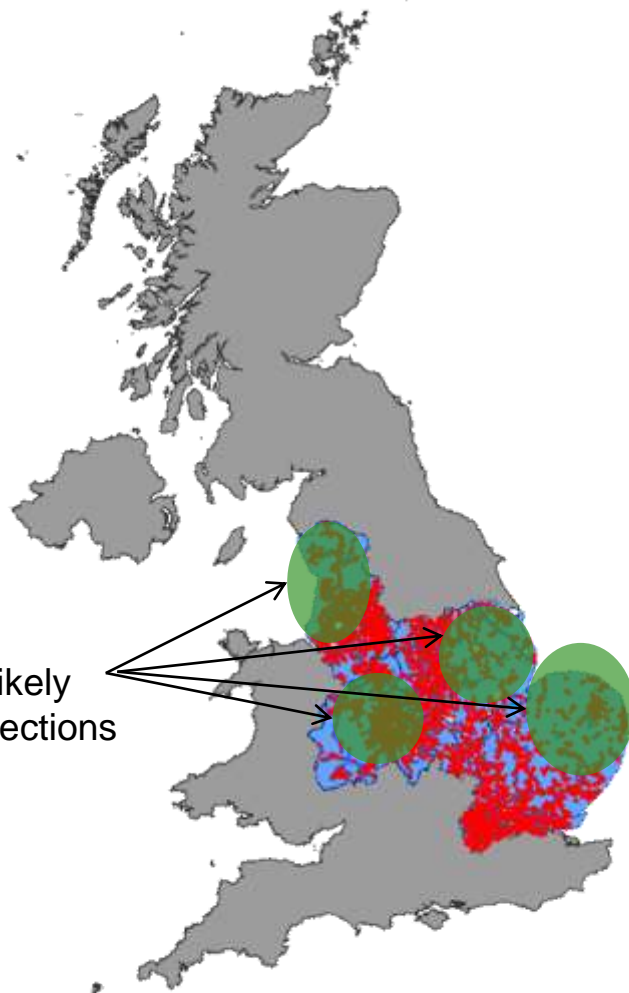
Demand Profile - 2015/16



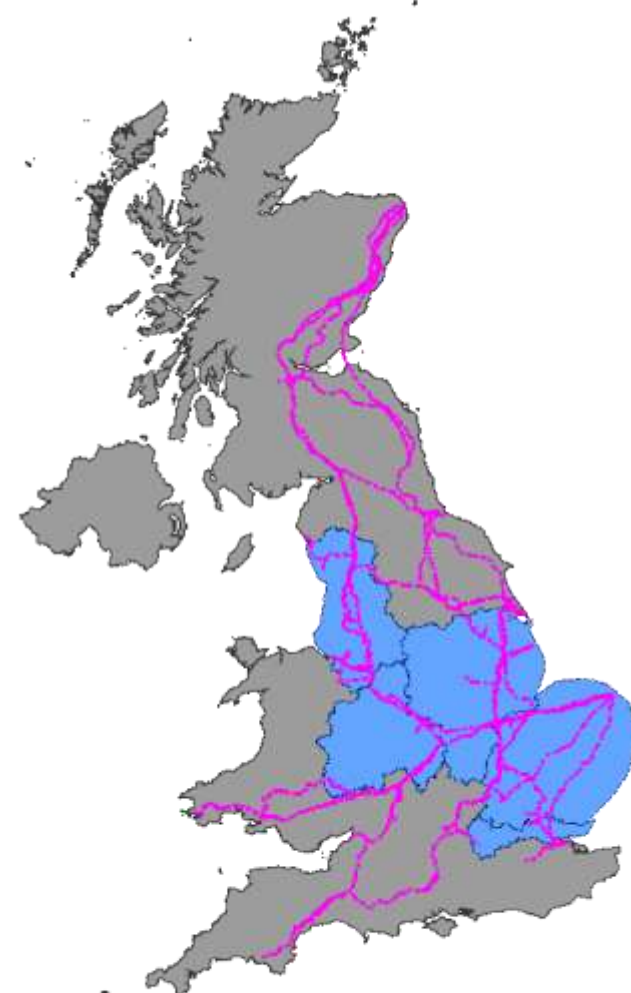
Daily Demand Profile



Assessing New Connections



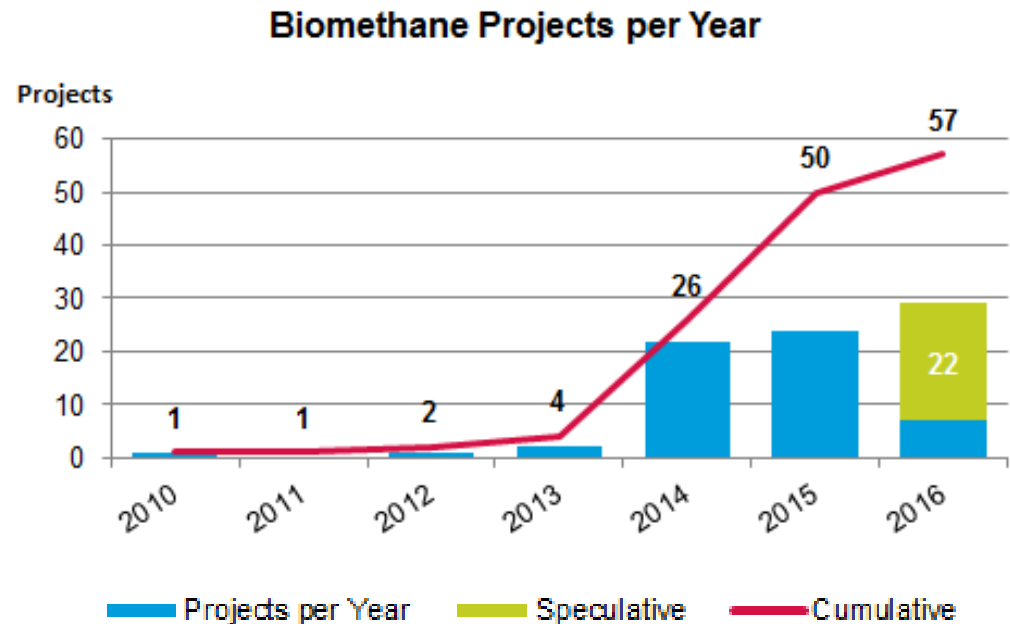
Distribution Networks



