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UK Future Energy Scenarios 2015

BIEE 16th October 2014

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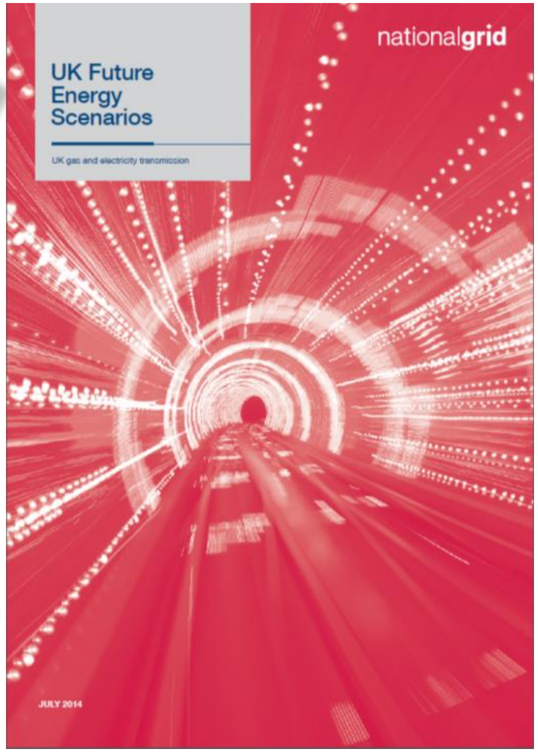
We develop scenarios that affect & inform how important decisions are made

Development of transmission systems

Supply & demand for the year ahead



European developments

Security of supply & decarbonisation

We follow an annual cycle of scenario development

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Your Views

Our stakeholder engagement allows us to listen to your views, which are vital to our outputs. They drive our processes and inform both our scenarios and our consultation process.

Axioms

An axiom is a premise or starting point of reasoning. The axioms that we produce are a reflection pf the stakeholder feedback that we receive through our consultation process. These axioms influence our modelling.

