

Options for Energy Buyers

Demand Side Response...

Demand Reduction or Destruction?

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Demand Side Response

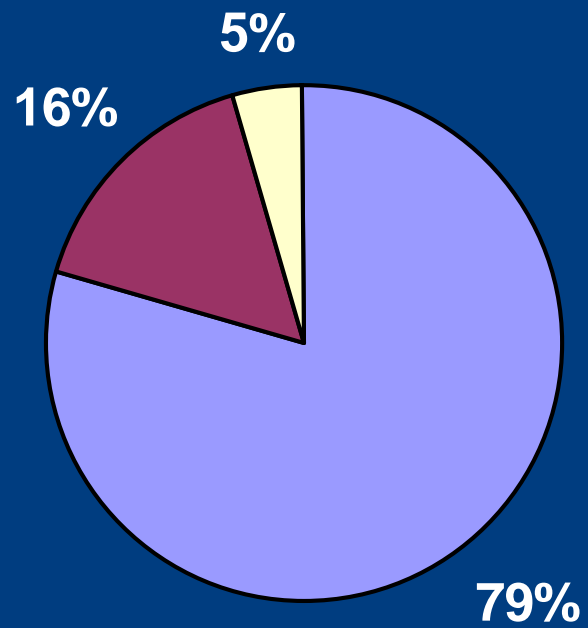
- British Sugar's Energy Mix
- Winter 2005-06 Review
- Look Ahead to Winter 2006-07
- British Sugar's Response

British Sugar

- Sole processor of UK sugar beet crop
- Six factories, all with CHP plants, four of which use natural gas as a fuel
- Highest fuel demand is when processing the beet crop between September and February
- Daily gas requirement of 560,000 therms

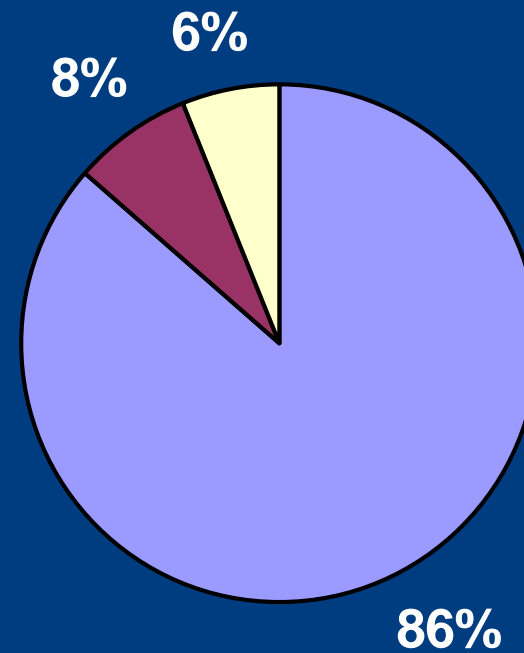
Fuel Mix

Fuel Mix (GWh)



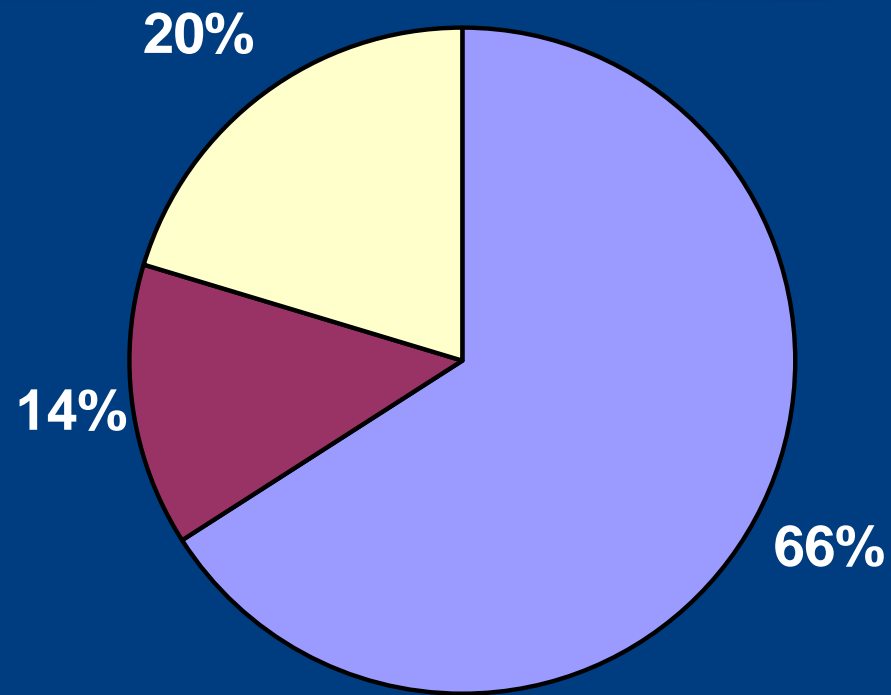
■ Gas ■ Coal ■ Oil

Fuel Cost (05/06)



