

eircom LIEN / AEE seminar

**Effective energy procurement and risk
management**

10 September 2013

Content



- ❑ Kore Energy services
- ❑ Key procurement and risk management issues for large users
- ❑ What is driving your electricity price?... A look at the key components
- ❑ Understanding the environment: Wholesale energy markets
 - Crude oil markets
 - UK natural gas
 - Carbon
 - Irish and UK spark spreads
- ❑ The solution.... Active energy price risk management
 - Flexible risk management strategy – how does it work?
 - Getting the strategy right
 - Strategy simulation V market
- ❑ Questions and Answers

Kore Energy Services



Energy Procurement



Risk Management



Carbon Management



Market Intelligence



**For lower energy costs and
peace of mind**



Who we are and what we do



Market leaders in Ireland in energy procurement and risk management

Service providers to 5 of Irelands top 10 energy users

Fully independent.... No revenue streams from energy suppliers

Service providers to global leaders in I.T., Pharma and Food sectors

Negotiated first fully flexible electricity supply contracts in Ireland

Delivered clients savings in excess of €70 million in past two years

Key procurement issues for large energy users



Is spark spread charge in line with wholesale market (i.e. competitive)?

Is gas to electricity price link market reflective?

Are fix and unfix options (tranche size and number of trades) acceptable?

GBP/EUR rate for wholesale gas: Embedded hedge or fixed at time of trade?

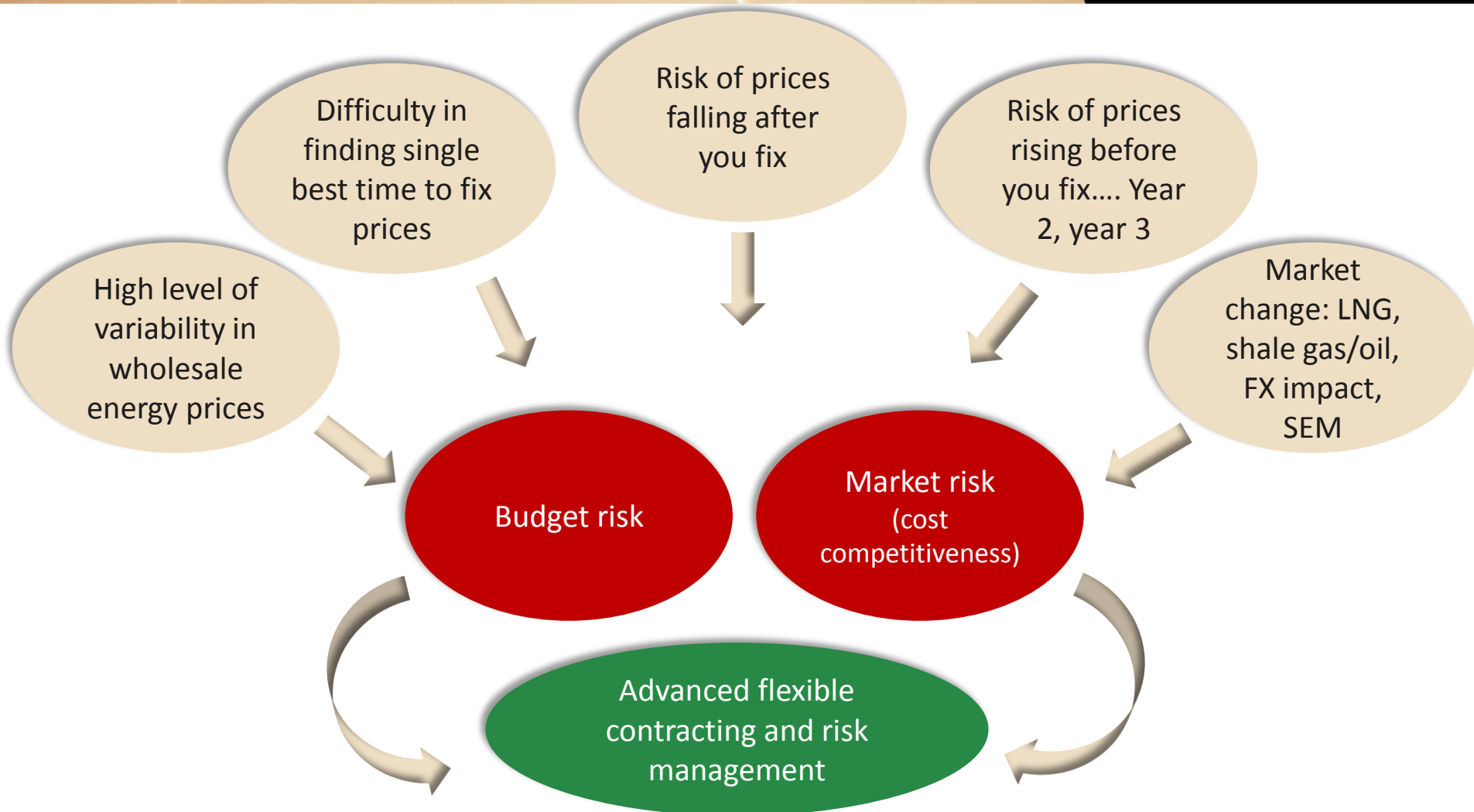
Is carbon price fixed or variable?

What price elements are subject to change?

What are the volume balancing arrangements: market based, symmetrical?

Any other penalties, taxes, levies to be considered?

