

Future Energy Scenarios 2016

Demand Overview

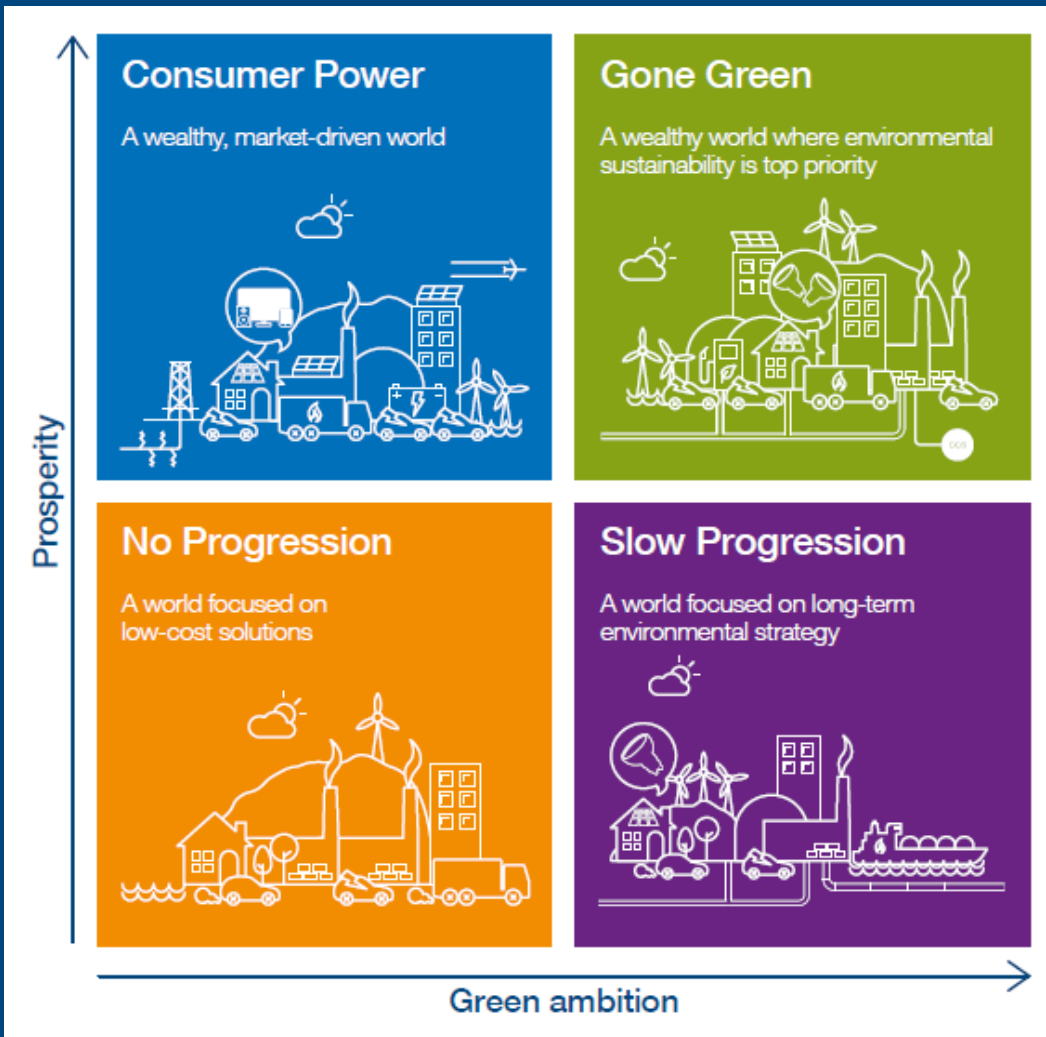
Orlando Elmhirst

Rob Nickerson





Scenarios and key messages



Traditional sources of energy supply are being replaced with an ever-divergent mix.