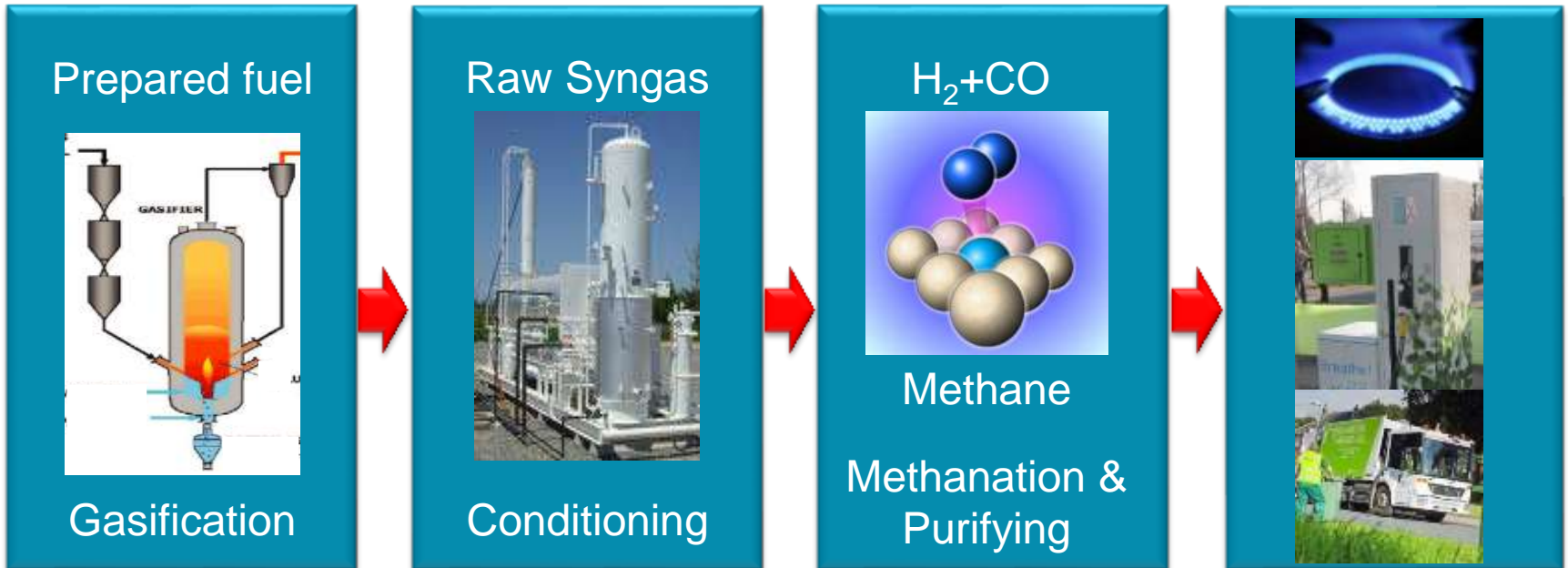
Transmission Network

Biomethane projects 2010 to 2015


*“50 sites
delivering c.2 TWh
of gas per annum
by end of 2015”*





BioSNG - Renewable Gas at Volume




Advantages

- 

✓ Feedstock range
- 

✓ Low by product
