

HEAT4U Project
Coordinator



HEAT4U Project
Partner



INTERNATIONAL CONFERENCE

HEAT4U^{PROJECT}

Gas Absorption Heat Pump solution
for existing residential buildings

January 26th, 2012
Congress Centre "Palazzo delle Stelline"
Corso Magenta 61, Milan



Under the EU's Seventh Framework Programme for Research





3rd Round Table

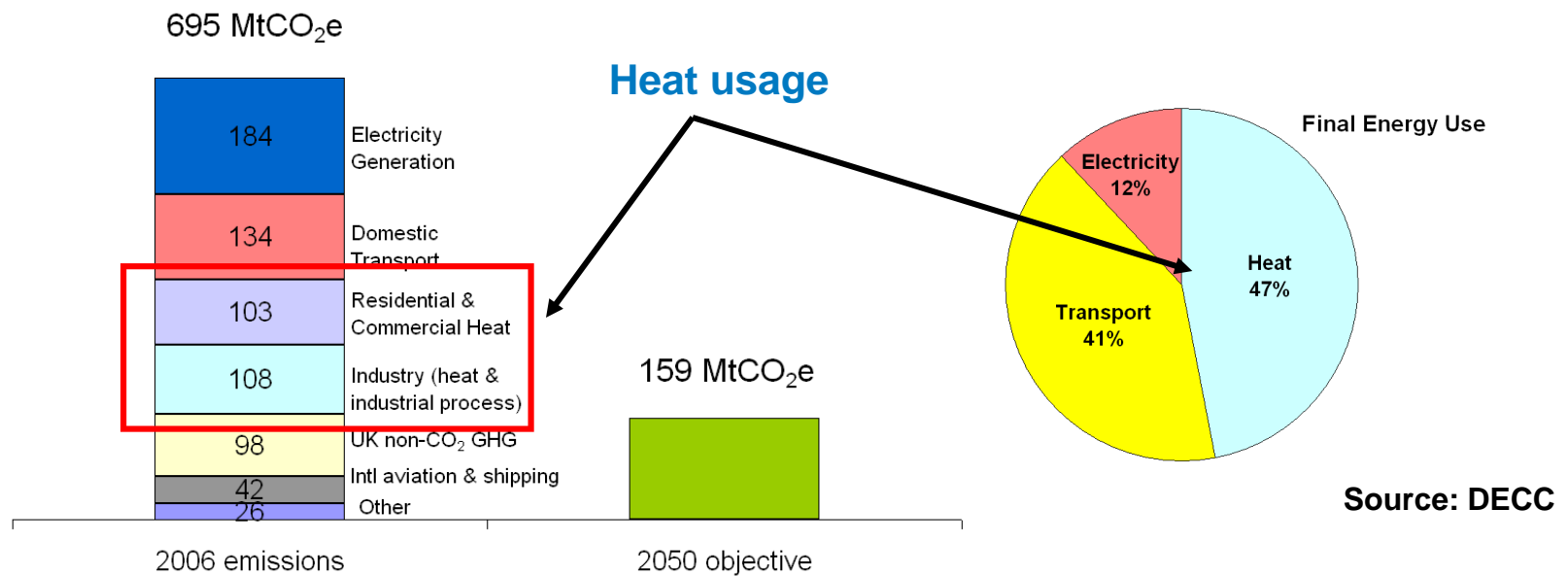
Stephen Marland

Future Projects & Innovation Manager –
National Grid Gas

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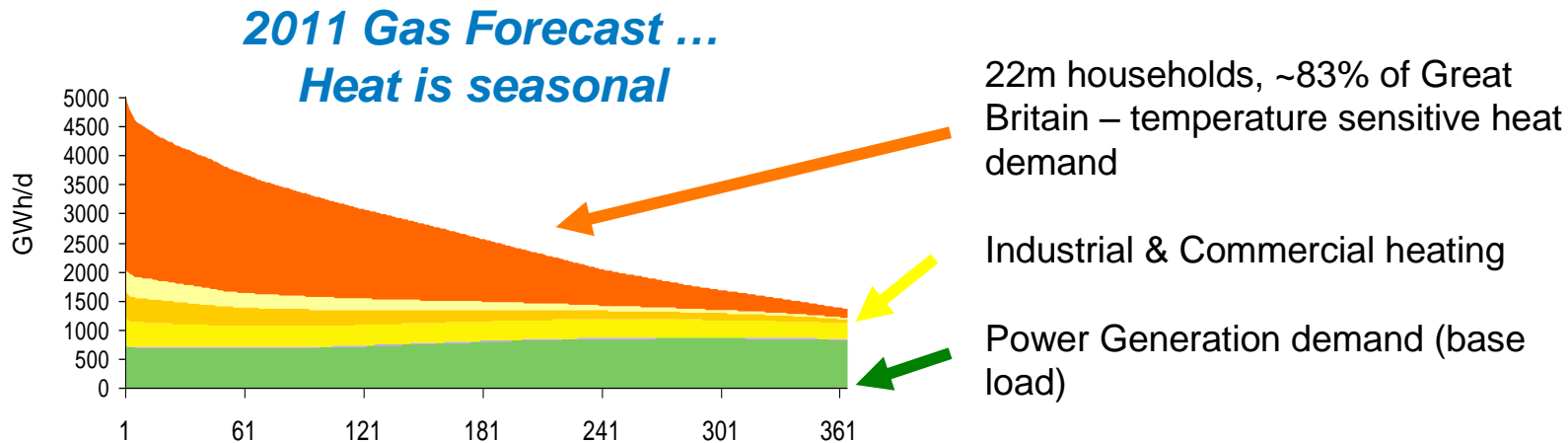