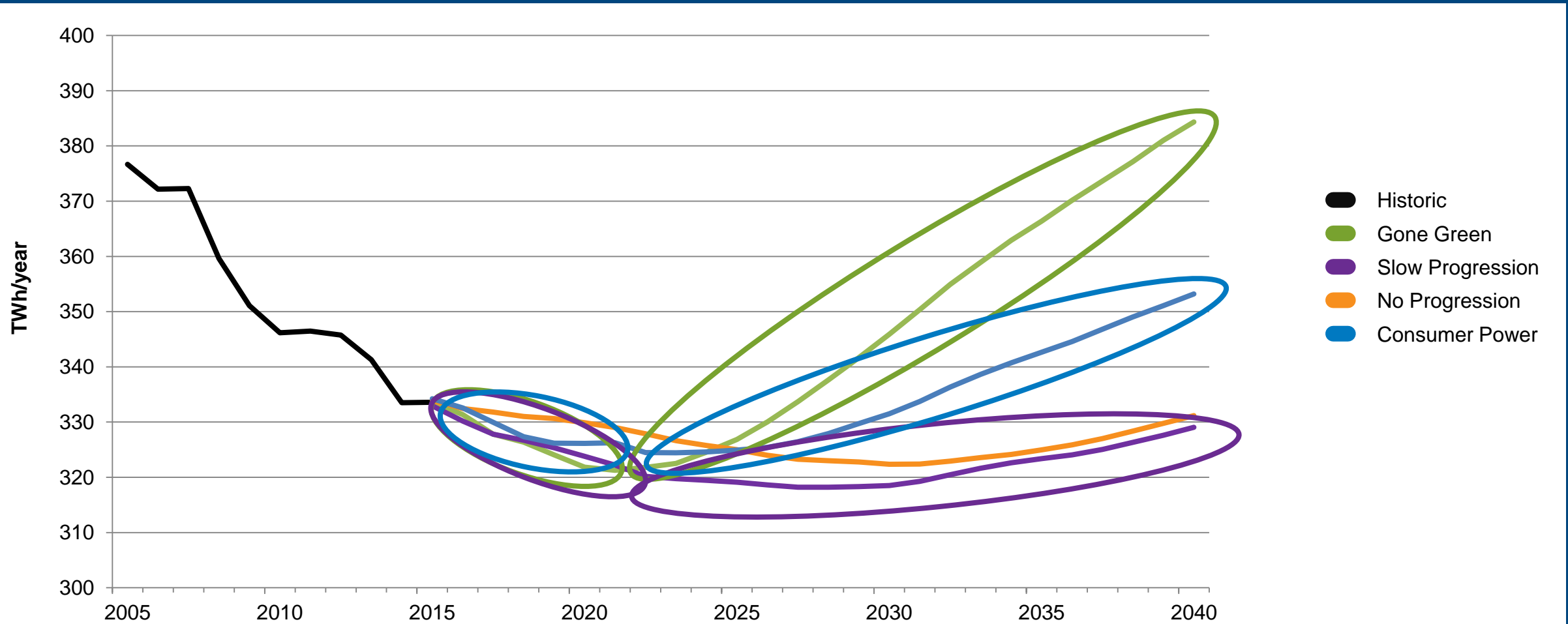
Significant progress needed in heat and transport to meet 2020 renewable energy target.



Gas with CCS and biogas will play an essential role in cost-effective energy decarbonisation.