Key Risk Management issues for large energy users



Contract selection for large energy users



Fixed price contract

Indexed contract

Fix only Flexible contract

Fully Flexible contract (fix and unfix)

Delivers budget certainty

Market reflective

Works in a rising market

Works well in rising and falling markets

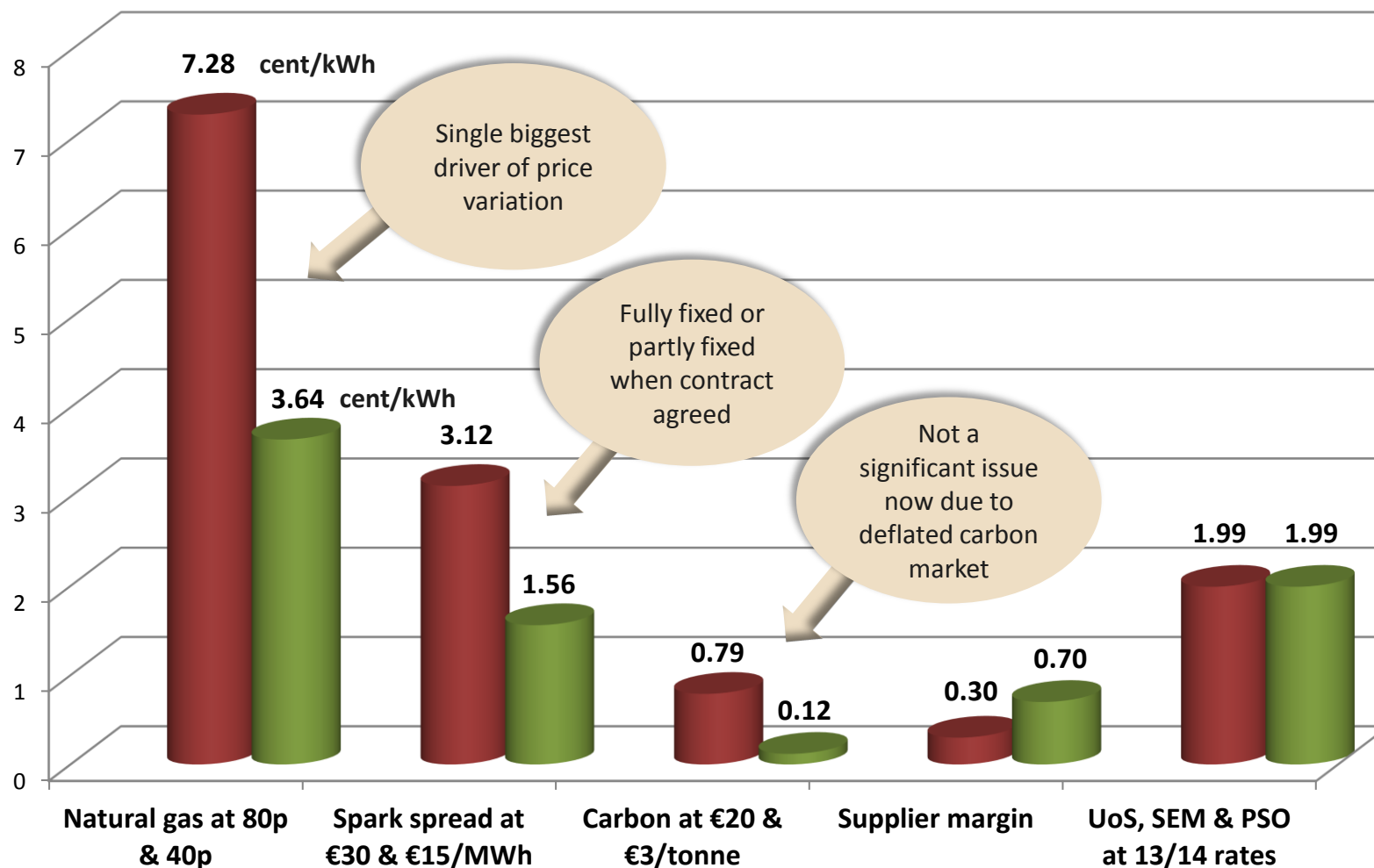
Adverse impact on costs over time

But why track a rising market?