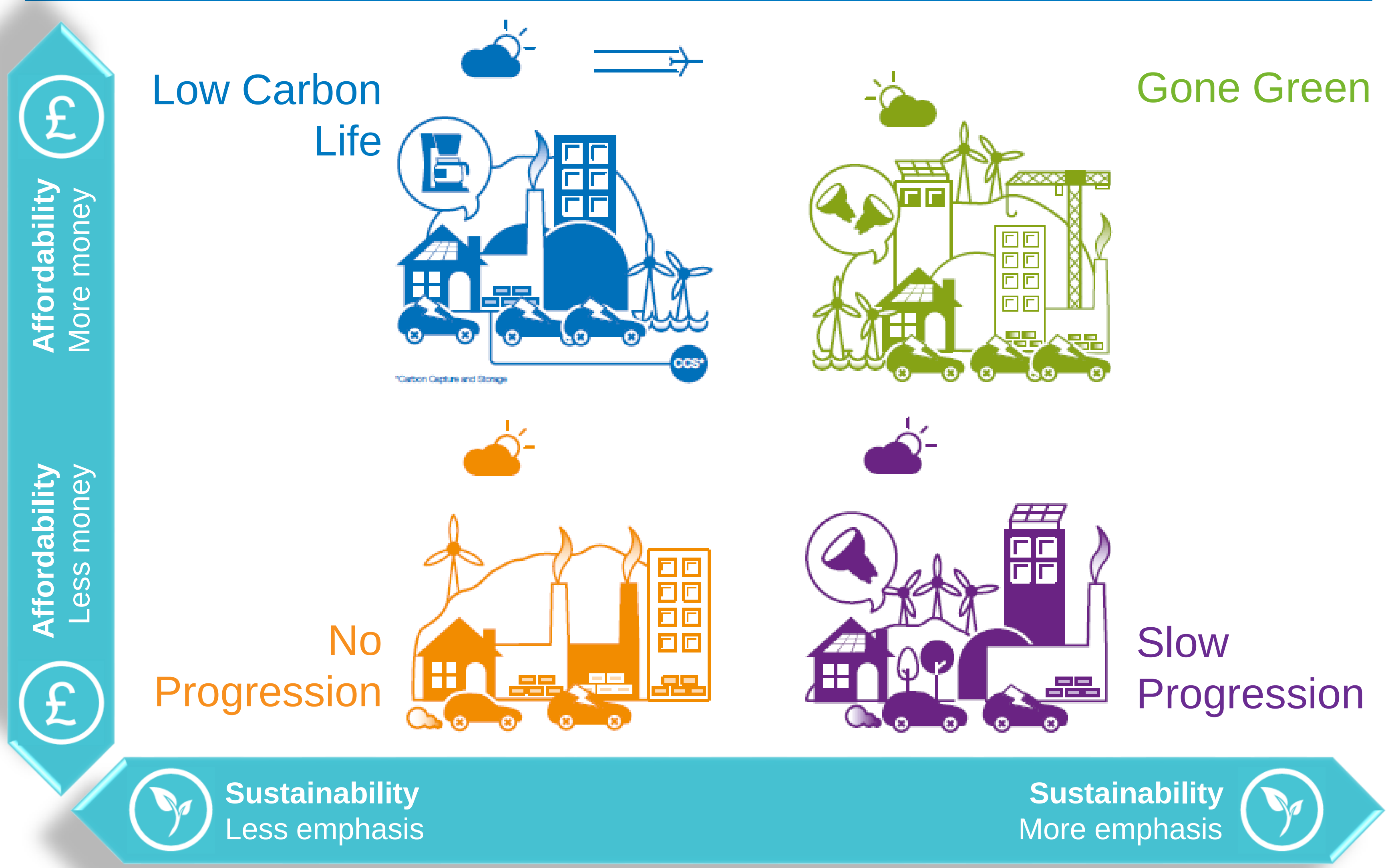
Modelling

Once our axioms have been defined, they underpin our detailed modelling and drive our specific electricity and gas, demand and supply scenarios.

Future Energy Scenarios

The scenarios are the end result and a vision of the future that stakeholders have informed. The publication of the Future Energy Scenarios document marks the start of our annual process and the continuation of our stakeholder consultation.

What do the 2014 scenarios look like?