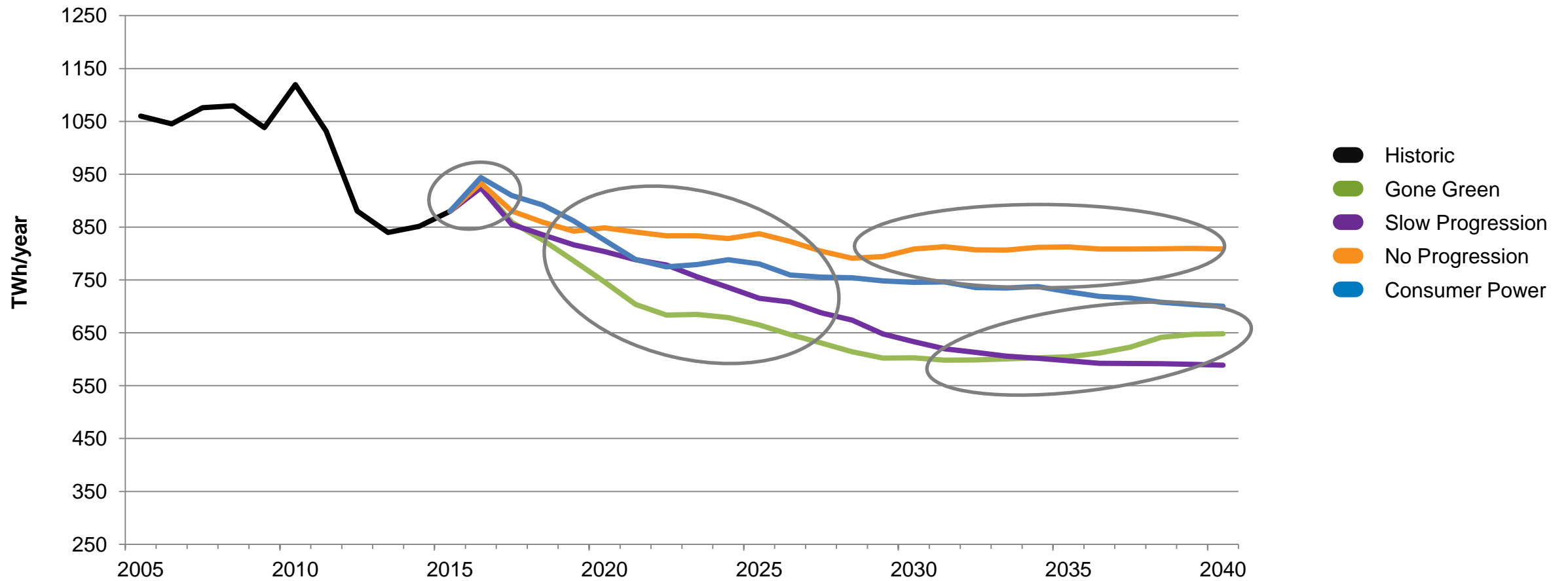


Annual electricity demand

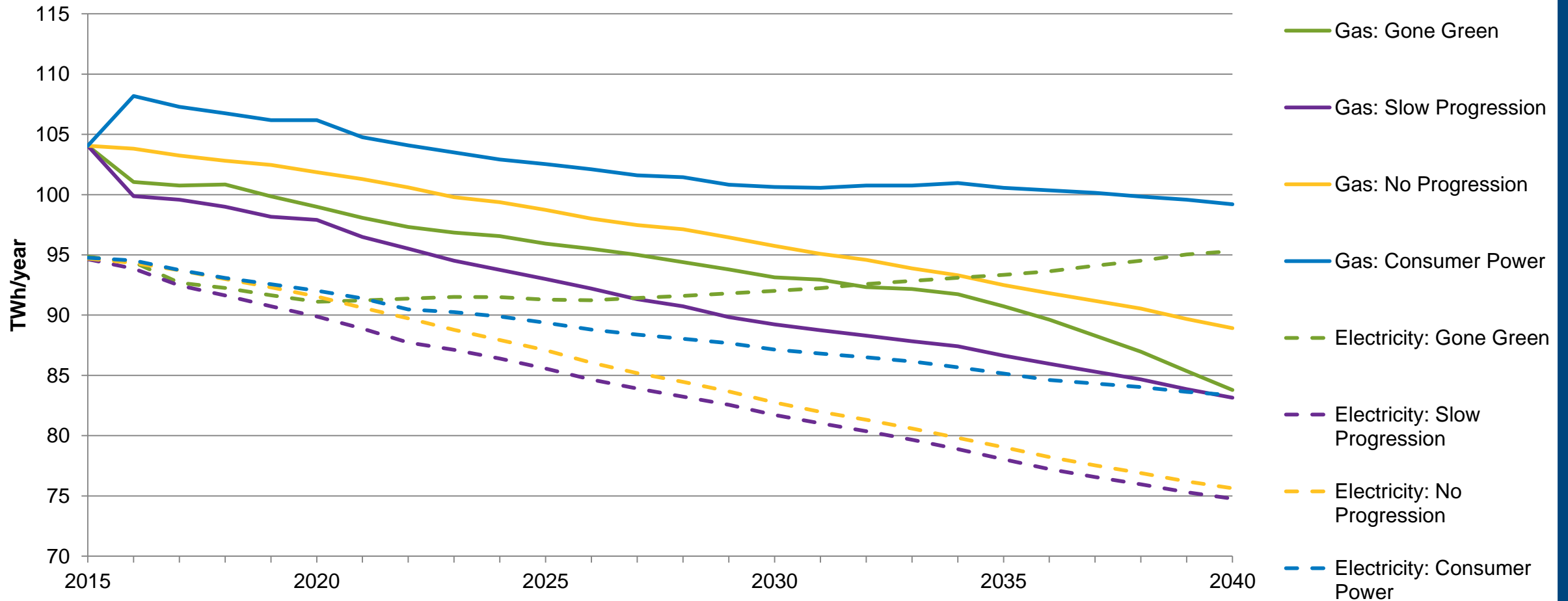




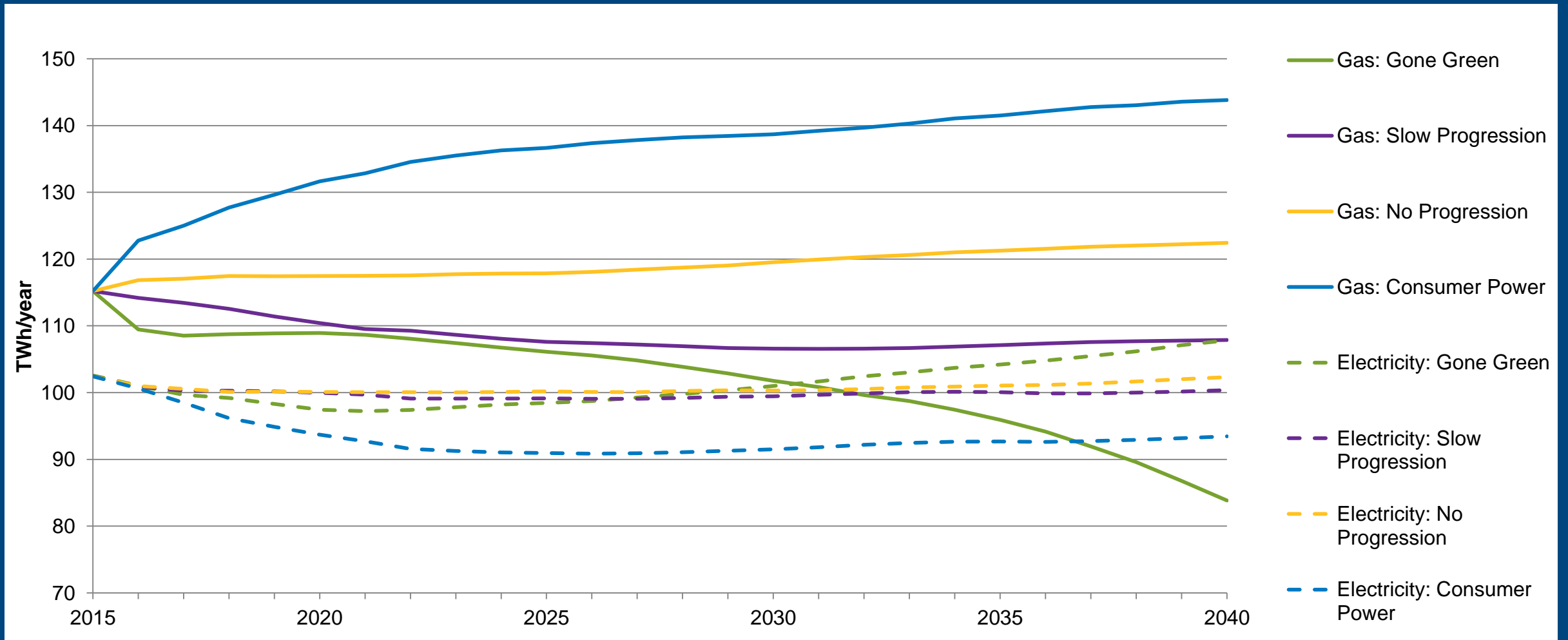
Annual gas demand



Industrial annual demand



Commercial annual demand

