Scottish and Southern Energy

Microgeneration

A Supplier's View

Microgeneration

- A threat or an opportunity for energy suppliers?

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- It’s a threat if the supplier wants to maintain the status quo
- Its an opportunity if the supplier wants to participate in the market development

Why are Suppliers Interested?

- Challenges ahead:
  - Manage growth in demand for energy services
  - Reduce carbon
  - Secure supply
  - Compete successfully
  - Help to deliver warm dry homes
- Microgeneration can contribute to all

Growth and Carbon

- White Paper assumes 50% growth by 2050
- Current trajectory actually much higher
- If we are still to meet 60% carbon reduction significant changes must be made
- Microgeneration can contribute through:
  - Reduction of waste/losses
  - Reduction of carbon intensity of generation
  - Contribution towards improved efficiency of use

Reduce Waste and Losses

- Local generation of heat can eliminate losses
- Local generation of electricity eliminates transmission and distribution losses
- Local generation of heat and power can combine the benefits

Reduce carbon intensity of production

- Microgeneration represents ideal opportunity for lower and zero carbon generation
- Electricity
  - Solar PV
  - Wind
- Heat
  - Solar thermal
  - Heat pumps
- Both
  - (Biomass) Micro-CHP

Improve efficiency of use

- Microgeneration has the potential to raise awareness of energy consumption and to directly impact on consumer behaviour
- Aids move towards energy services model
- “Sexier” than insulation!

Security

- Microgeneration strengths:
  - Low/zero carbon energy (MWh)
  - Conserves other fuels for peak capacity (MW)
  - Indigenous fuel source
  - Low/zero fuel price risk
  - Low/zero political risk on fuel
  - Adds to security through diversity
  - Potential for rapid deployment
  - Public acceptability (??)

Competition and Market Opportunities

- Opportunity to engage with customers
- Satisfy wider needs of customers
- Build up loyalty and stronger relationship with customers
- Increases overall choice for customers