Energy Demand

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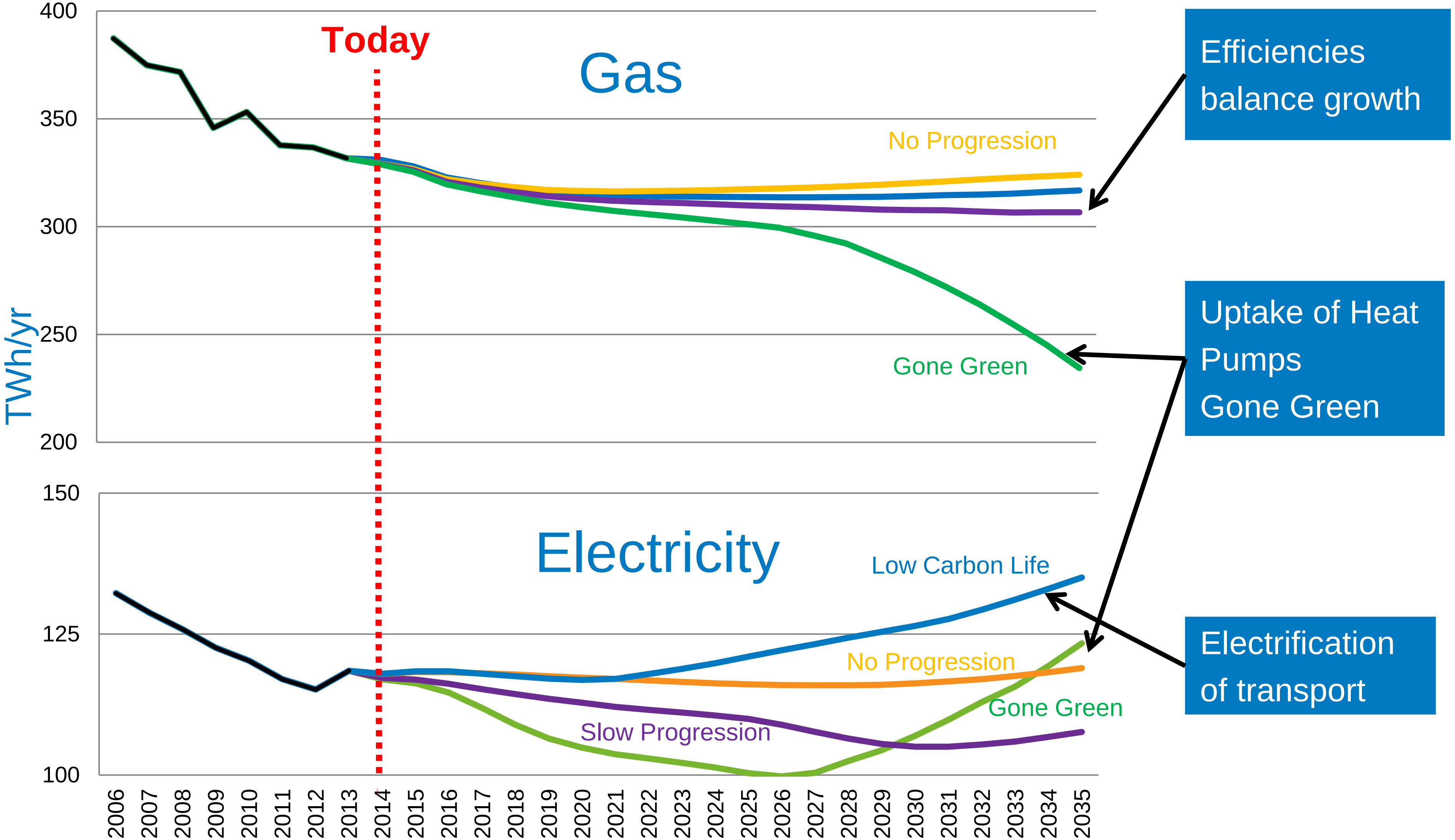
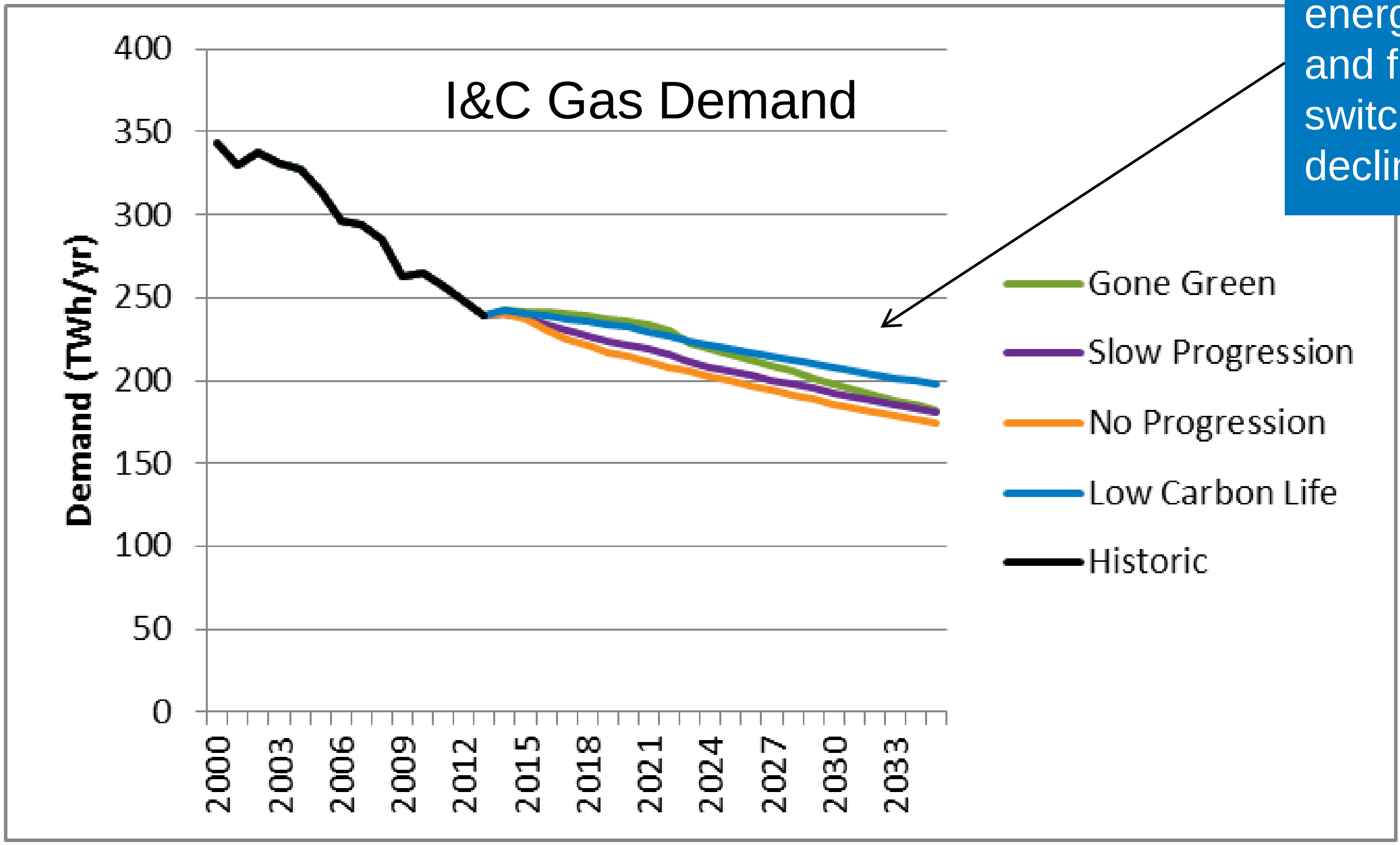
Residential energy for gas is stable to 2020, range of outcomes for electricity is wider

