The Challenges and Opportunities presented by Microgeneration … a Supplier's perspective

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Current drivers of growth in microgeneration

Economics:

- Technology costs falling
- Energy price volatility
- CO_2 price in power

Legislative:

- Financial Support
- Planning (Merton)
- Zero Carbon Homes

Consumer:

- Corporate
- Public Service
- New Build
- Existing Dwellings

Microgeneration technologies in focus….

Electricity

Photovoltaic (PV)

Wind turbine

Heat and Power

Stirling Engine

Heat

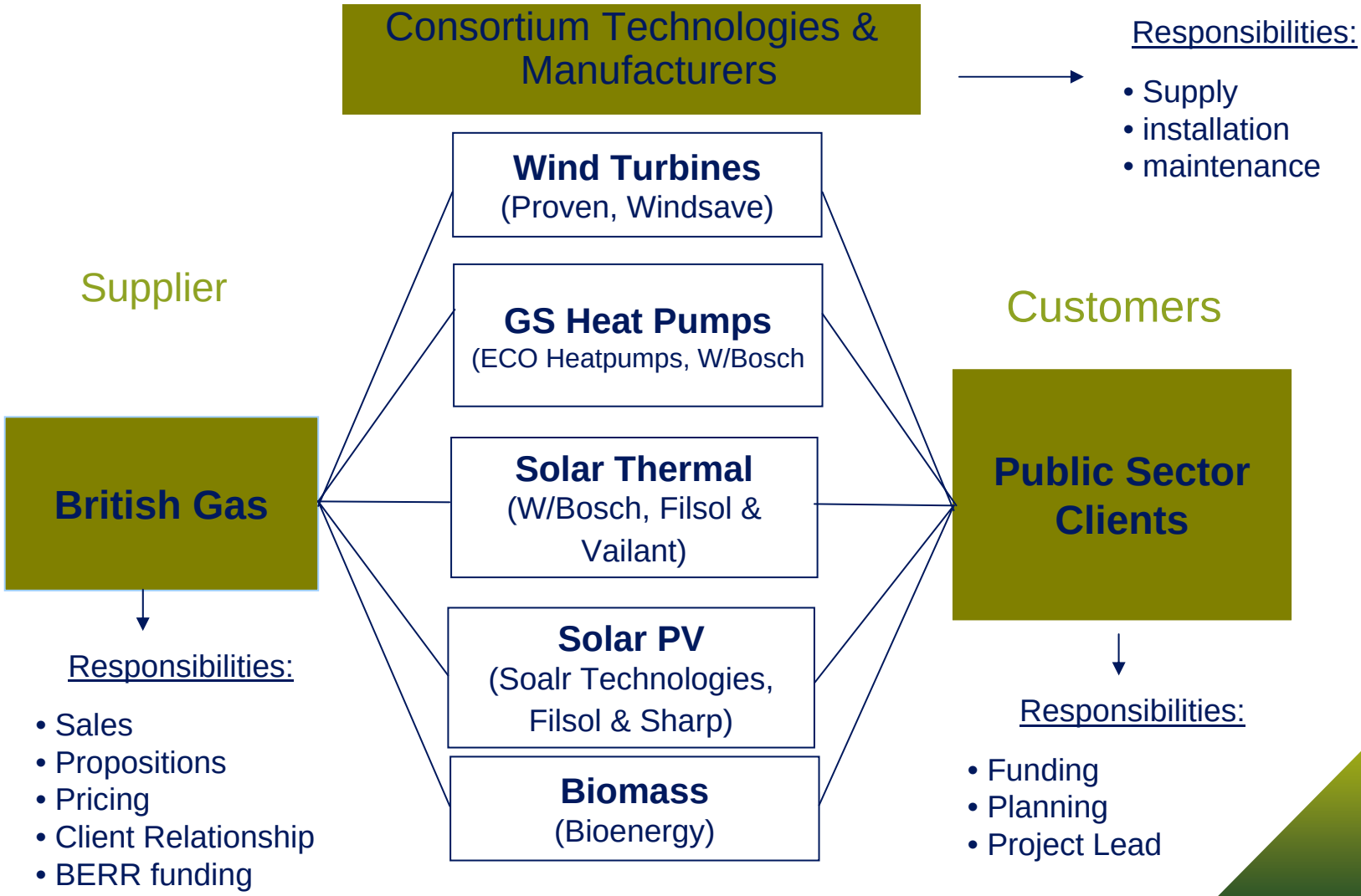
Heat pumps

Biomass

Solar Hot water

Solid Oxide Fuel Cells

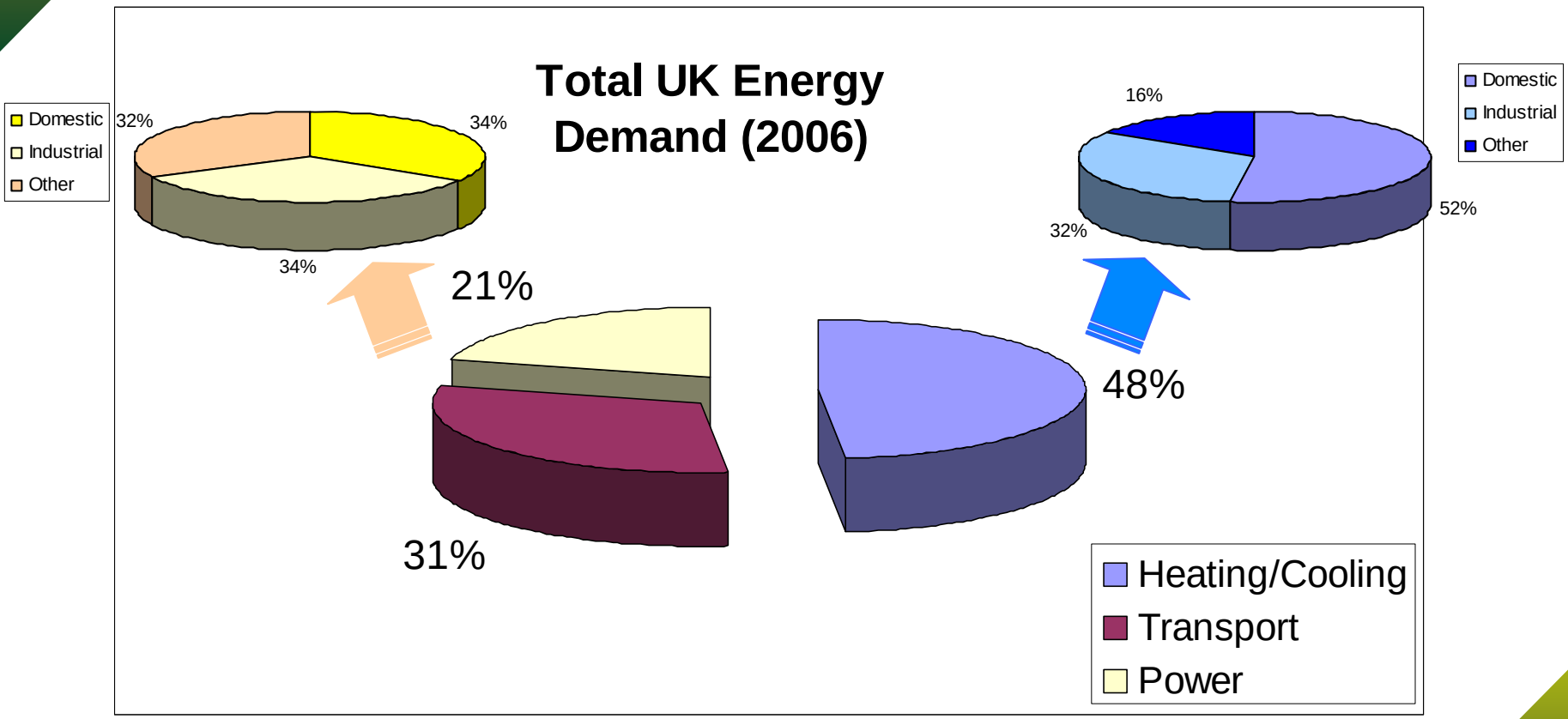
British Gas Microgeneration Activities (LCBP2)



Microgeneration faces many challenges

- Consumer acceptance
- Metering and reward
- Planning, installation and maintenance
- Nature of support mechanism
  - FIT - not just electricity?
  - Structure – technology agnostic?
  - Level of support

Domestic Heating is a Huge Proportion of the UK's Energy Mix



Can it be done…….

German PV installs 933,333	Scaled to UK 687,763
German solar thermal installs 2,013,500	Scaled to UK 1,483,726
Swedish Heat pump installs 300,000	Scaled to UK 2,001,531

Source: Element Energy, numbers 2005/06

Opportunity

- We face huge targets:
  - 15% of all energy from renewable sources by 2020
  - 60% (80%?) reduction of GHG emissions by 2050
- Mistake to think that big targets can only be delivered by big projects – remember conversion…..
- Half of UK energy demand is heat
  - Over half of this is domestic
- The more renewable heat delivered the more attainable the target for renewable electricity becomes

With the right support, microgeneration will make a huge contribution and Suppliers will be at the forefront of delivering it