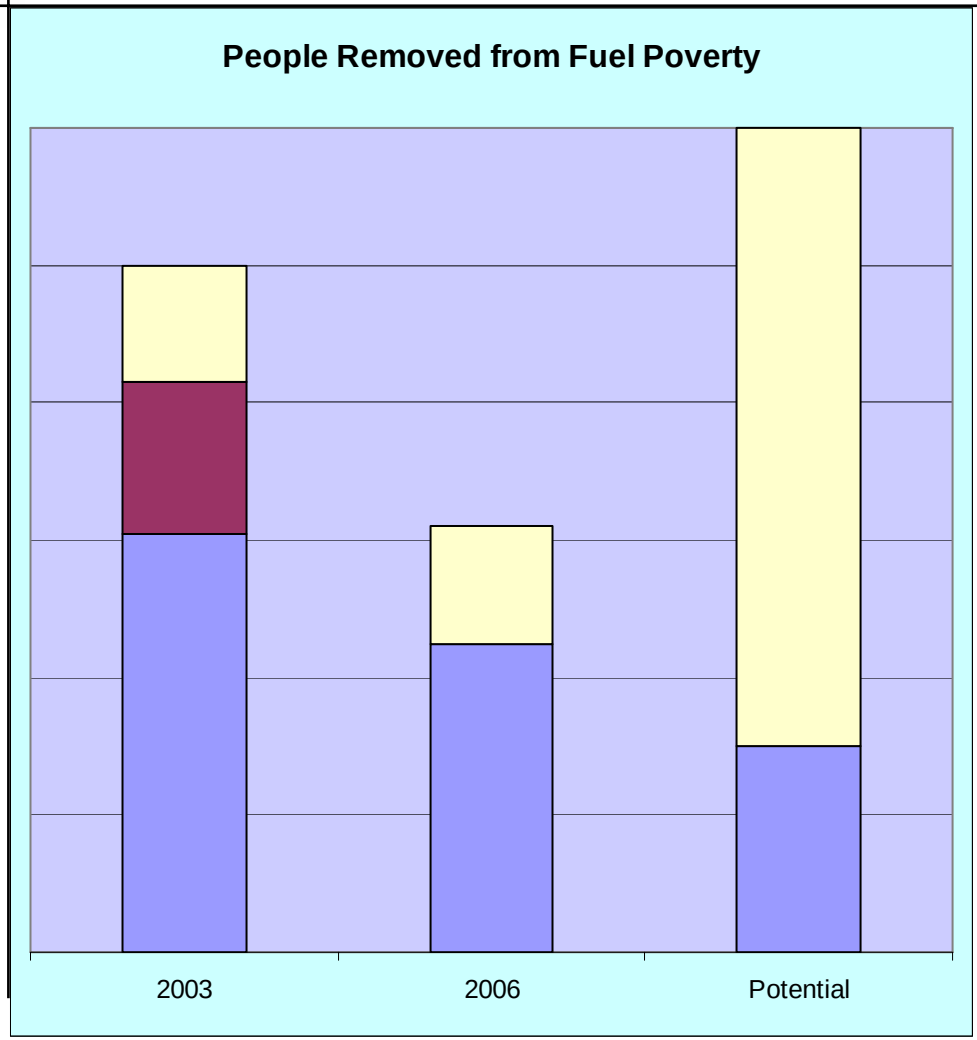
Help to deliver warm dry homes

- Difficult to balance often competing priorities
  - Economic
  - Environmental
  - Social
- Useful to focus on each area, where possible

Help to deliver warm dry homes

- "Fuel poverty" has 3 components
  1. (Low) income
  2. Fuel price
  3. Fuel volume required
- Responsibilities
  1. Is a function of income poverty (Govt.)
  2. Is a function of policy, regulation, market and taxation
  3. Can be dealt with by investment
- Focus on reducing fuel needed to deliver ***warm, dry homes***

“Fuel Poverty” Statistics



- Recent fuel price increases have wiped out

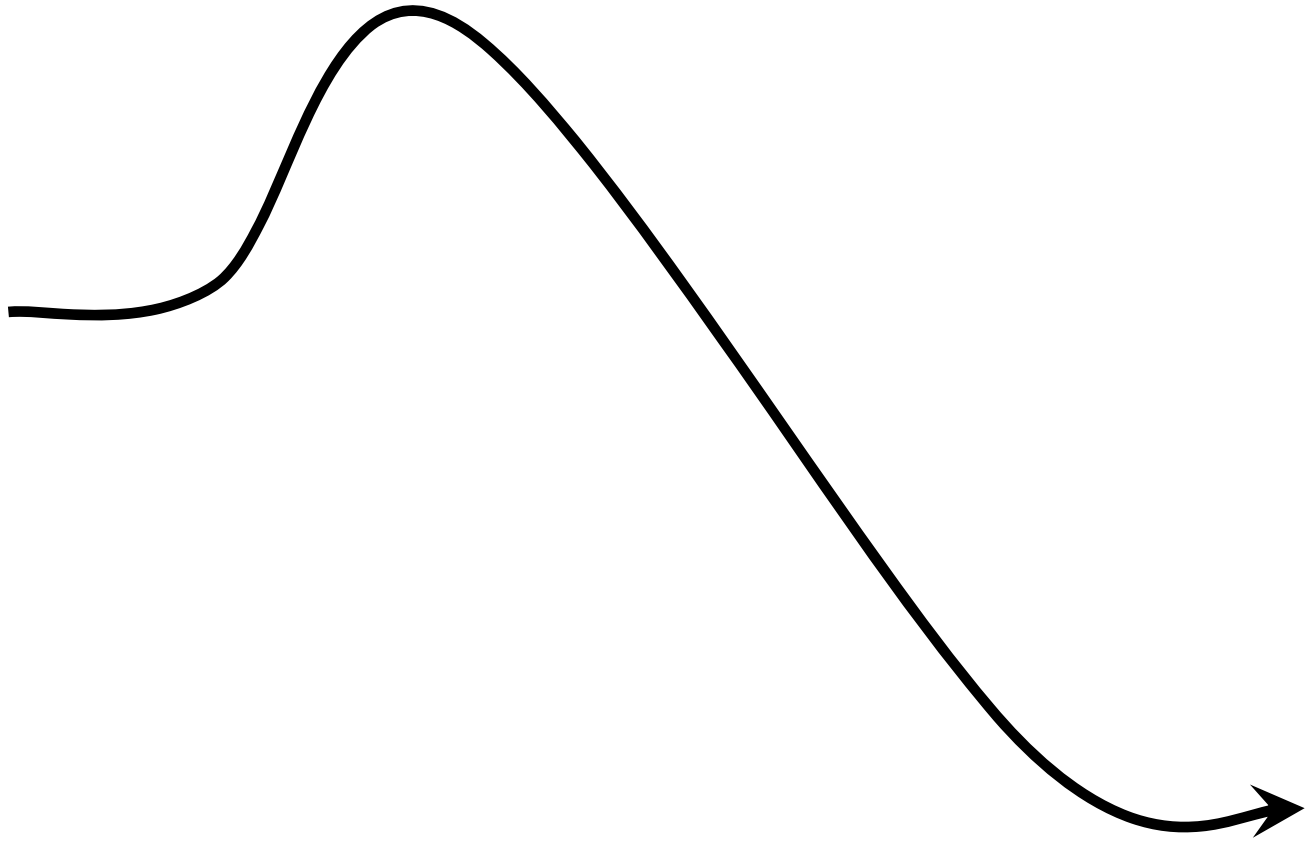
- Shift from revenue to capital solutions to deliver long-term improvement