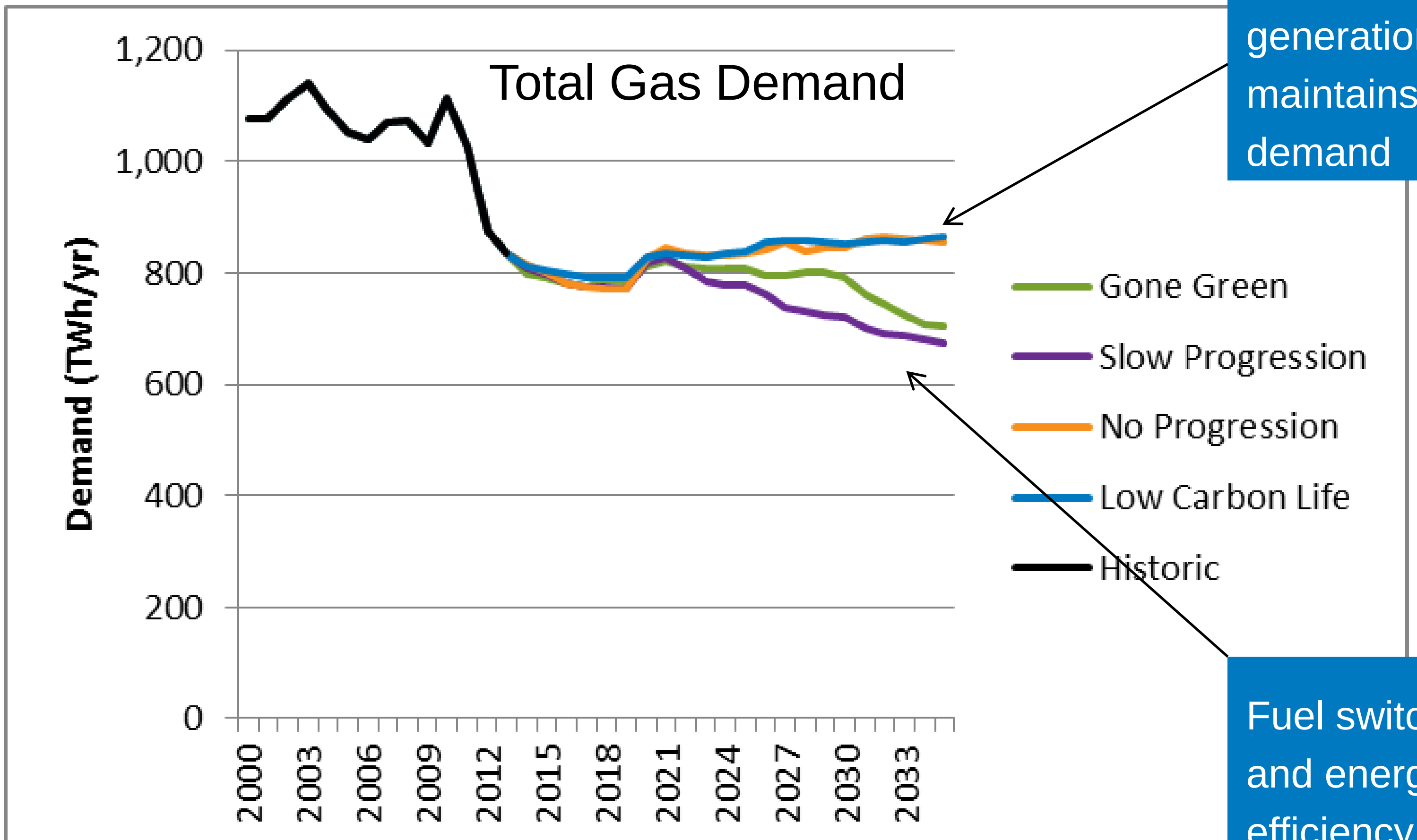


Industrial & Commercial gas demand continues to decline



Sectoral change, energy efficiency and fuel switching drives decline

Gas demand falls in the greener scenarios and plateaus in the other two



Power generation maintains demand