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Heat accounts for 50% of final energy use and 30% of Green House Gas emissions in UK



- Low Carbon supply, fuel efficiency
- Transition or technology?

GB Gas Market by demand



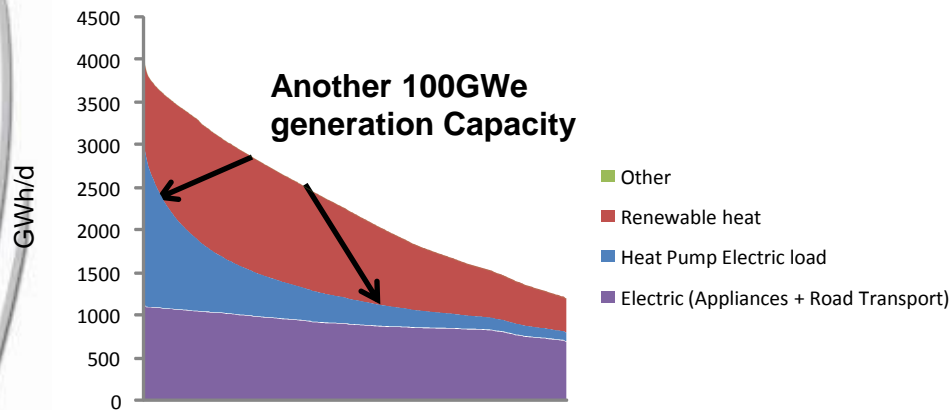
- Largest market is highly seasonal
- Residential heat demand is also highly variable (older larger properties ~40MWh/a, new small ~4MWh/a)
- So what are the options?

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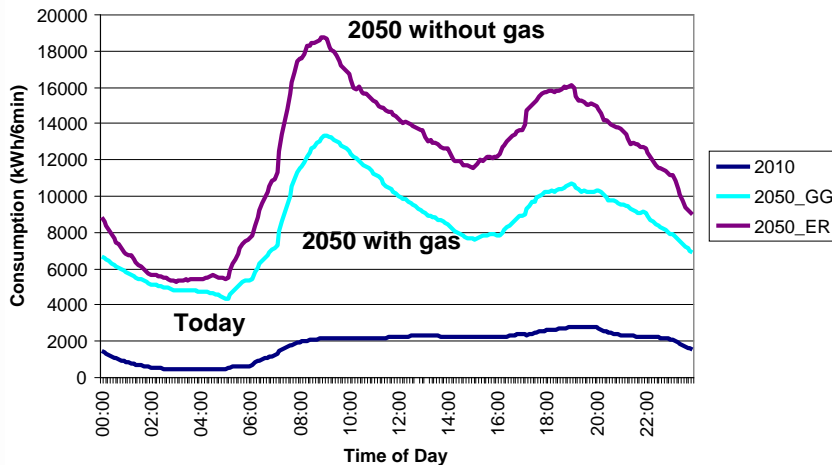
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Full Electric – Sustainable, Secure & Economic?