But difficult to deploy in a volatile market

Effective for budget risk and market risk

Wholesale gas price is key driver for Irish electricity prices

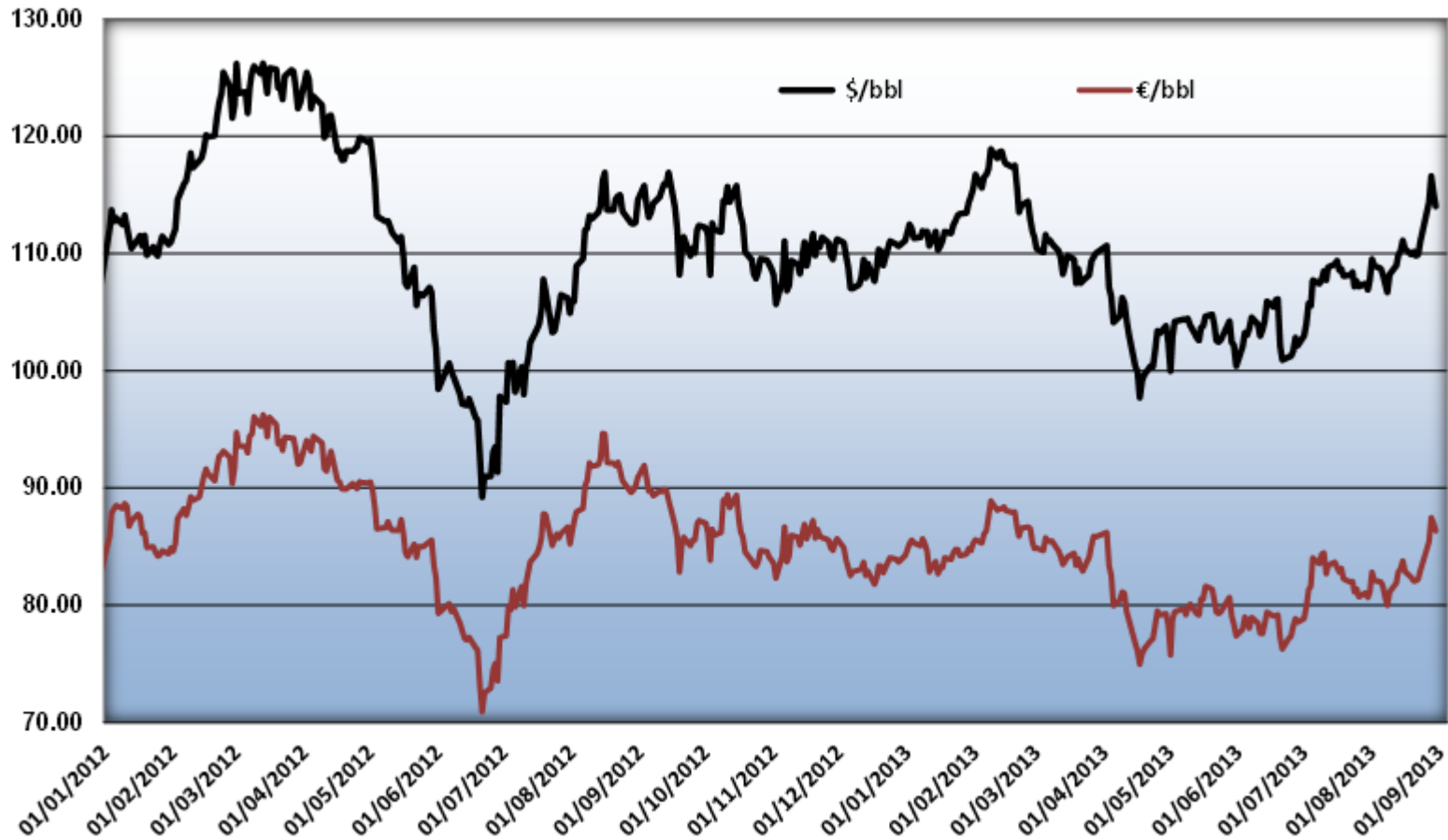


Understanding the environment for energy procurement and risk management