Fuel switching and energy efficiency

Power Supply

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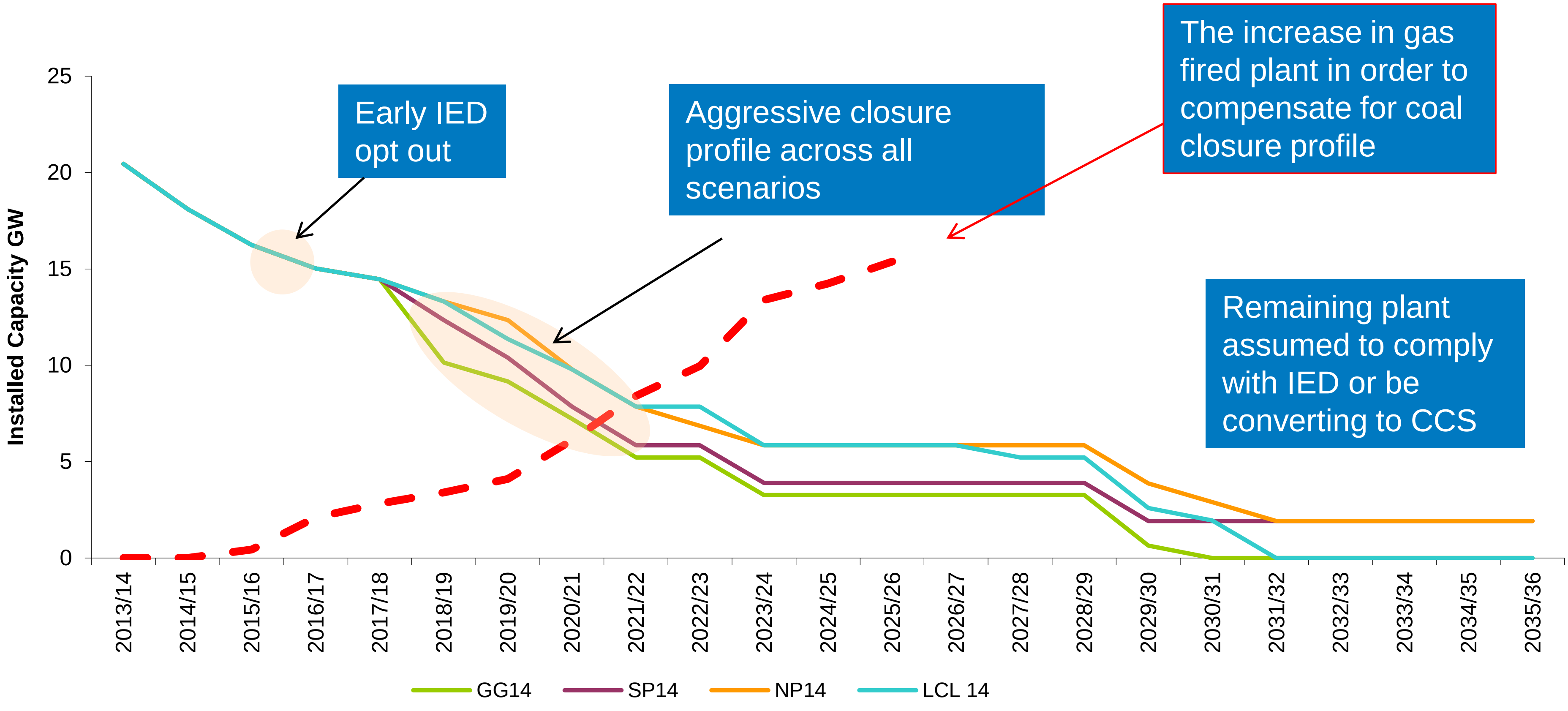
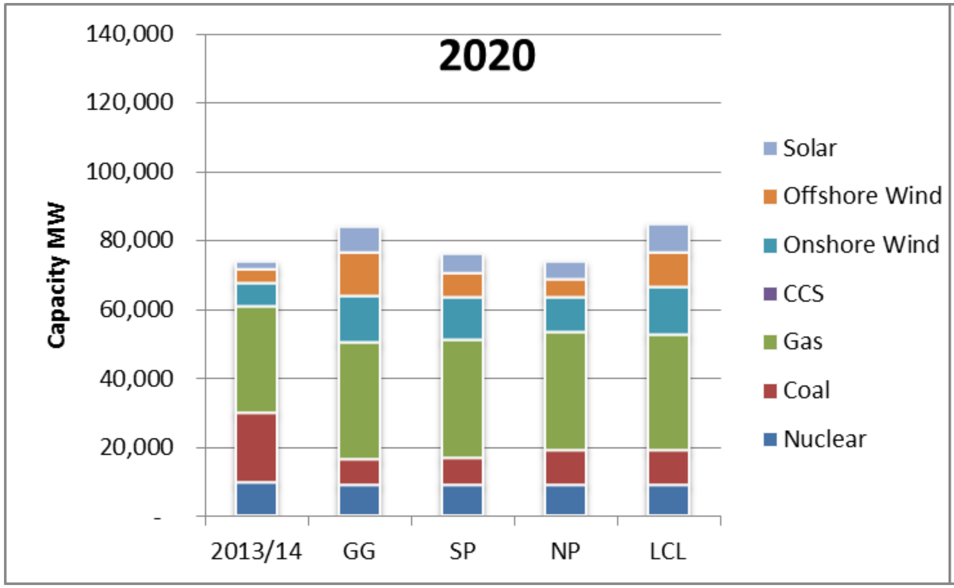
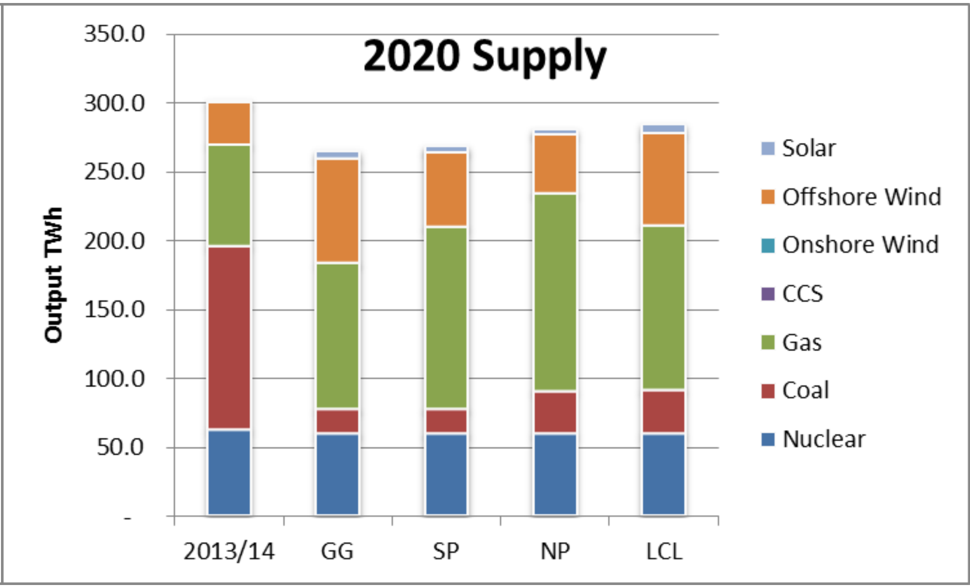
In all our scenarios we expect coal to reduce rapidly, and gas to initially fill the gap