- 

✓ Gas evolution
- 

✓ Substantive scale

Waste to Wheels Demonstration Project

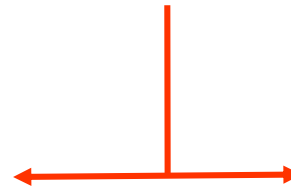


Swindon Council
7,500 tonnes pa waste

Swindon 'GoGreenGas' demonstration facility
Producing 1.6 million kg pa of Gas



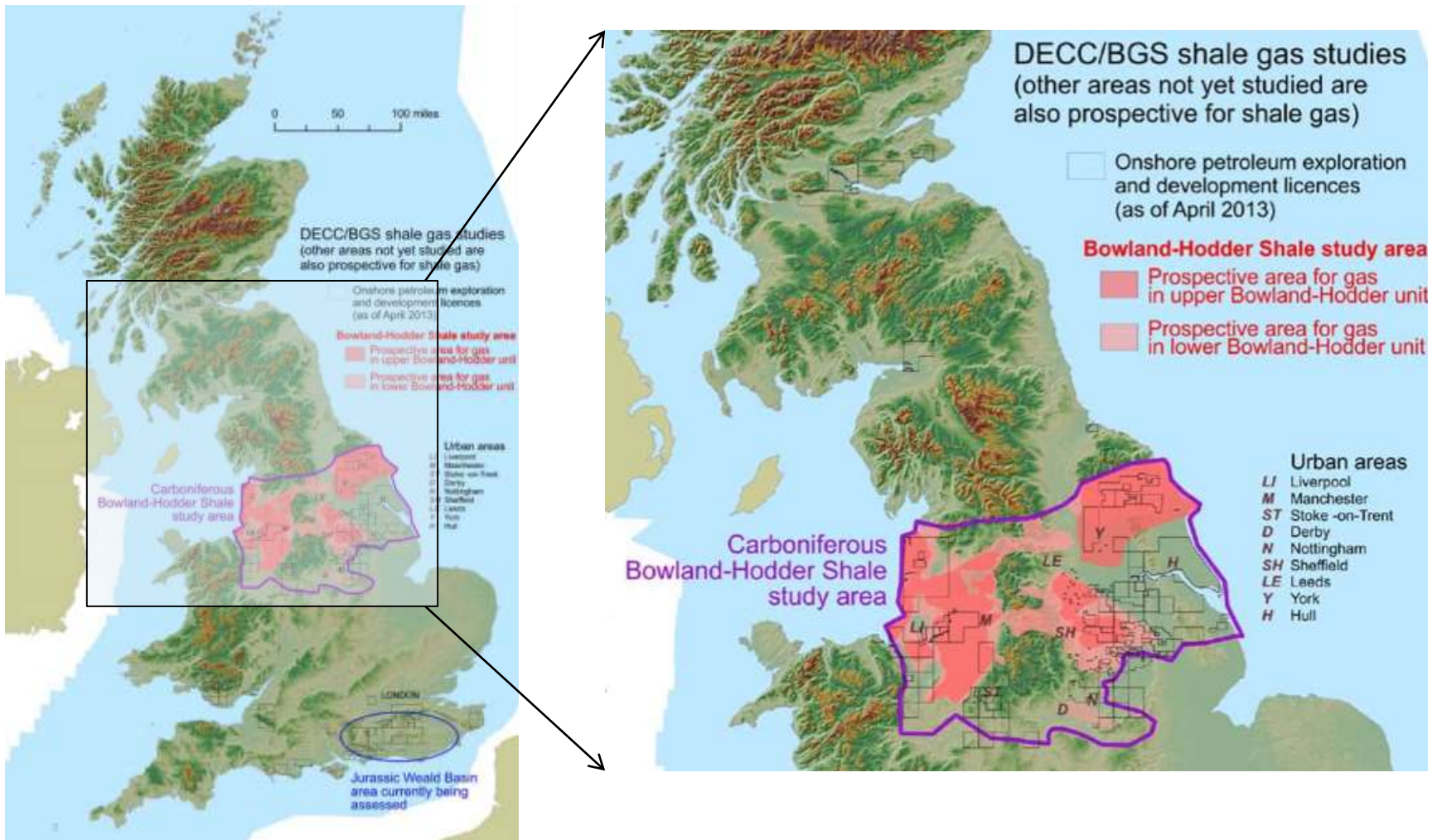
Local, existing gas
fuelling station



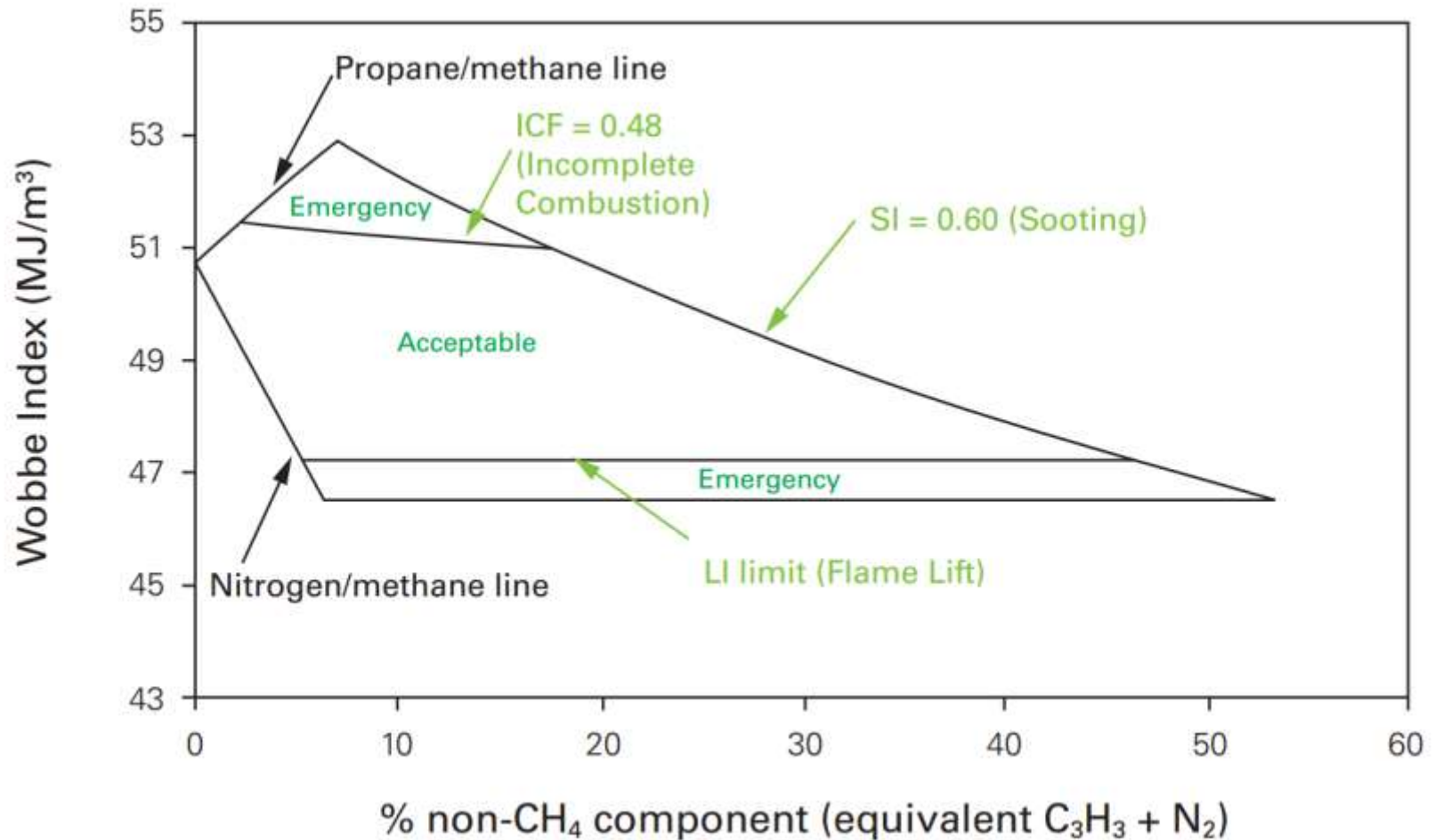
Gas grid connection

Sufficient gas for a fleet of around 50 vehicles

Shale



Gas Interchangeability



Conclusion