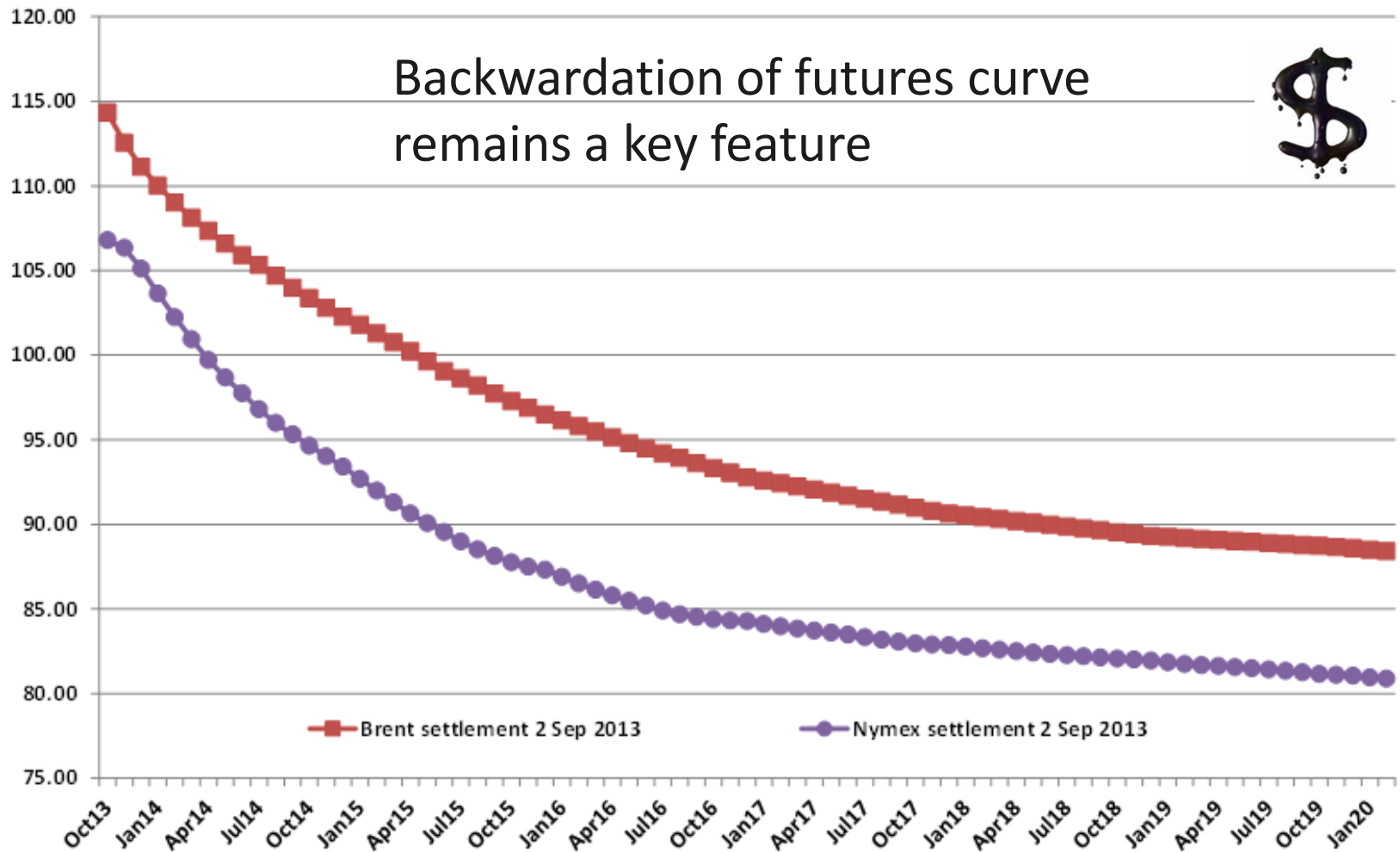
Wholesale energy market overview

Crude oil markets
UK gas market
Shale gas
LNG
Carbon

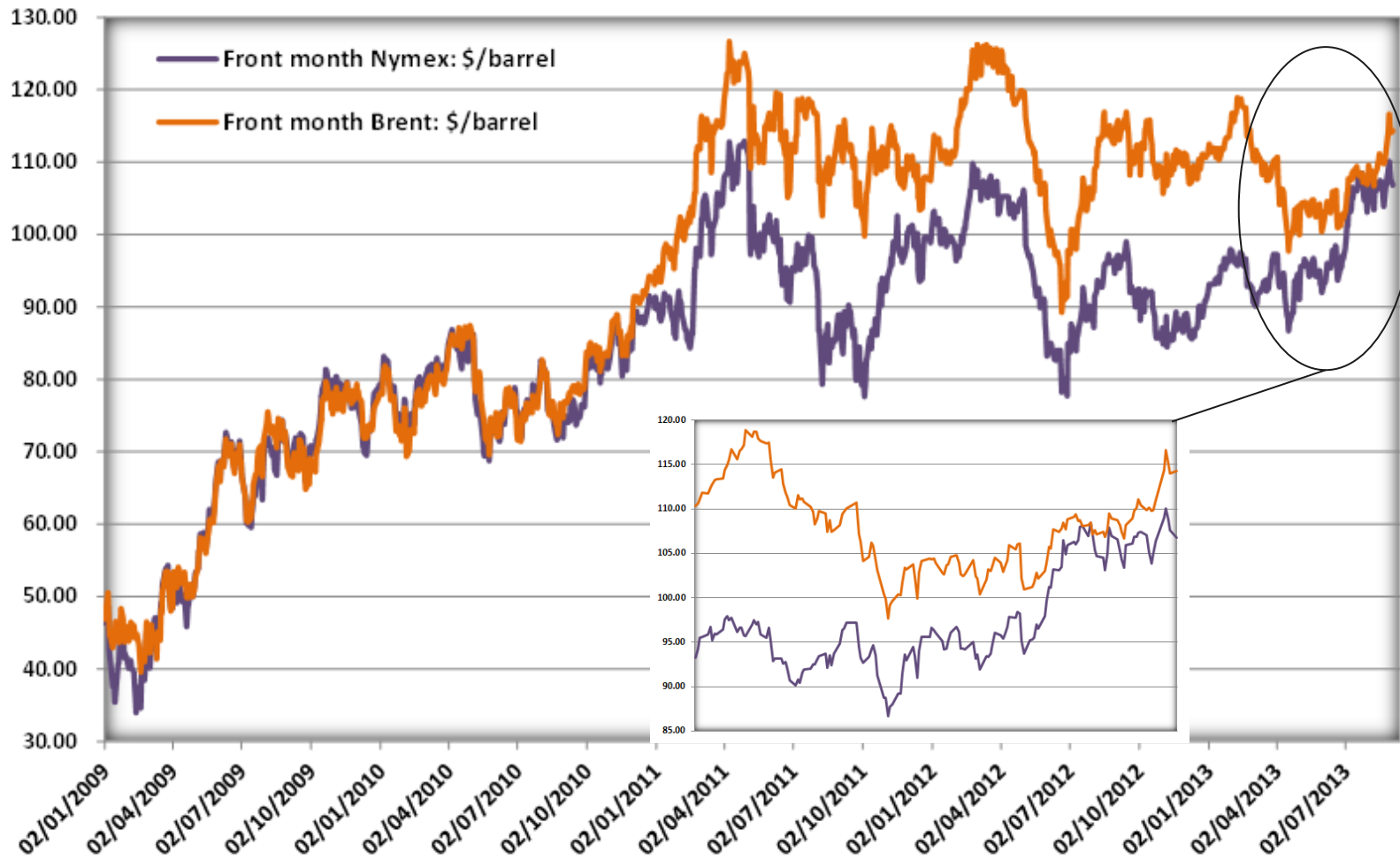
High degree of volatility in crude oil prices over past 18 months



