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Energy Supply – Power Generation & Gas Supply



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Power Generation – Key Axioms

Gone Green

Renewable targets met

Significant renewables, fossil fuels become increasingly marginalised

Higher carbon price, similar fuel price assumptions

Slow Progression

Renewable targets missed

Appreciable renewables, gas becomes default source of generation

Lower carbon price, similar fuel price assumptions

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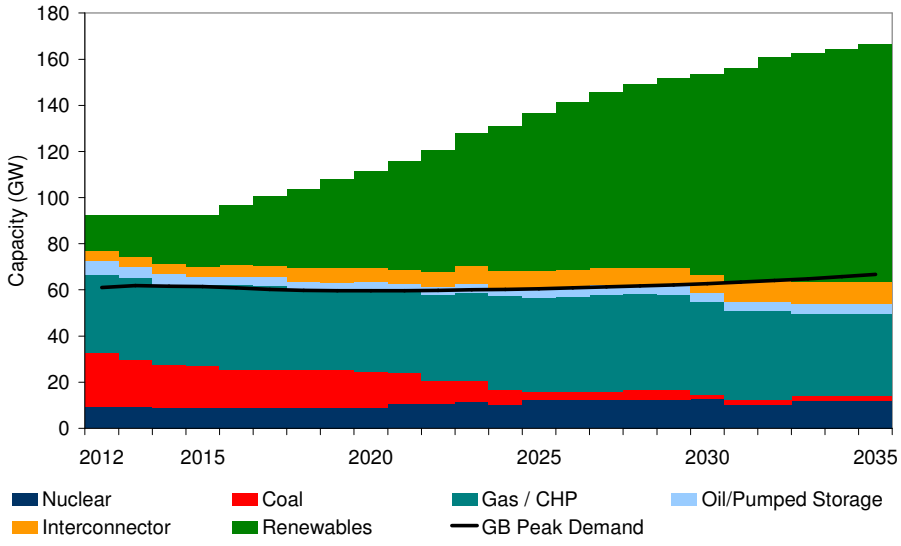
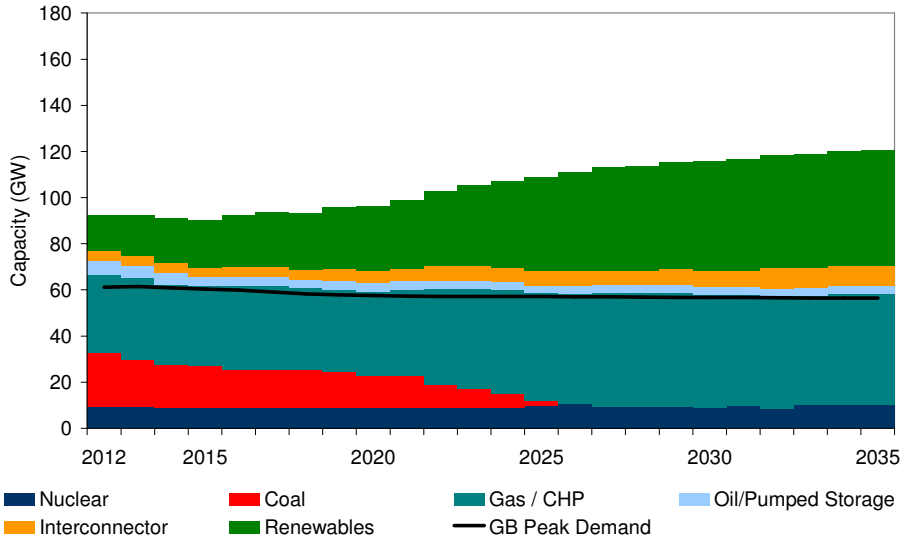
Power Generation - Capacity (GW)

Gone Green



- Renewable generation - significant new build rates, notably wind
- Nuclear - new plant coincides with existing plant closures
- Gas - limited new build near term, increased build primarily for 'back-up' thereafter, some CCS
- Coal – gradual closures, some CCS
- Interconnection – some increase