■ Gas ■ Coal ■ Oil

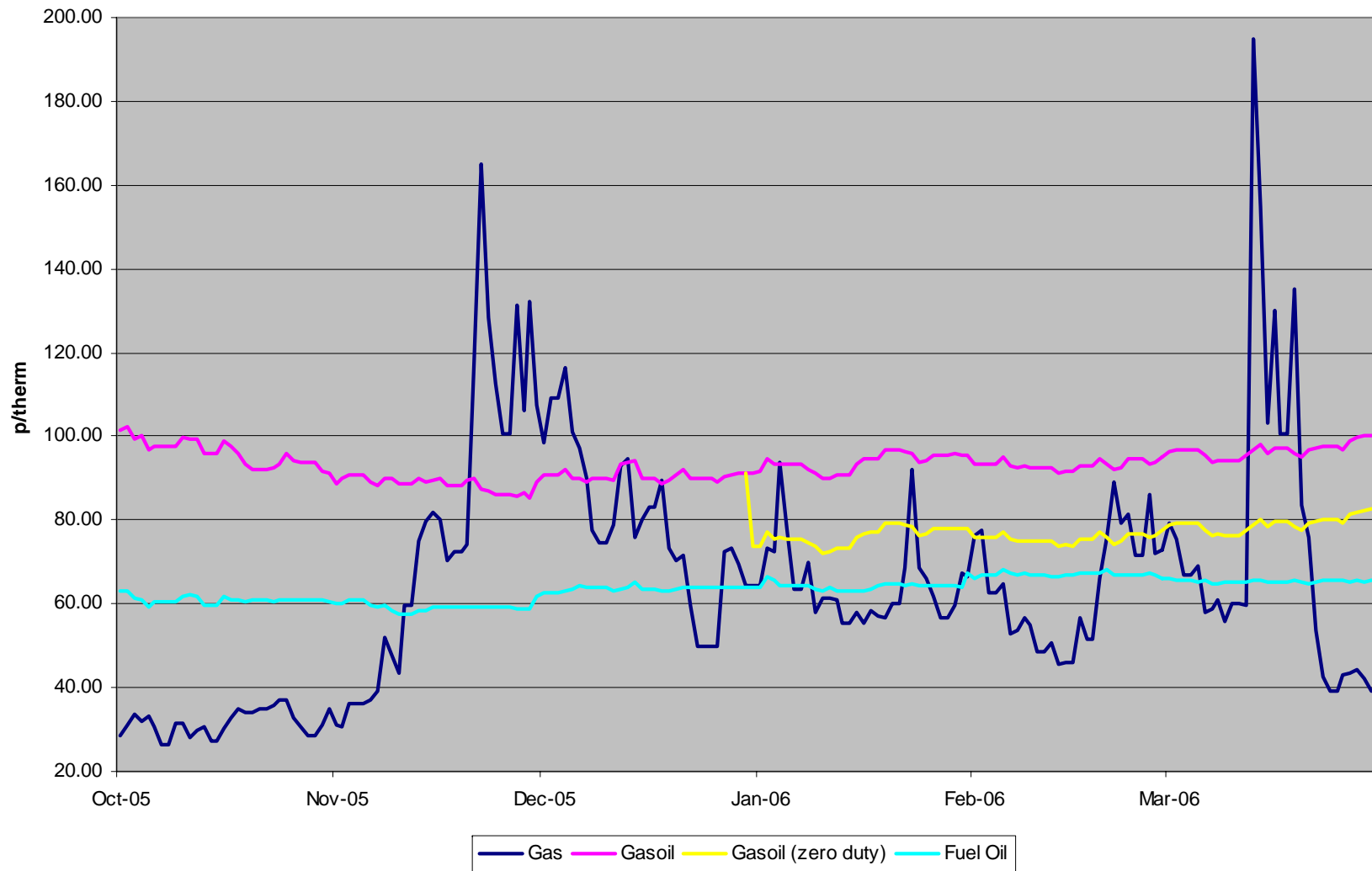
Gas Substitution Fuels



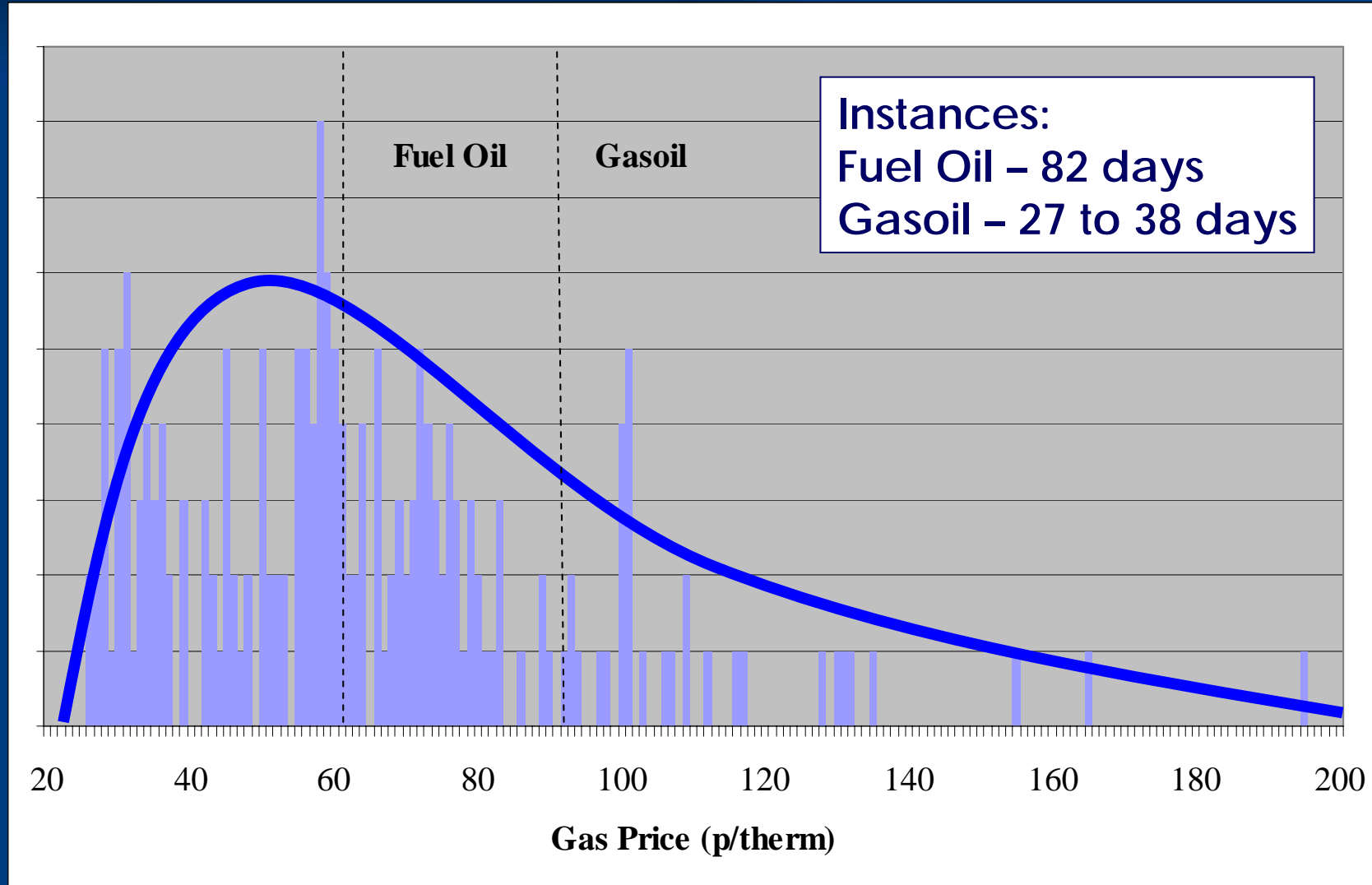
Treatment of duty on gasoil (and fuel oil) for generators and CHP changed 1st Jan 2006.