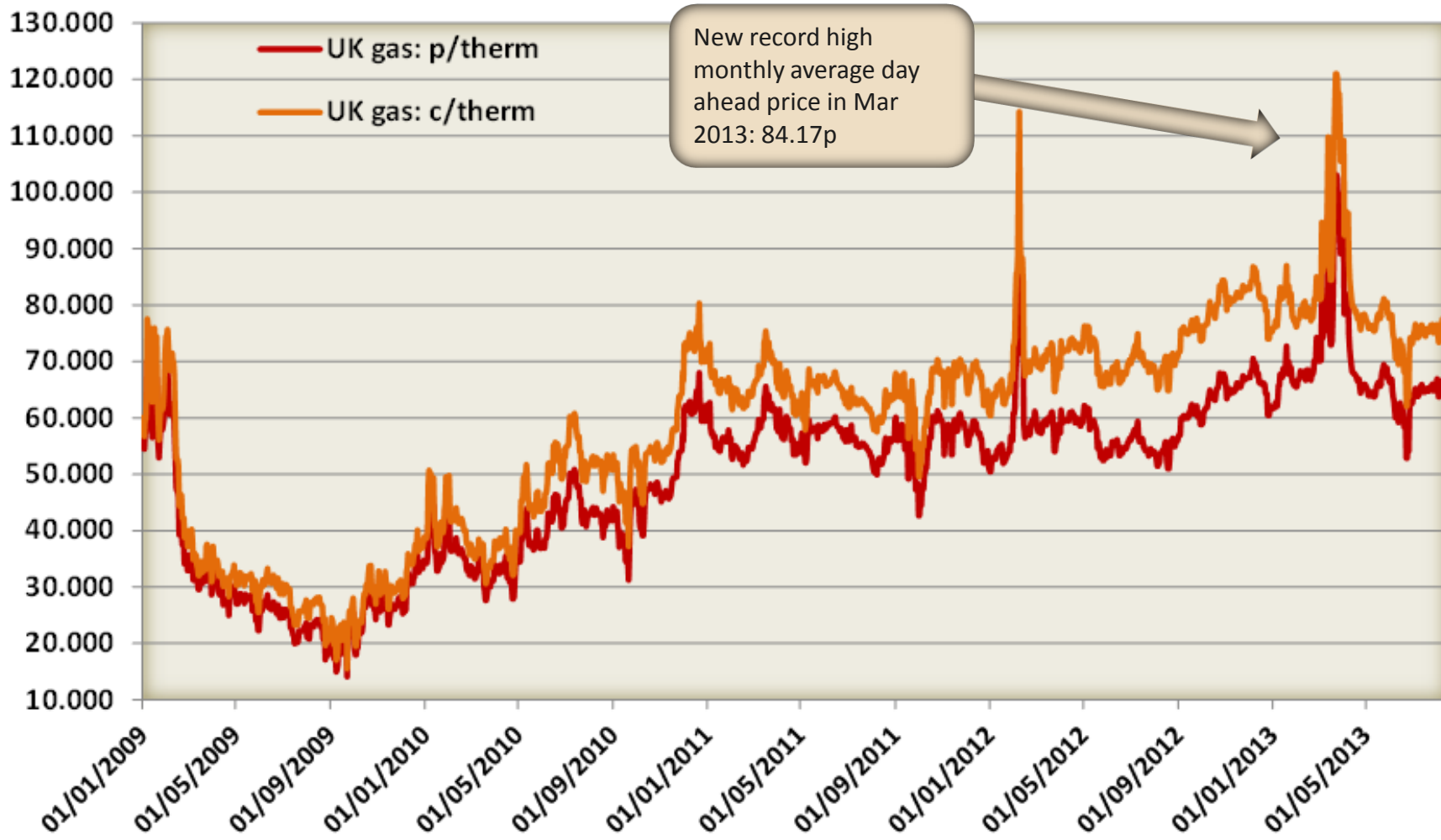
But front month pricing is only part of the picture



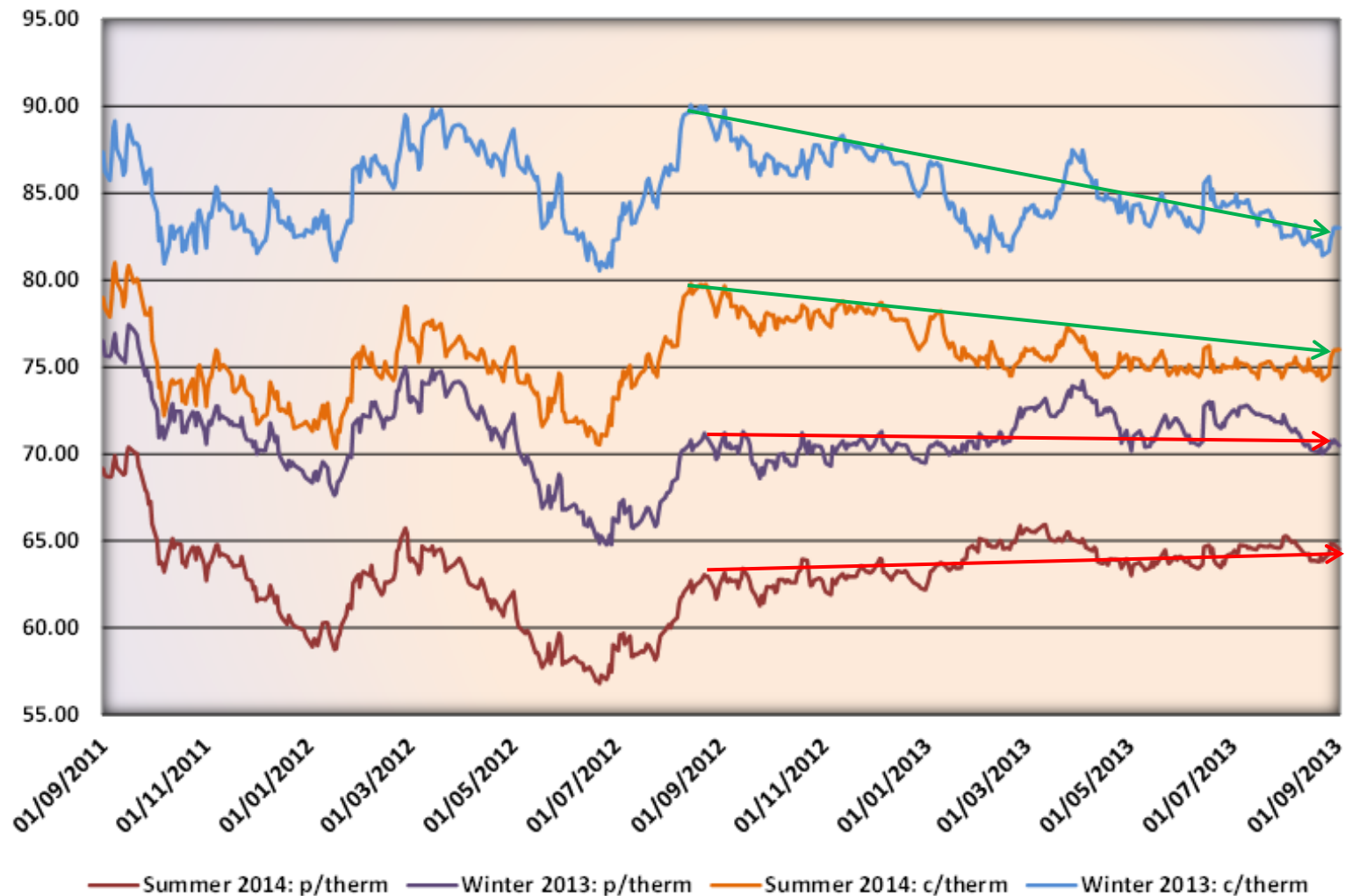
Brent and Nymex divergence a key issue over past two years