By 2020 Gas will be the dominant generation fuel, with wind and solar more prevalent in the wealthier scenarios

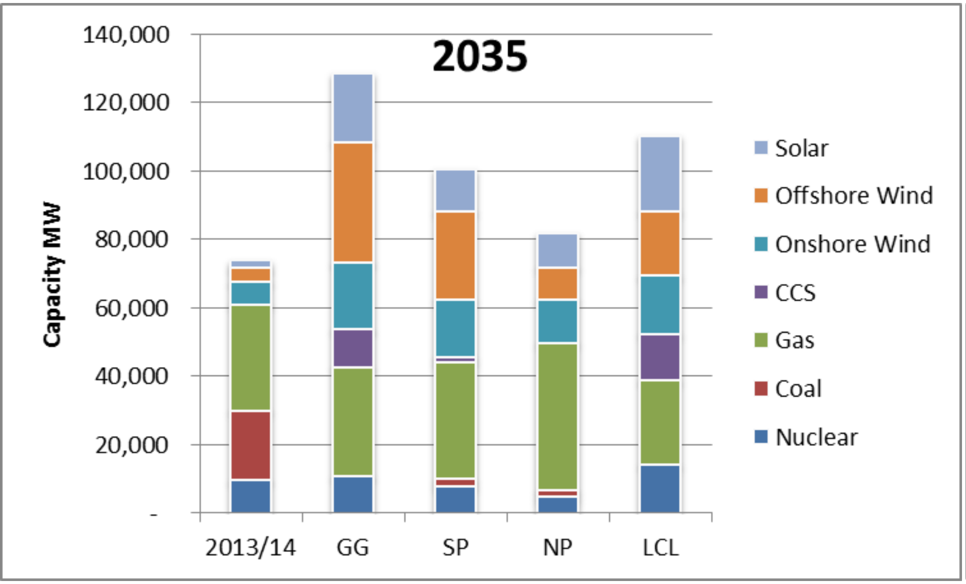


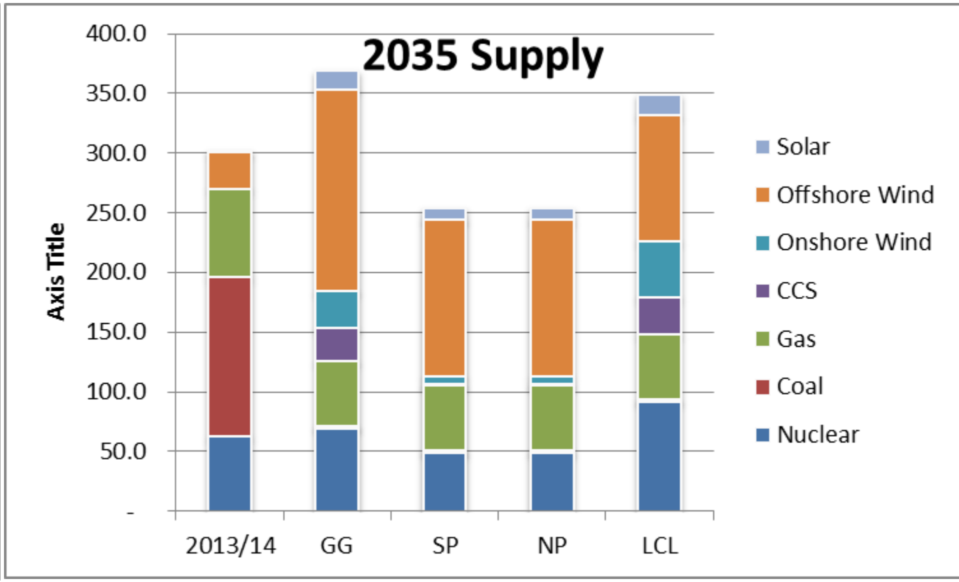


Generation scenarios

Gas capacity and usage increases across all scenarios

By 2035 we have a much wider range, with CCS for gas in the greener scenarios





