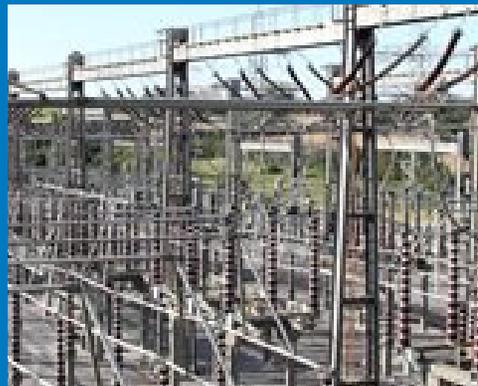
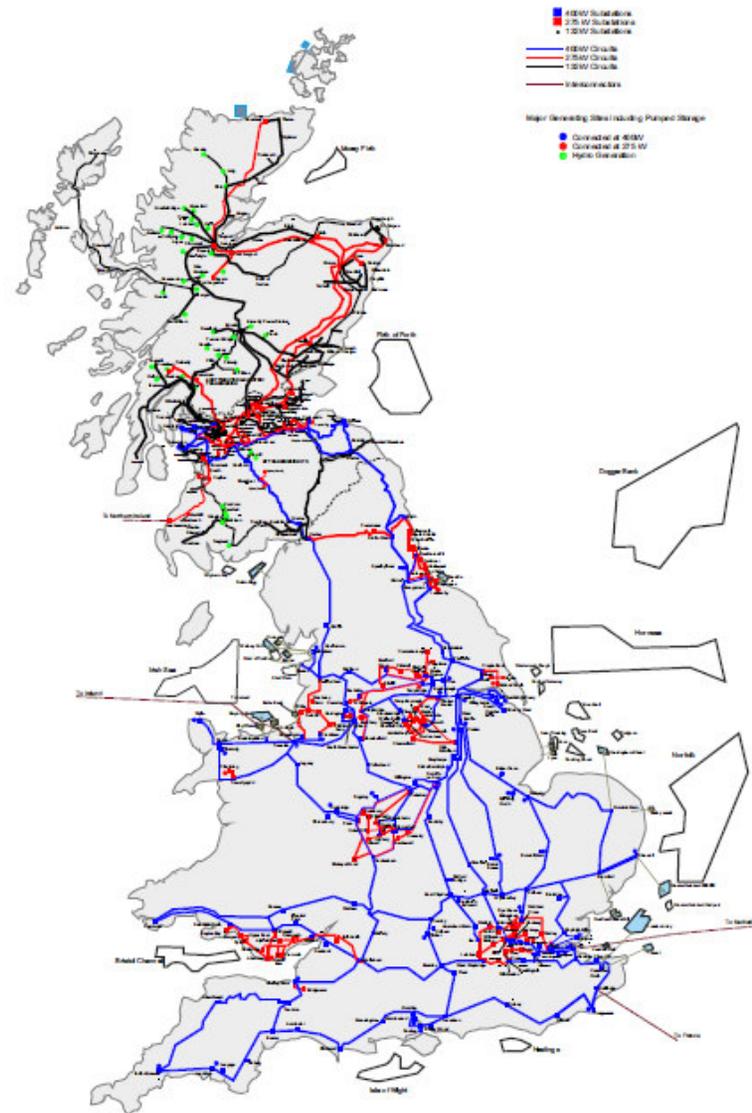