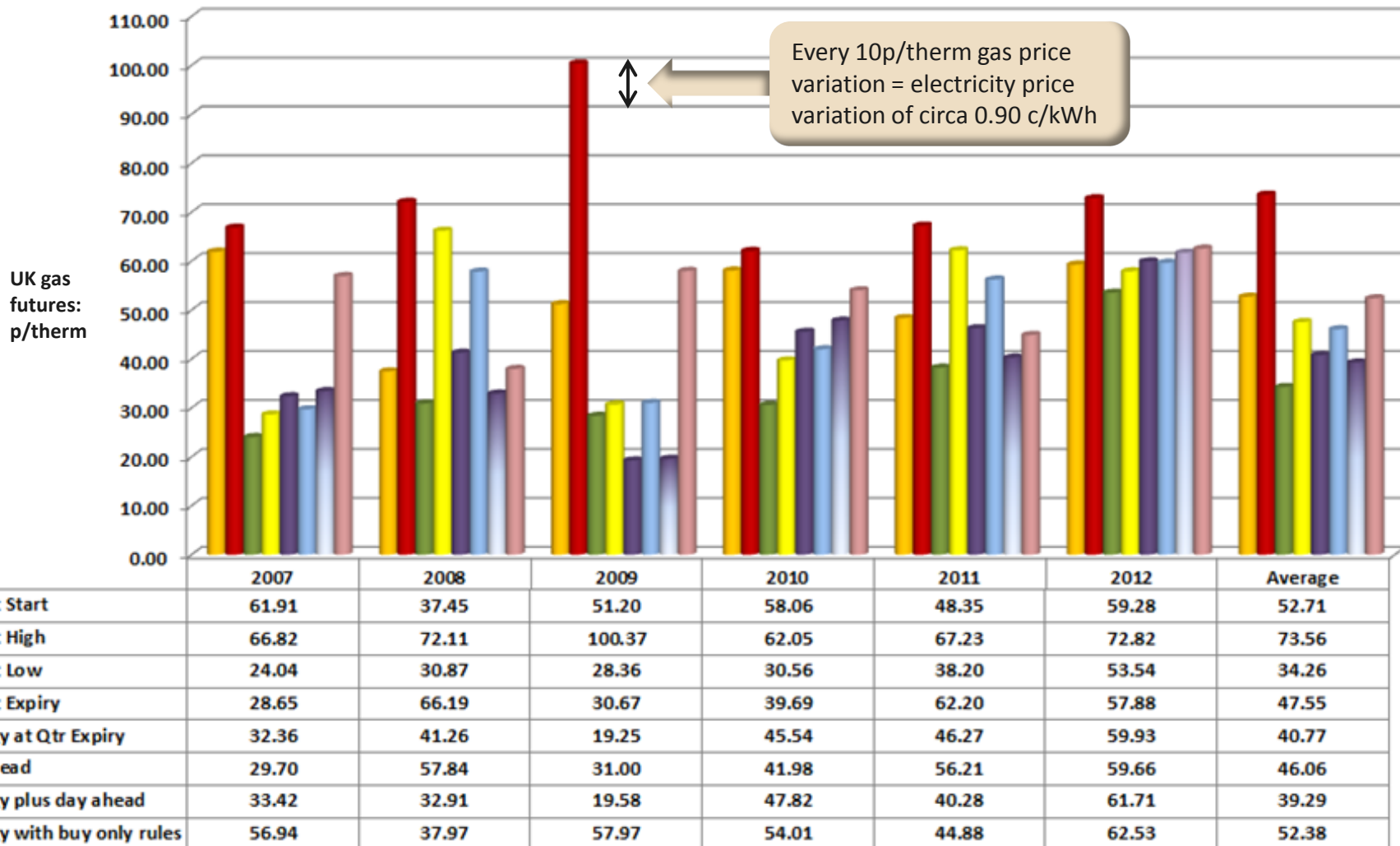
Day ahead gas prices remain strong through 2013