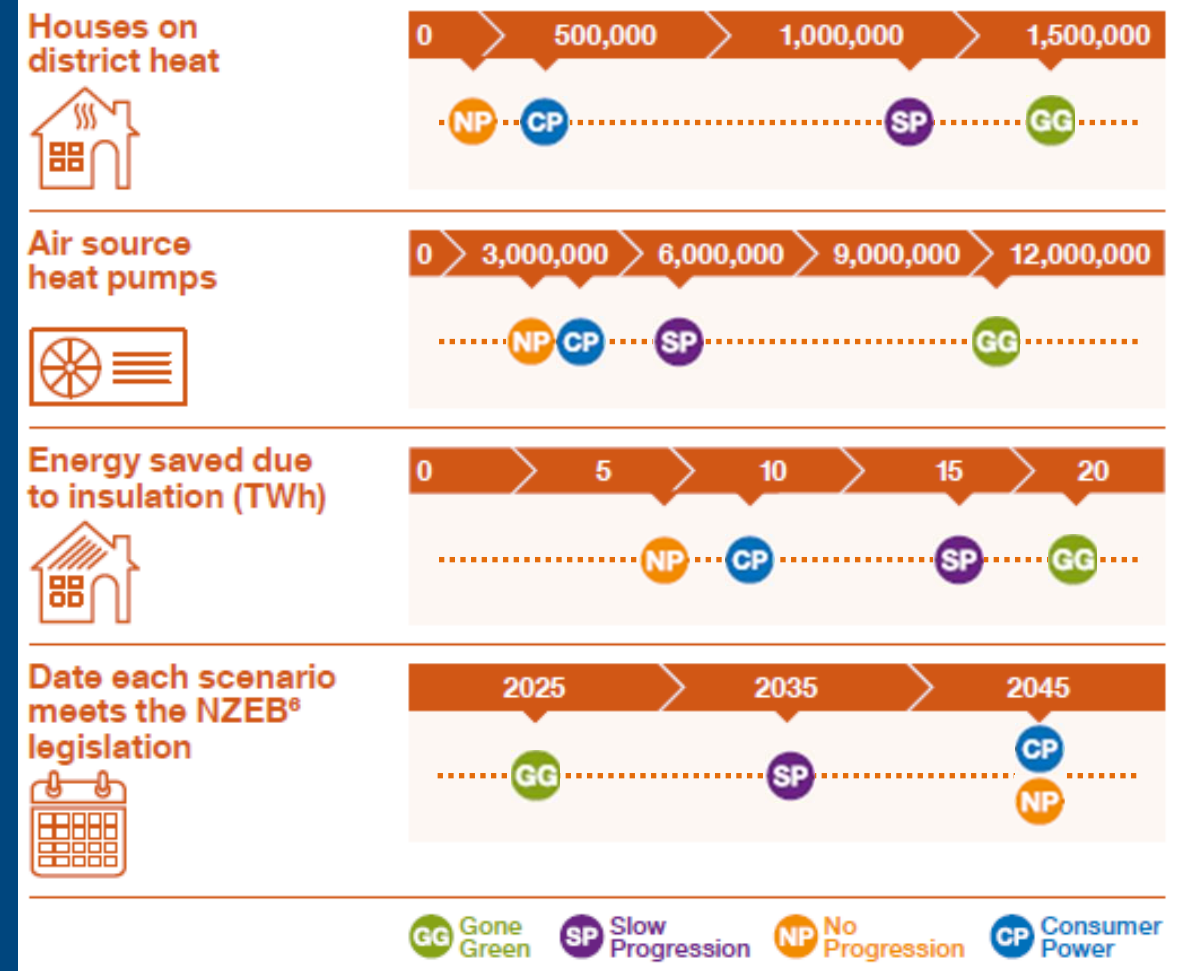




Residential demand

- Residential demand represents the largest single portion of gas demand and a third of electricity demand.
- Heating our homes accounts for 40% of gas and 8% of electricity use.
- Gas boilers are installed in around 90% of homes.
- Solid wall insulation provides the greatest potential savings from insulation (as loft and cavity wall insulation reaches saturation) but is the most expensive.

