1. Impact of energy market volatility

2. Procurement business strategies

I. Fixed vs. Flexible Procurement

II. Risk Management

III. Outlook for 2012 and Beyond

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Why are the markets so volatile?

Chaos Theory Comparison–
The Butterfly Effect

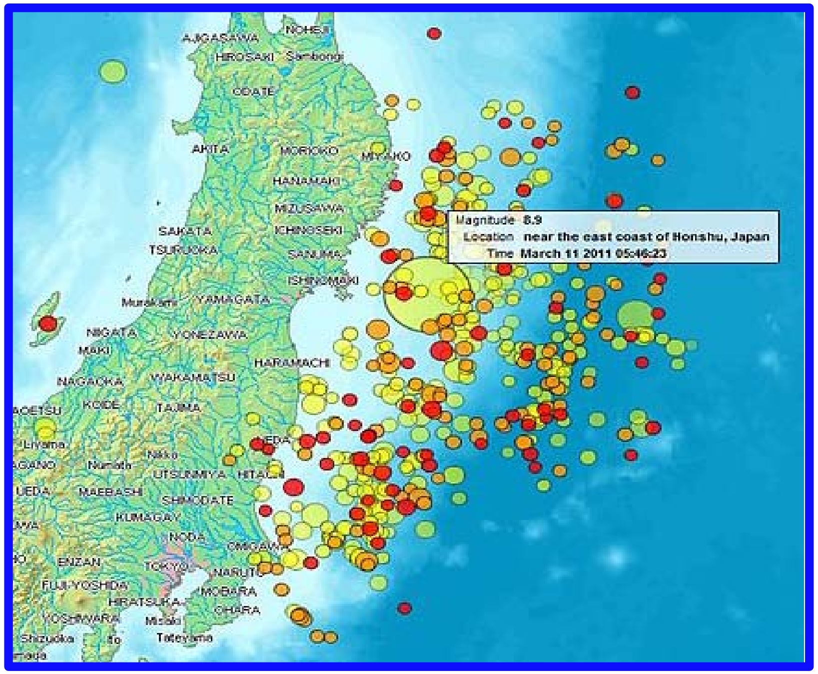
When a butterfly flaps its
wings in one part of the world……

……it causes a
hurricane in another
part of the world

2011 Story

Scene 1

28 March 2011 Pacific Ocean Earthquake



Scene 2

Earthquake triggered Tsunami in Japan

pulse
commercial utilities

Scene 3

Japanese nuclear power station meltdown

Scene 4

Germany decides to close nuclear stations for safety audits

Scene 5

Scene 6

Election of green coalition in Germany = Permanent closure of nuclear plants

Electricity and Gas price increases throughout Europe because Germany dictates electricity European electricity prices pulse commercial utilities

Arab Spring – tensions in the Middle East fuel speculation of LNG disruption.

Rumoured and actual plant maintenance in key regions like Russia, Norway and Middle East.

Gas Prices 2011 (Annual vs. Month Ahead)

Electricity Prices 2011 (Annual vs Month Ahead)

Gas Prices 2011 (Fixed vs. Flexible Prices)

Electricity Prices 2011 (Annual vs Month Ahead)

Electricity Cost Breakdown

Charges	Negotiable	Contract Value %
TUos	Fixed	10-15%
DUos	Fixed	15-20%>
Metering – Settlement Charge	Fixed	>1%
BUos	Fixed	1-2%
Site Losses	Fixed	3%
Commodity	Flexible	50-60%

Gas Costs Breakdown

Charges	Negotiable	Contract Value %
NTS	Fixed	1%
LDZ	Fixed	7-12%
Metering Charges	Fixed	1-2%
Commodity	Flexible	80-85%

Why 2011 has been the Year for Flexible Energy Strategies

1. Forward Annual Prices have been consistently higher than Month Ahead

2. Suppliers have released Flexible Products for the Masses (300,000 AQ for Gas and most HH sites for Electricity can have flexible contract)

3. Annual buying now seems redundant given the wholesale markets trade in months, quarters, seasons

pulse
commercial utilities

Fixed vs. Flexible Risk Management

1. The requirement for Budget Certainty

2. Management of Flexible Procurement – Supplier contracts transfer all risk to Client

3. Importance of energy prices and ability to absorb cost increases

4. The culture within the organisation

5. Understanding of the Energy Market – save for Chaos Theory !

OUTLOOK FOR 2012 AND BEYOND

1. Chance that Annual or Seasonal Prices could catch up to Month Ahead prices making fixed long term deals more attractive SHORT TERM

2. The impact of Shale Gas and Shale Oil could have a similar impact to energy prices in the US - MID TERM

3. Investment in low carbon generation infrastructure will be costly compared to current – LONG TERM

4. Wholesale Gas prices may no longer become indexed linked to Oil Prices – MID to LONG TERM

5. CHAOS THEORY AND THE BUTTERFLY EFFECT – SHORT, MID AND LONG TERM