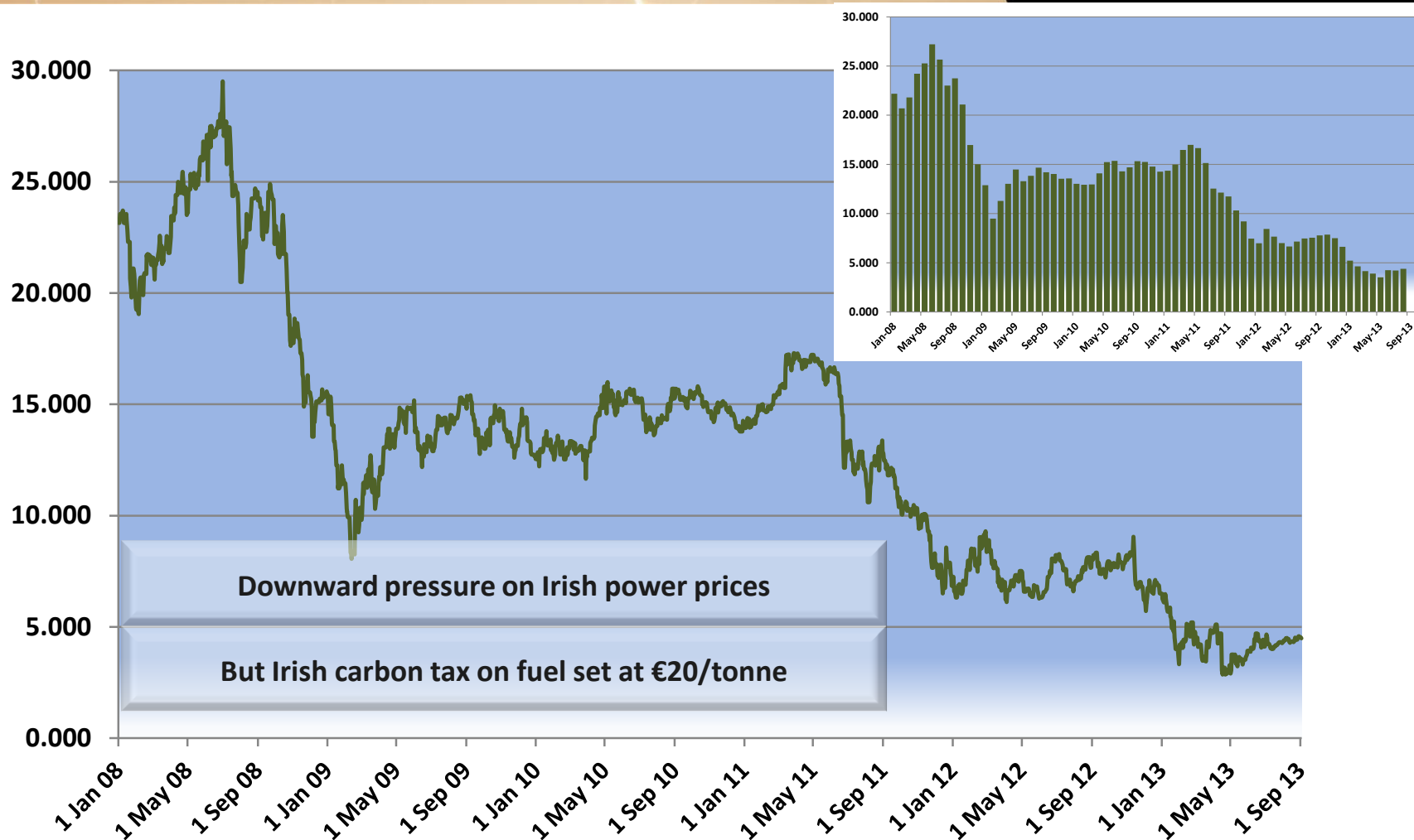
Different direction for gas prices in euro and sterling values



