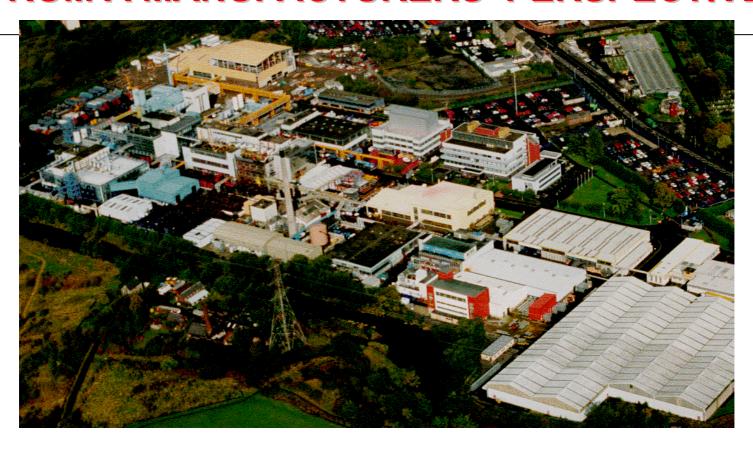
ENERGY PURCHASING FROM A MANUFACTURERS PERSPECTIVE

David Lloyd
Site Utilities Improvement Engineer
Ciba Specialty Chemicals Paisley



ENERGY PURCHASING FROM A MANUFACTURERS PERSPECTIVE



Ciba Specialty Chemicals, Coating Effects UK



CIBA SPECIALTY CHEMICALS - WHO ARE WE?

Paisley Site

- 600 Employees
- Classical Pigments for Inks, Paints, Plastics, Paper Colouration
- Manufacturing, R & D, Technical Specialists, Supply Chain, Support Services







We create effects to improve the quality of life.

Ciba Paisley Utility Consumptions

STEAM:

- 70MW Capacity gas / gasoil fired Boilers.
- Gas = 10,000 therm/day , 140 GWh/yr

POWER

7.5MW pk 41 GWh/yr

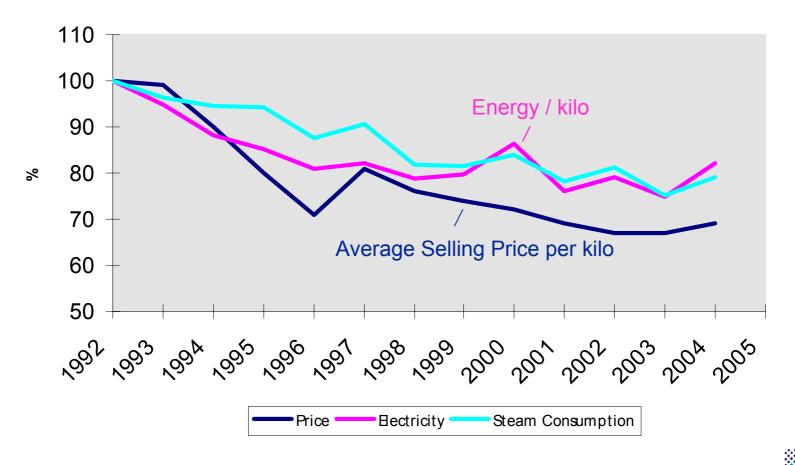
Water & effluent

2.1Mm3

Totals Utilities 2006 ≈£6.5m 2007 >£0.8m

2007 >£0.8m Ciba

CIBA SPECIALTY CHEMICALS



CIBA SPECIALTY CHEMICALS

Biggest threat

- **•SUBSTANTIAL REDUNDANCIES**
- **•SEVERAL HUNDRED EMPLOYEES ON NEW SHIFT PATTERN**



Savings made are under threat

Competitiveness

DJC06/Climate Change Slide 7

Gas Purchase strategy

- UK (Bradford, Grimsby, Clayton Paisley) Flexible contract with interruptible supply since 2003.
- BOM, DA, Fix and Float.
- Risk Management support across UK group.
- Basic principle DA in summer Fix to protect winter.
- Winter 2005 turned philosophy upside down.

Gas Purchase 2005 >

- Paying high prices (liquidity £)
- Market changes results in more focus.
- Invest time in understanding the fundamentals of the market.
- Investigate strategy with Risk Management Support, work alongside and ask the right questions.
- Ascertain leadership team aspirations.
- Improve fuel switching reliability,
- Change IPC authorisation to allow fuel switching for price interruption.

DJC06/Climate Change Slide 9

Ciba Gas Experience

- Q4 2006 refloat with partial repurchase.
- Winters fixed out until q4 2008 giving budget forecast reduction and possible refloat opportunities.
- Taken Balance of Month to protect budget.
- Successful fuel switch for 7days from 13/3/06 (Balance Alert).
- Monitor live market prices before going to supplier.
- Take control of Bid offer situation.
- Check your Day ahead agreement before fuel switching.

Gas Monitoring Strategy

- Monitor the market daily. Use Tools.
- Record decisions against agreed philosophy.
- BEP spreadsheets.
- Budget Spreadsheets to 2009.
- Monthly Risk Management meeting.



Power Flexible Contract

- BOM, DA, Fix & Float (x1).
- Bring experience and learning from Gas.
- Fix Nov, Dec, Q1 07.
- Float Summer (A/c Units.. Maintenance).. Gains???
- Buying Winters out to 2009.
- Monitor ∆ winter 06/07/08.
- No alternative supply.
- Daily monitor tools, Alarms and orders with supplier.



Summary

- Energy cost is critical.
- Energy efficiency is first priority.
- Top down management support .. Agree aspirations.
- Invest time and money in Risk management.
- Develop monitoring tools.
- Maximise logistical position (fuel switching, IPPC).
- Have a long term view in the market.