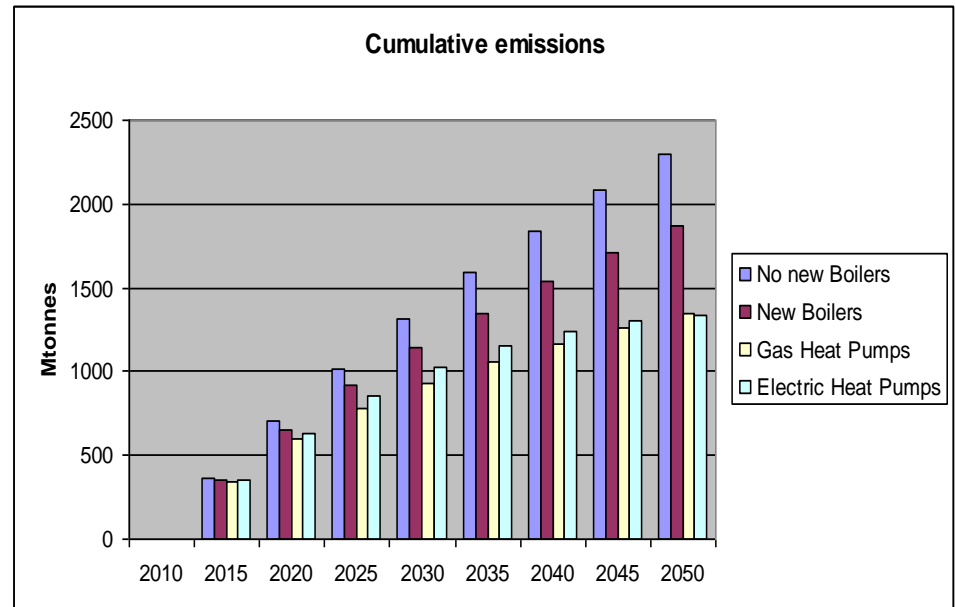
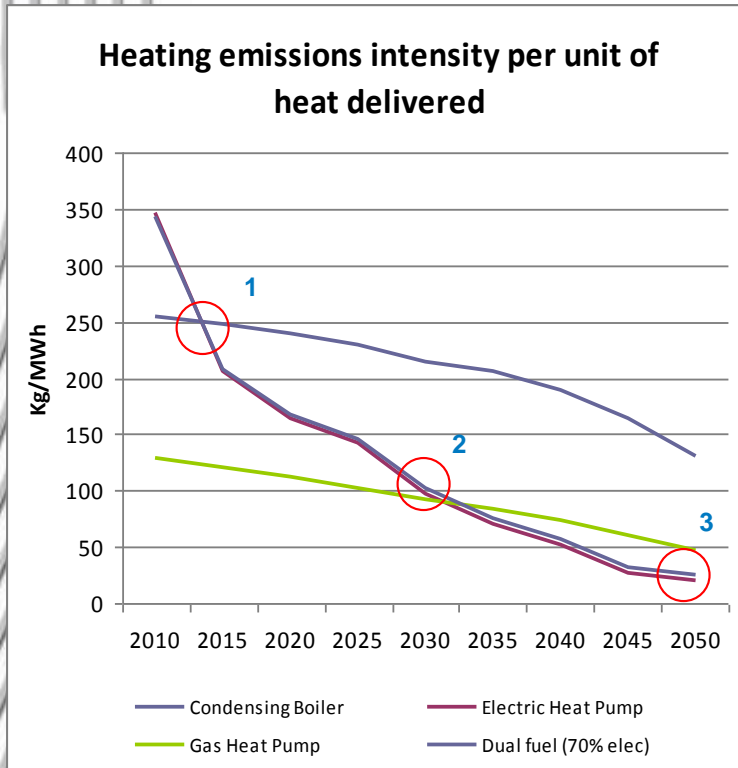
1 in 20 Peak Network Electricity (with Fast Charge)



- Plausible but challenging economically – 100GWe e.g. 30 new 3.3GW nuclear sites with very low load factors
- Network infrastructure at low voltage levels would need to be 3 - 7 times greater (rewire the country?)

The potential for Gas Heat Pumps.....

The same CO₂ in aggregate as electric heat pumps



Boiler replacement rate = 1.5 million per annum in UK

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nationalgrid
THE POWER OF ACTION

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