- **Microgen** role as “hard” contribution to reduce fuel volume required

Key Asks for Microgeneration

- Long term policy and market for carbon
- Address electricity, heat and transport
- Targets and standards
- Kick-start through government procurement
- Removal of barriers
  - Fiscal measures
  - Planning
  - Transaction costs

Remove or Avoid Barriers



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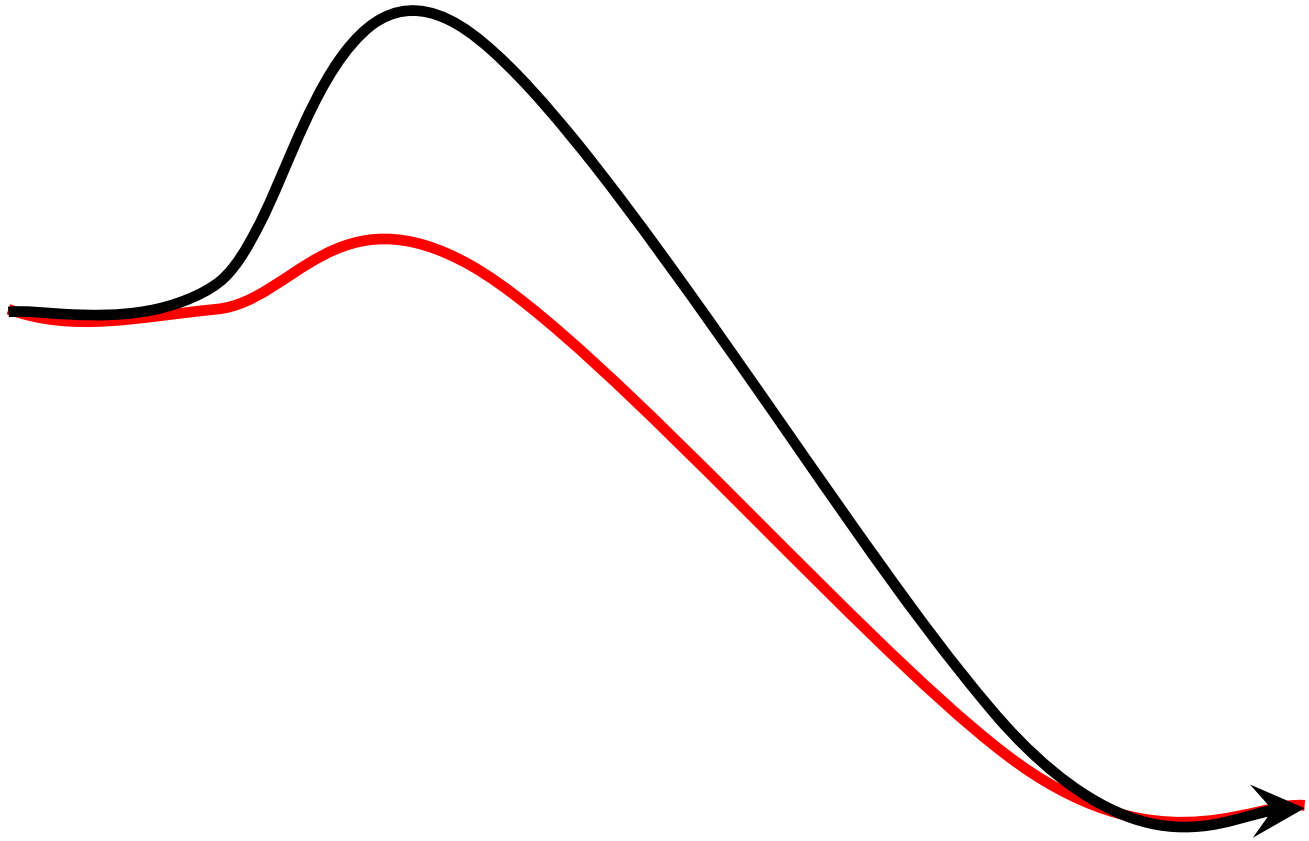
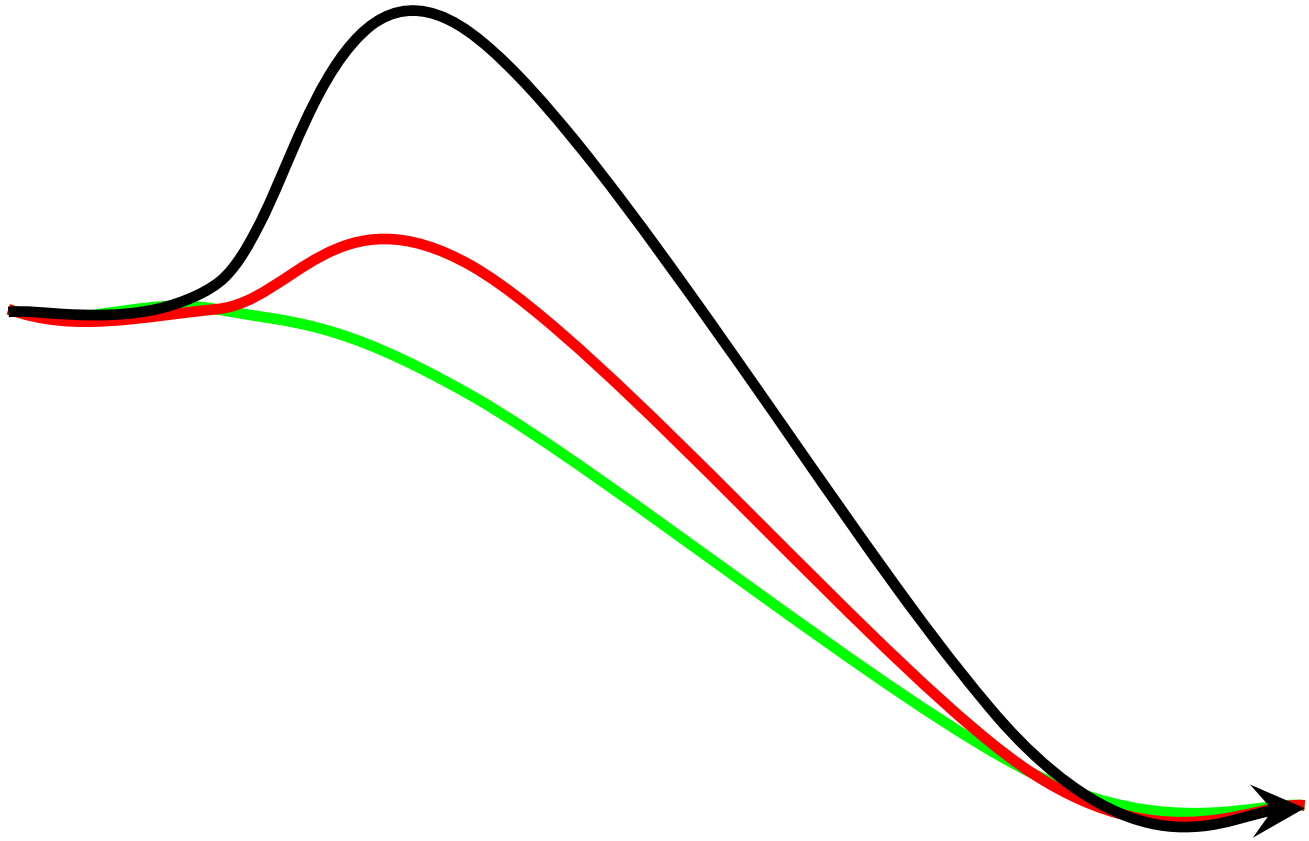


Remove or Avoid Barriers



Making it Happen

- All options can be commercially competitive and sustainable ***BUT***
- They don’t just happen by themselves
- Emphasis must be on appropriate carrots and sticks to make it happen

How can Ofgem help?

- Help to reduce the barriers (especially for the initial phase)
- Lower transactions costs
  - ROC's
  - "export" reward
- Facilitate infrastructure support
  - Grid (T&D)
  - Smart meter roll-out
- Encourage investment