Future Network Development

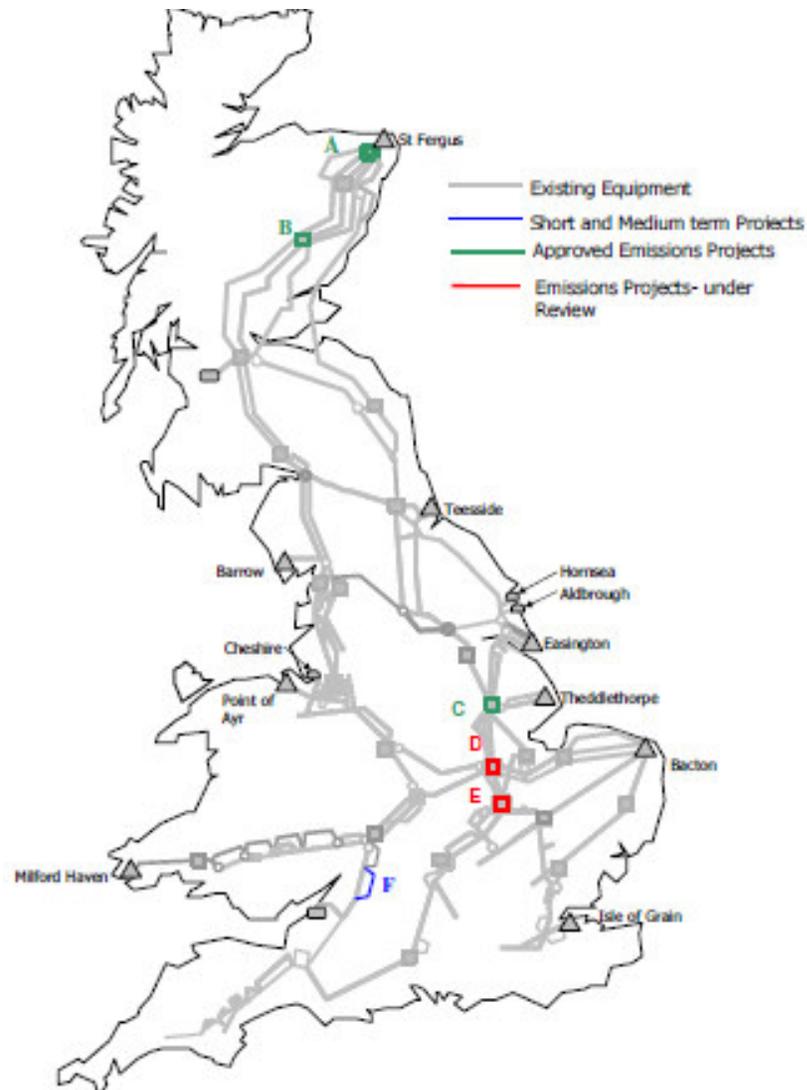


Phil Sheppard
Head of Network Strategy
National Grid

Network Development - Electricity



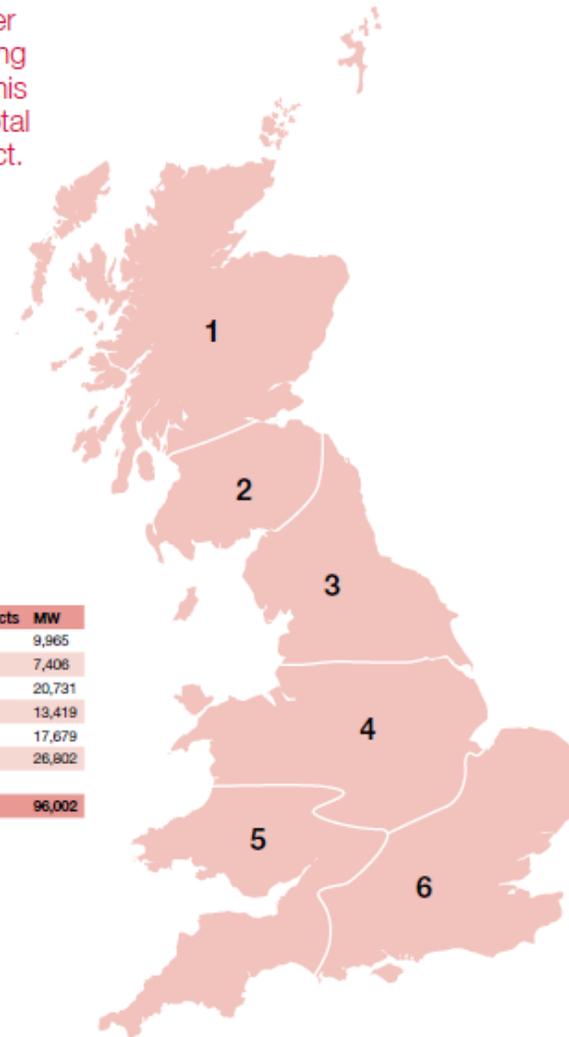
Network Development - Gas



Contracted Generation – 96GW / 229 Projects

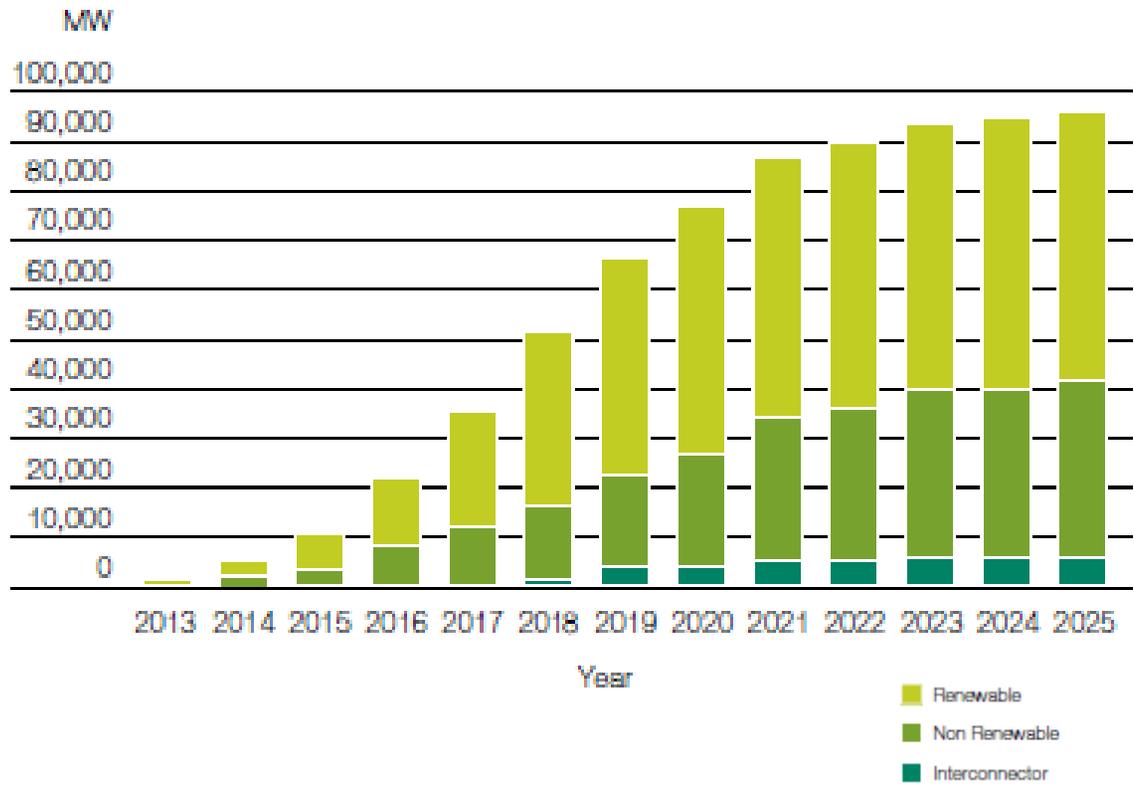
Scotland has the largest number of projects in the UK, contributing 48% of the projects, however this only accounts for 18% of the total MW's generation due to connect.

Area	Map Area	No. of projects	MW
1	Northern Scotland	66	9,965
2	Southern Scotland	44	7,406
3	Northern England	33	20,731
4	Central England and North Wales	24	13,419
5	South West England and South Wales	21	17,679
6	South East England	41	26,802
Totals		229	96,002



Contracted Generation & Scenarios

Contracted future renewable and non-renewable generation



We have to plan for all ~96GW to connect

Gone Green: just over half actually connects

Slow Progress: around one third actually connects

Source: ⁵National Grid TNQCU – July 2013.
 * No new contracted generation after 2025.
 Renewable fuel types: Biomass, Hydro, Tidal, Wave, Wind