Slow Progression



- Renewable generation - appreciable new build rates
- Nuclear – delayed deployment offset by life extensions
- Gas - limited new build near term, increased build for thereafter
- Coal – gradual closures
- Interconnection – some increase

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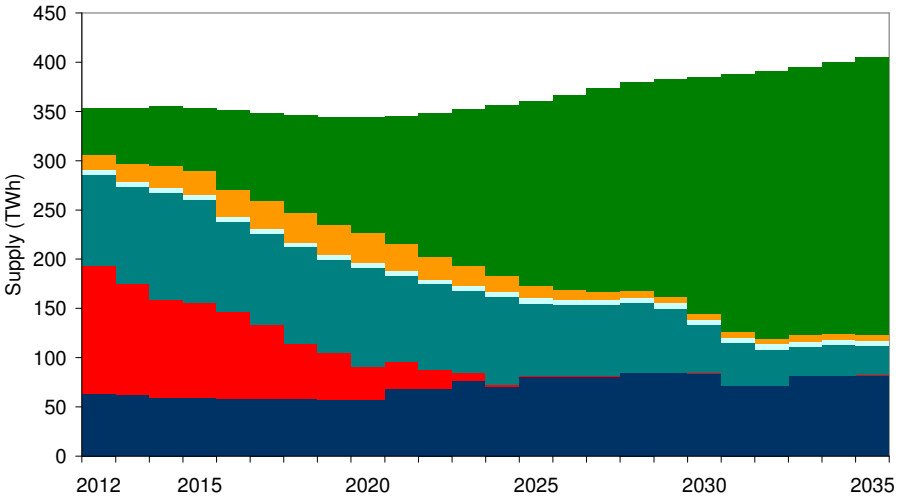
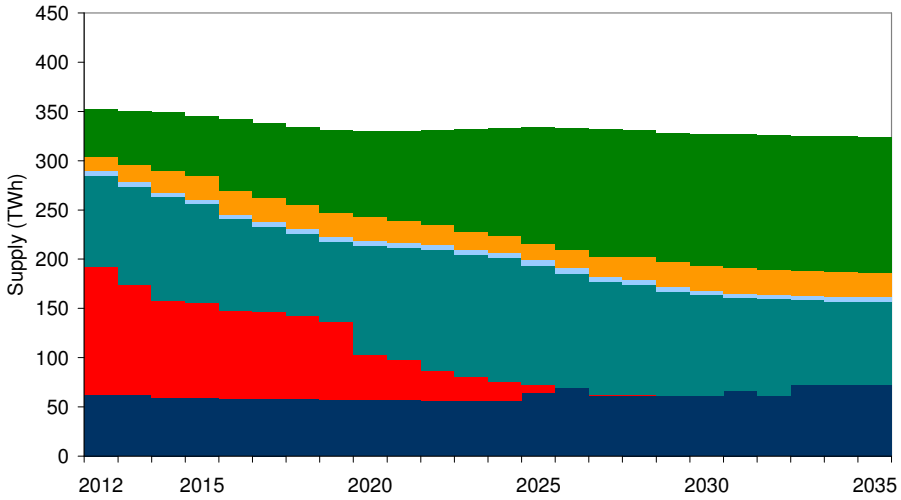
Power Generation – Supply (TWh)

Gone Green



- Sustained build-up of renewables, notably wind
- Increased nuclear
- Gas and coal CCS
- Gas plays a balancing role
- Less coal use due to high carbon price

Slow Progression



- Gradual build up of renewables
- Slight increase in nuclear
- No CCS
- Gas fills the gap
- Increased coal use until closures due to low carbon price