■ CHP Gasoil ■ Gasoil ■ Fuel Oil

Gas Substitution Prices Win-05



Win-05 DA Price Distribution



Size of the Opportunity last Winter

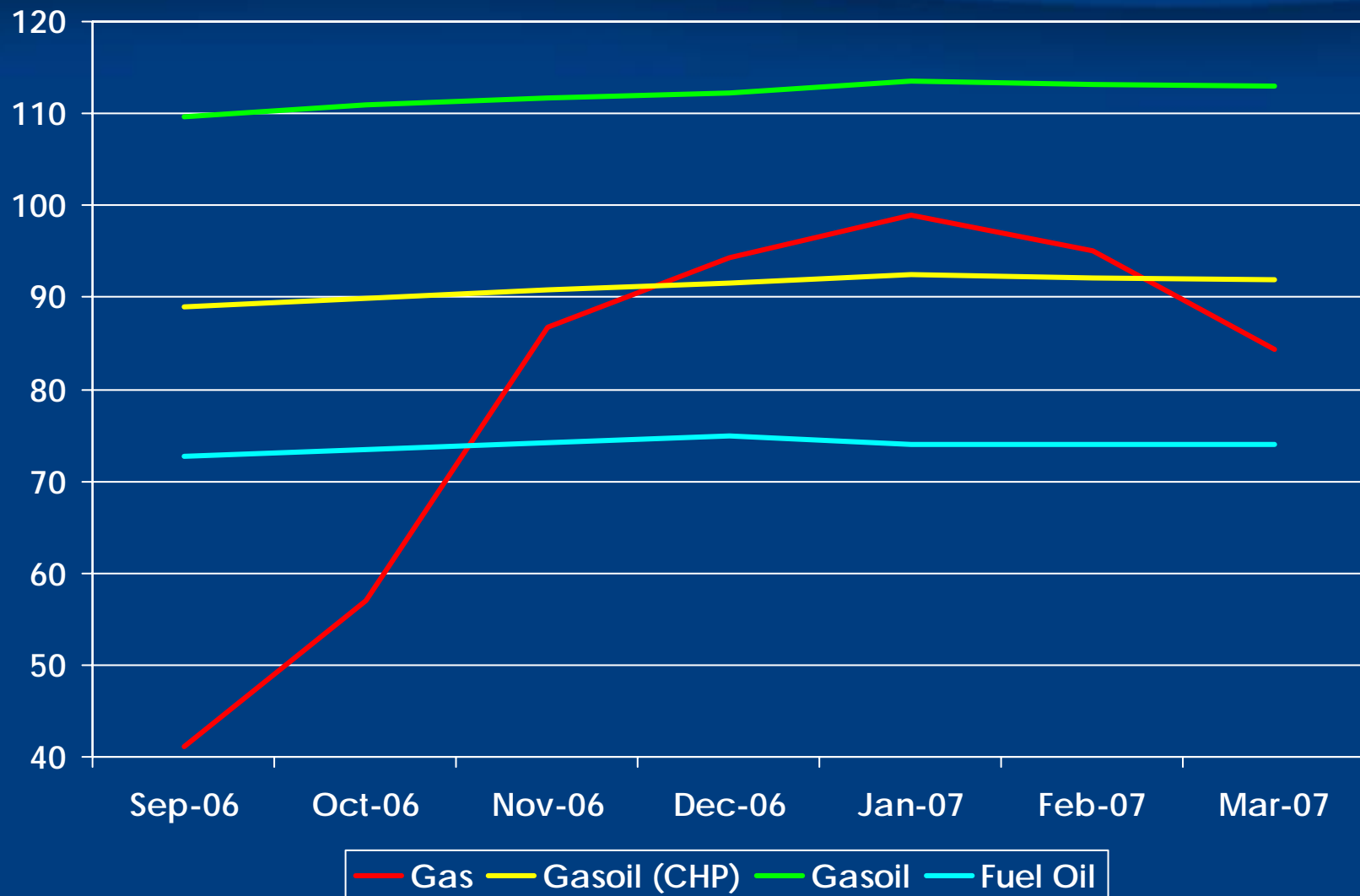
Gasoil for CHP	£3.2M
Fuel Oil	£2.2M
Other gasoil	£0.5M
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Total	£6.0M

Potential fuel cost saving last winter from switching whenever economic to alternative fuel.
(spot oil price vs. day ahead gas price)

Practical Considerations

- Normally hold about 12,000Te of gasoil at the two largest sites
- Usage 750Te/day (16 days stock)
- To keep sites supplied requires 25 loads per day, 7 days per week
- Last winter it was not possible to obtain vehicles (or fuel following Buncefield) to supply our sites at this rate.

Gas Substitution Prices Win-06



Environmental Authorisations

- Need to work with the EA to achieve an acceptable compromise
- Forward curve suggests that gasoil will be economic fuel from Dec-Feb
- Fuel oil will be economic fuel from Nov-Mar

Planning for higher prices

- Short Term
 - Response on the day to high prices
- Medium Term
 - Energy Management
 - Product Mix
 - Production Strategy
- Long Term
 - Energy Efficiency
 - Capital Investment

Response on the Day

Fuel Switching

- Systems tested
- Contractual arrangements
- Alternative fuel available?
- Regulatory constraints?

Stop Production

- Cost Impact understood
- Systems in place

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Example: We will not produce dried animal feed at some sites if gas price is too high.

Medium Term

- Energy Management
 - a much higher priority now
- Product Mix
 - Minimise production of products with highest energy content at times of highest energy cost
- Production Strategy
 - Maximise production at sites burning coal and with lower cost alternative fuels
 - Reduce process efficiency (extraction) to save energy

Longer Term

- Most of industry's investment decisions were made at a time when energy prices were much lower
- Investment in energy efficiency now has a much better payback
- Potential £10M investment programme at one site to reduce energy costs
- Potential for alternative fuels including renewables

Demand Reduction or Destruction?

- The short term and medium term measures we have been taking will provide a reduction in demand in response to market prices
- Some of the longer term measures will undoubtedly result in demand destruction