Network Development Policy



FES as a starting point

Boundary Capabilities

Establishes Options

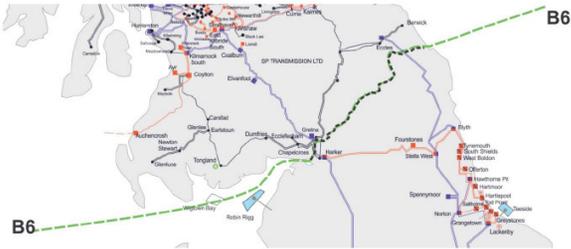
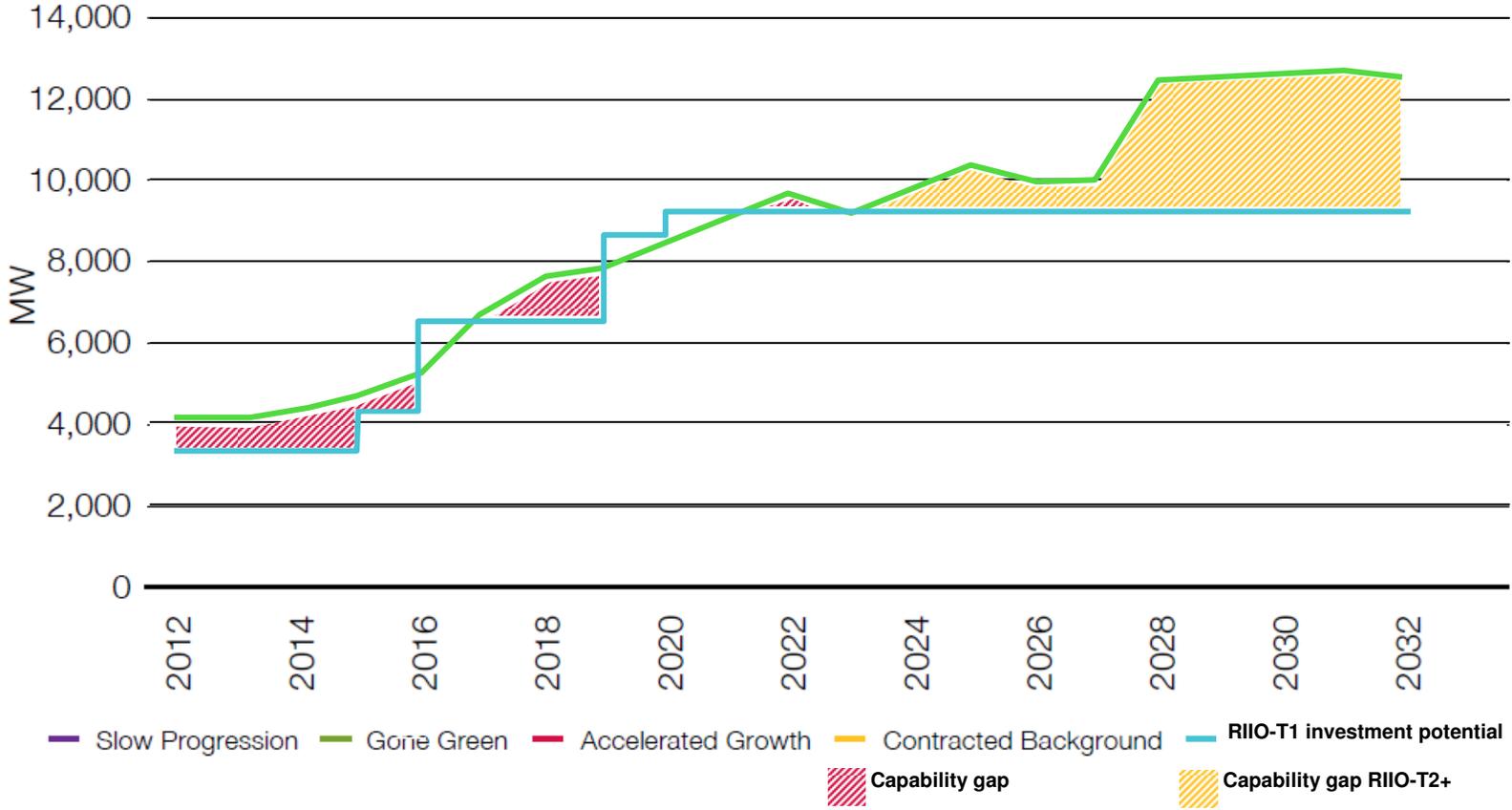
Least Regret Methodology