Scenario ranges in 2040 for residential heating





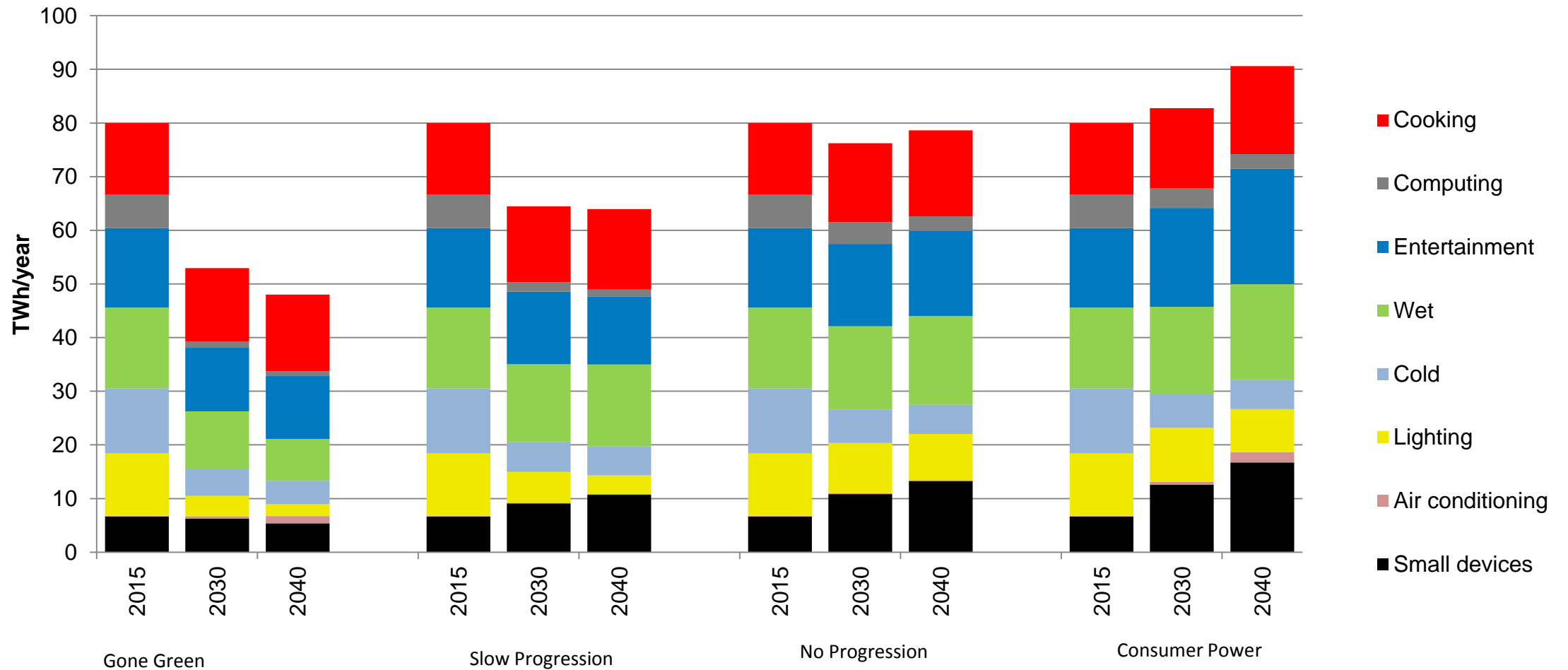
Poll 1

How bound to European energy and environmental targets do you think the UK will be, post Brexit?

- a. Fully (6%)**
- b. Mostly (44%)**
- c. Few (19%)**
- d. Not at all (8%)**
- No answer (23%)**



Annual demands for electrical appliances





Poll 2

Future webinars you would like us to cover within the Energy Demand Team?

- | | |
|------------------------------|-------|
| a. Industrial and commercial | (14%) |
| b. Residential | (5%) |
| c. Appliances | (0%) |
| d. Flexible responses | (39%) |
| e. Transport | (8%) |
| f. Heating and insulation | (2%) |
| g. District heating | (7%) |
| No answer | (25%) |



Upcoming events

Webinars	Register now
Electricity supply	19 th July 12-1
Gas supply	27 th July 10-11
Pathways towards a 2050 future	29 th July 10-11

Workshops	More information to follow
Edinburgh	3 rd Oct
Warwick	11 th Oct
Cardiff	13 th Oct
London	19 th Oct

Download the 2016 FES and FES in 5: <http://fes.nationalgrid.com/>

Future Energy Scenarios 2016 : Queries...

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Electricity peak demand