Nuclear Coal Gas / CHP Oil/Pumped Storage Interconnector Renewables

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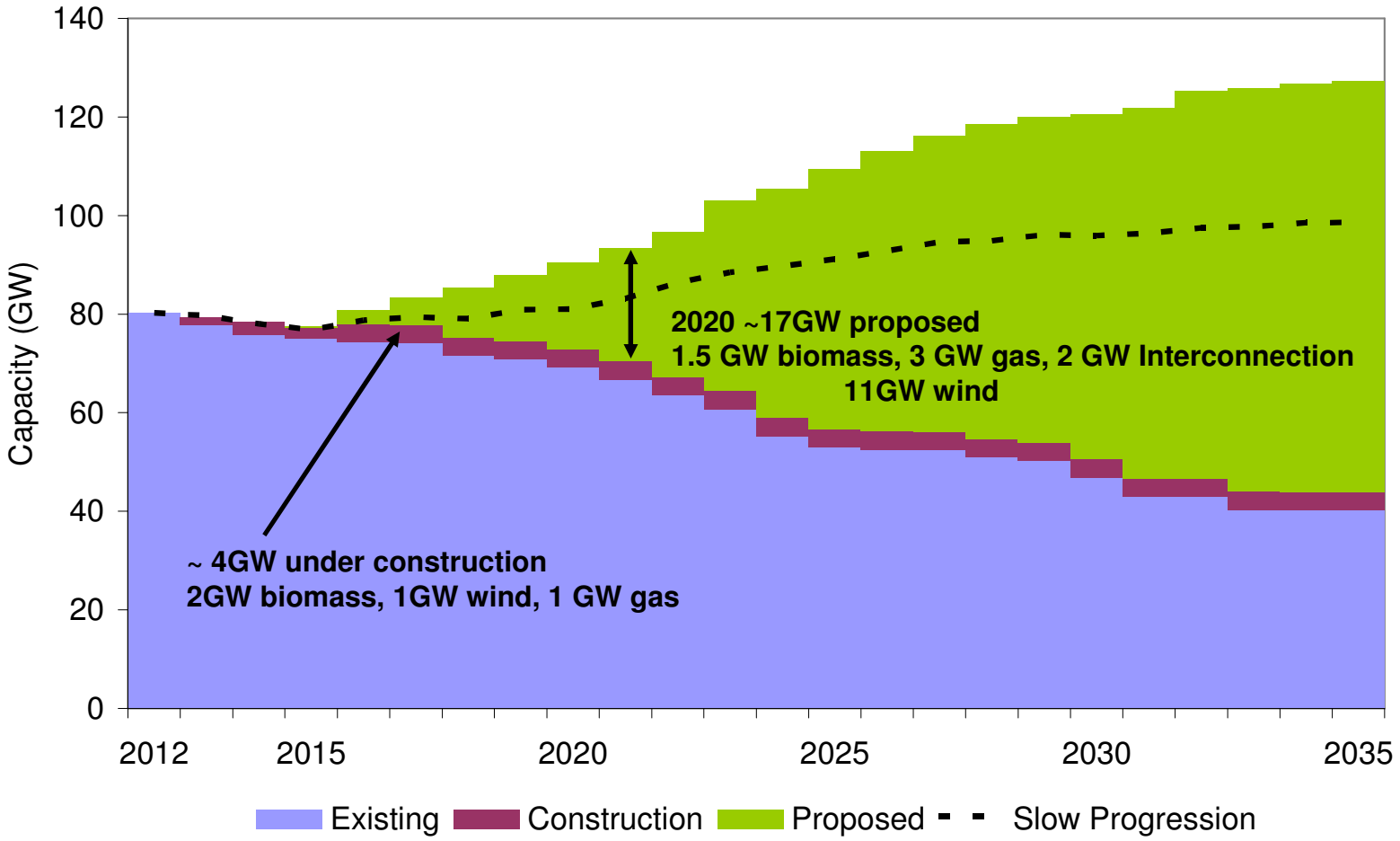
Gone Green – Build Rate (Transmission)