Proposed Investments

Part of EYTS

Consultation process

Network implications: B6 boundary example



Electricity Ten Year Statement



Published November

Describes NETS

Boundary Capabilities

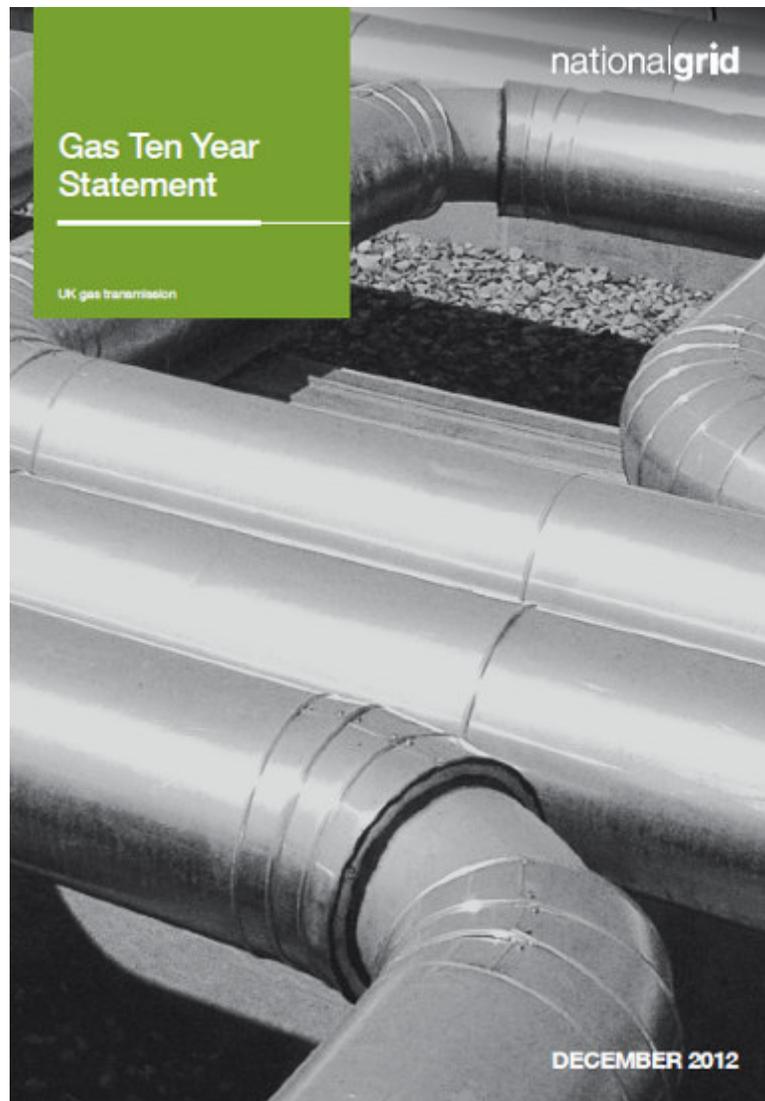
System Operation

Proposed Investments

Technology Route-map

Consultation process

Gas Ten Year Statement



Published December

Supply / Demand

Describes NTS

NTS Capacity

System Operation

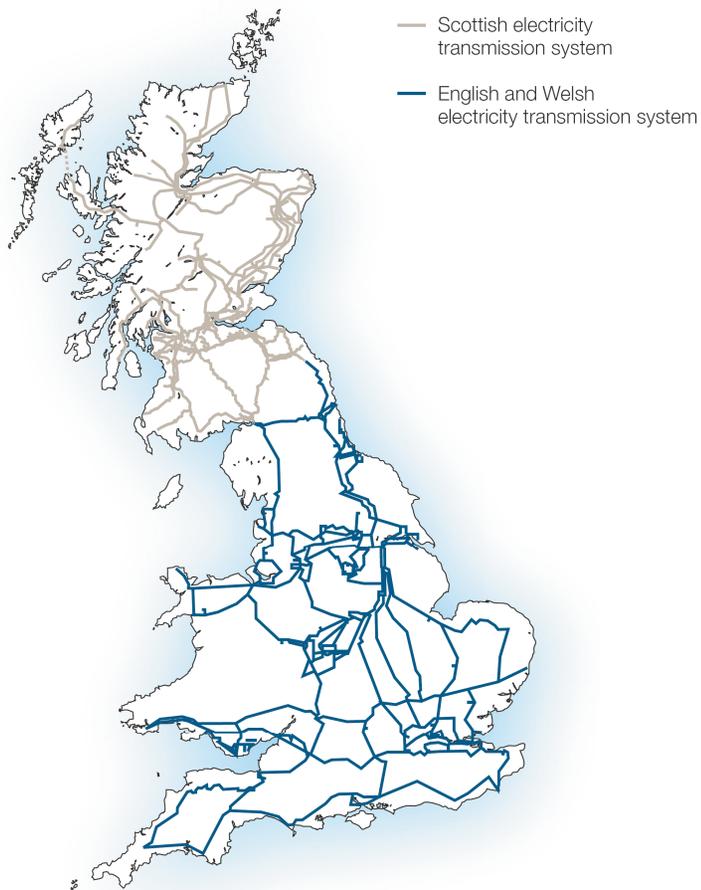
Proposed Investments

Technology Route-map

Consultation process

Network Strategy

Electricity network



GB existing electricity transmission system

Gas network



GB existing gas transmission system