Generation scenarios

Gas capacity retained but annual usage changes

Gas Supply

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Due to the large amount of uncertainty around Shale production we have a broad range

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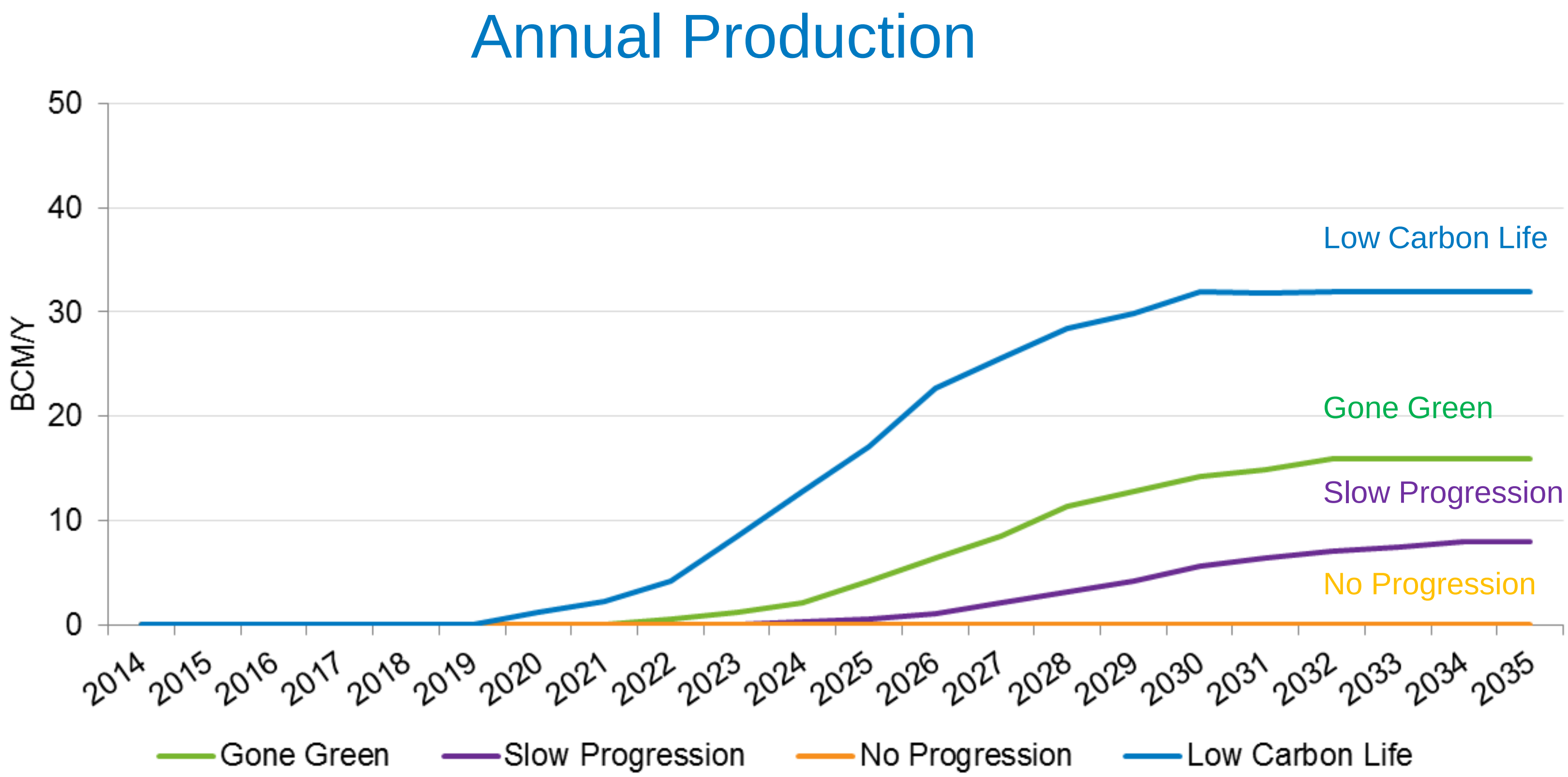
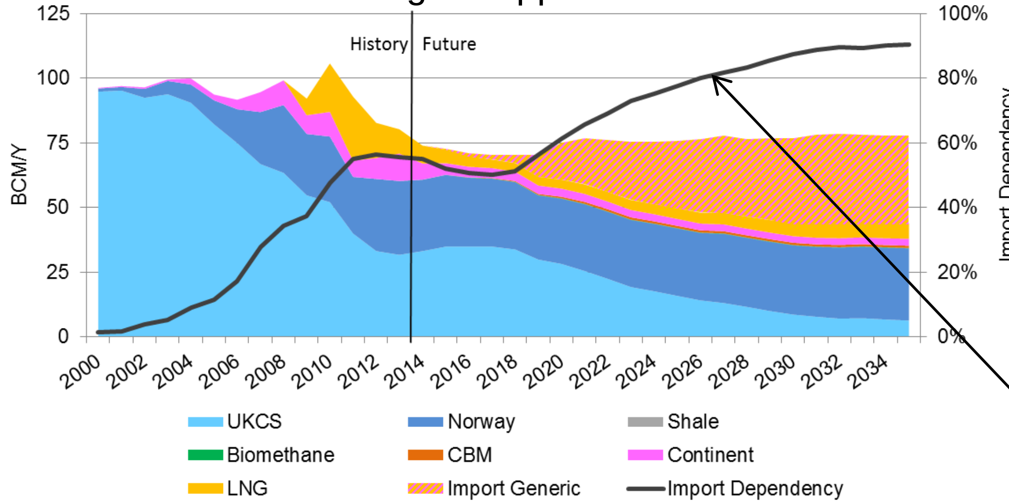