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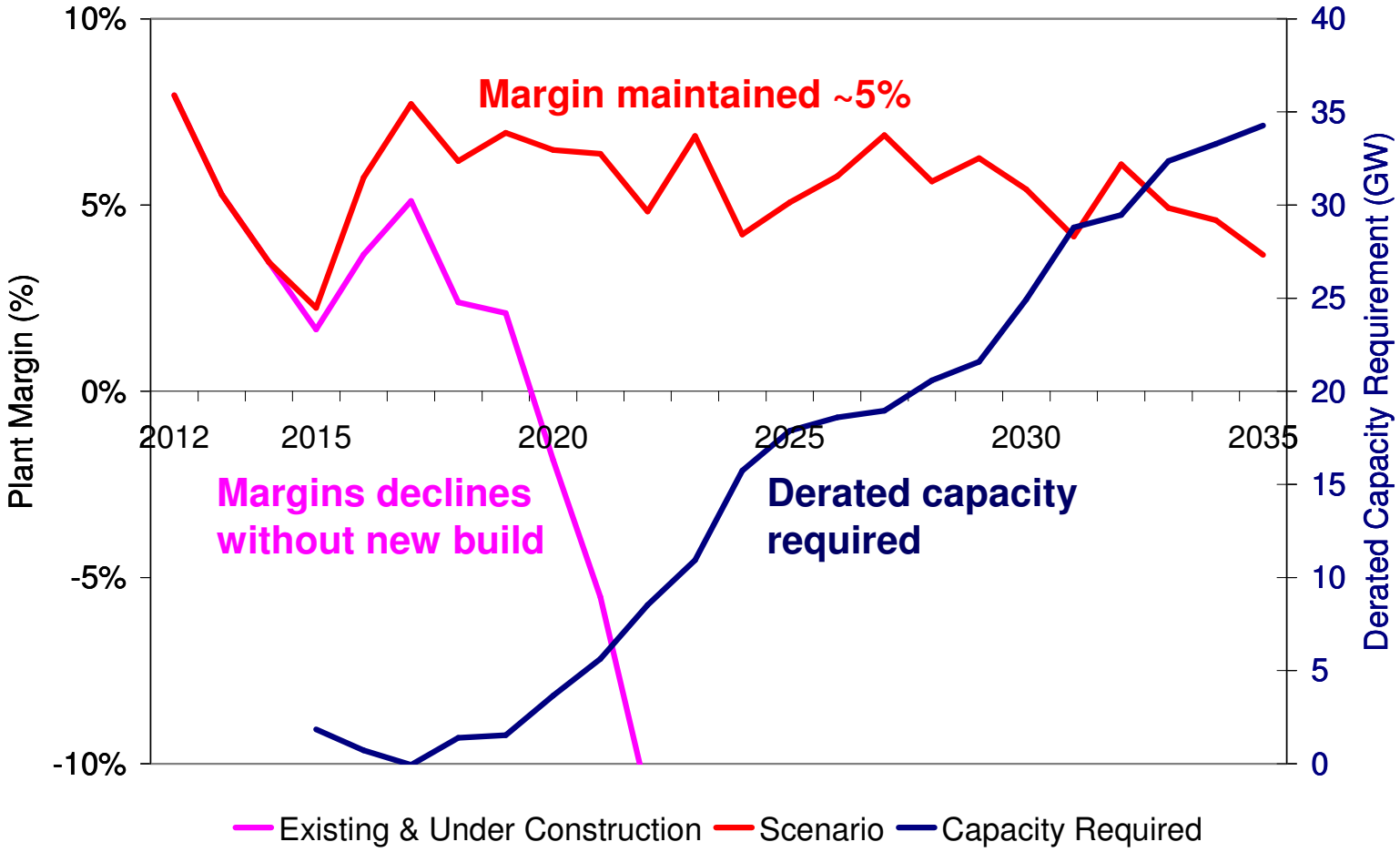
Gone Green – Plant Margin (Transmission)



Gas Supply – Key Axioms

Gone Green

Global gas market uncertainty

Lower UKCS and Norway

Uncertainty in both LNG and Continental supply / markets

Increased role for biogas

Increased need for flexible supply / storage

Slow Progression

Gas role in global energy markets enhanced

UKCS and Norwegian upside

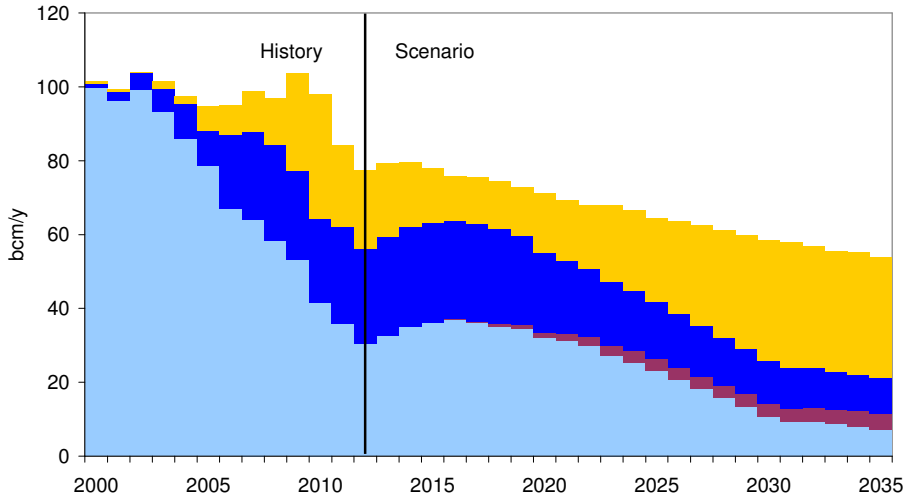
Uncertainty in both LNG and Continental supply / markets

Increased role for shale (high case as a sensitivity)

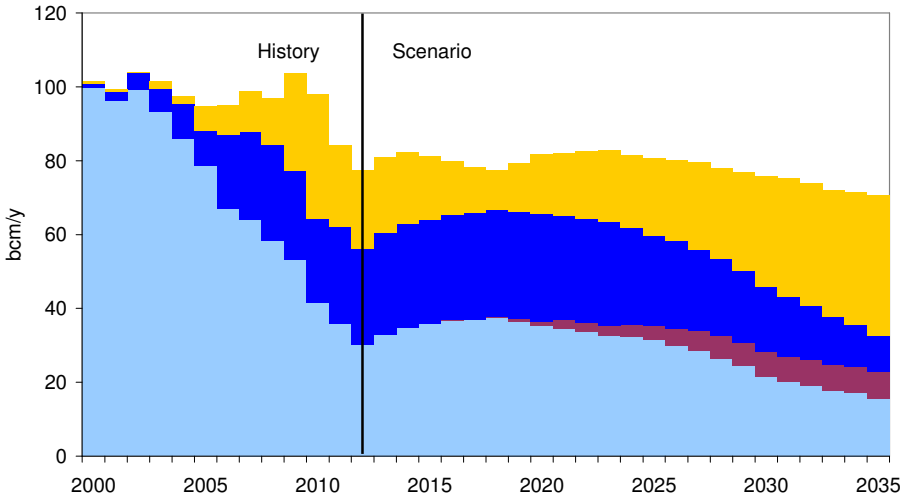
SoS concerns promotes seasonal storage

Gas Supplies – Annual (bcm)

Gone Green



Slow Progression



UKCS Onshore Norway LNG & Continent

- **Lower demand dictates future UK supply needs**
- **Some 'renaissance' in UKCS reduces imports**
- **Norway remains a significant exporter to UK**
- **Considerable uncertainty over LNG and Continental imports, both scenarios reflect this**
- **Onshore – biogas in Gone Green, shale in Slow Progression with upside sensitivity**
- **Increased role of storage / flexible supplies assumed in both scenarios**