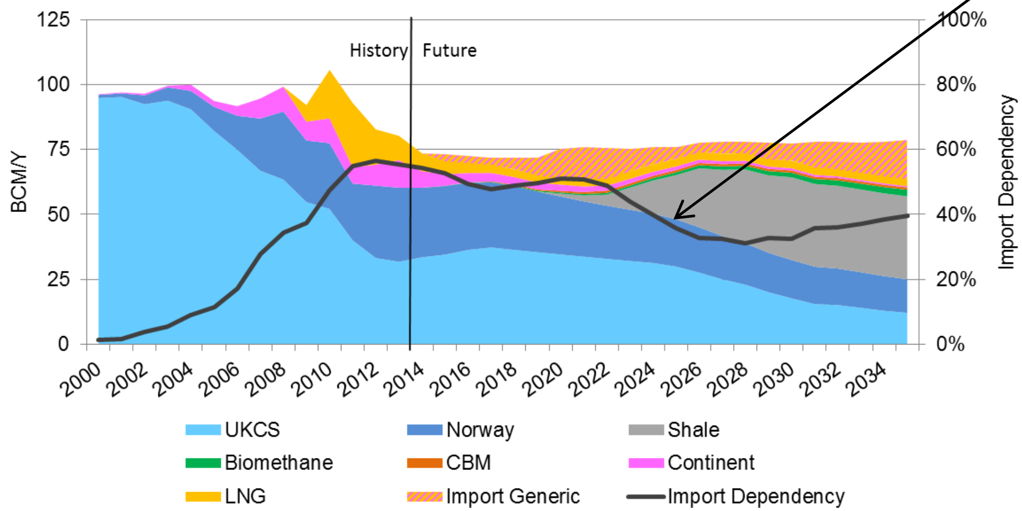
Shale has the potential to significantly impact import dependency

No Progression

Annual gas supplies



Low Carbon Life



Import dependency

Summary

Broad range of plausible and credible scenarios to capture uncertainty

Demand for gas is expected to plateau or fall

However, gas still has an important role in both heat and power out to 2035

Shale could have a big impact on import dependency

Issues for the coming winter?

Demand expected to be very similar to last year

Gas supply position secure

Diverse supply

Storage well stocked

Impact of Russian gas curtailment low

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Thank You

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