... much higher degree of variability in gas prices over last 6 years



Excess carbon allowances and weak demand continue to weigh on carbon market

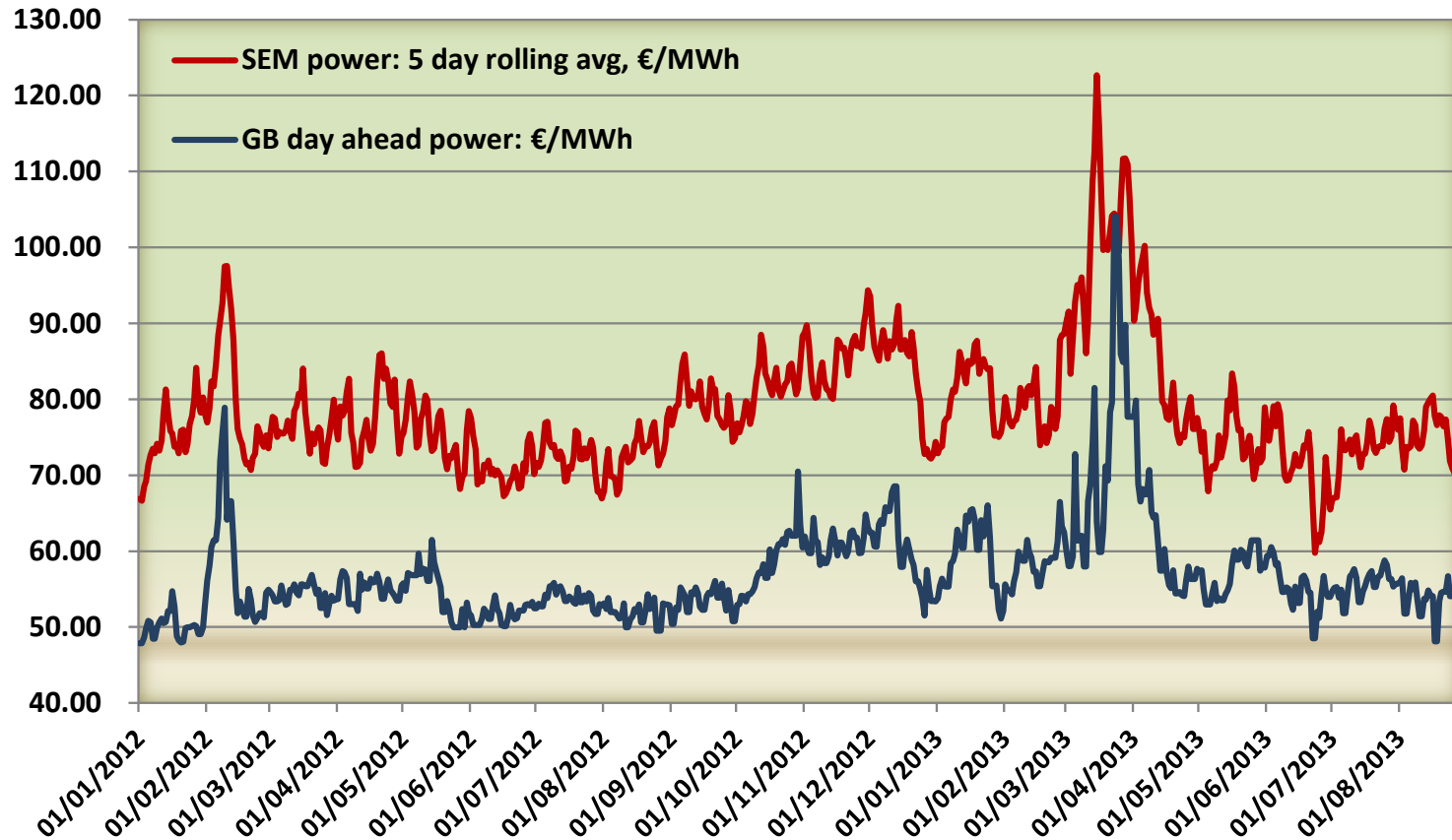


Relative competitiveness also a key issue

Irish SEM pricing versus GB and continental European markets

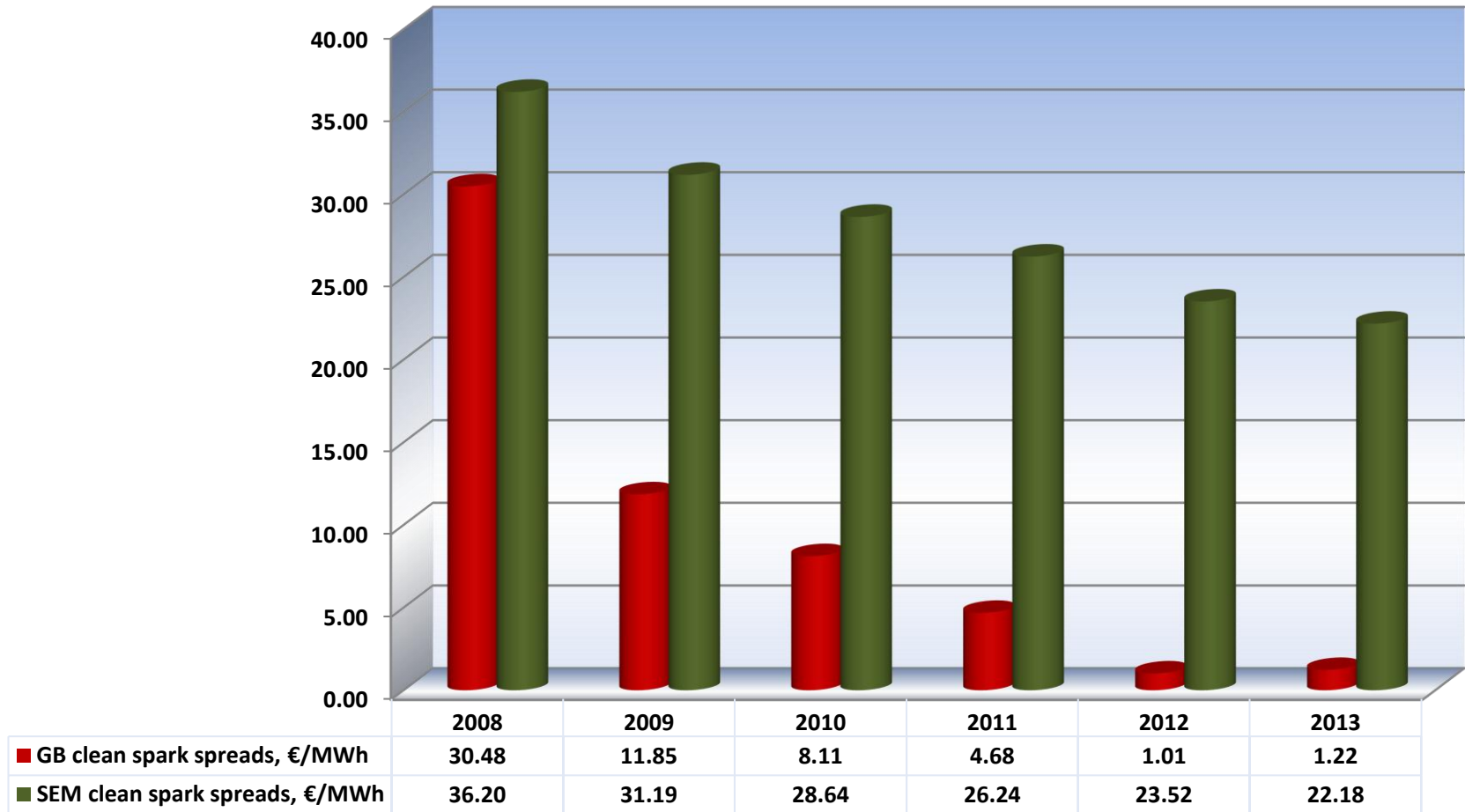
Upward trend in electricity pass through charges

Market risk not just about how and when you buy – location also an issue

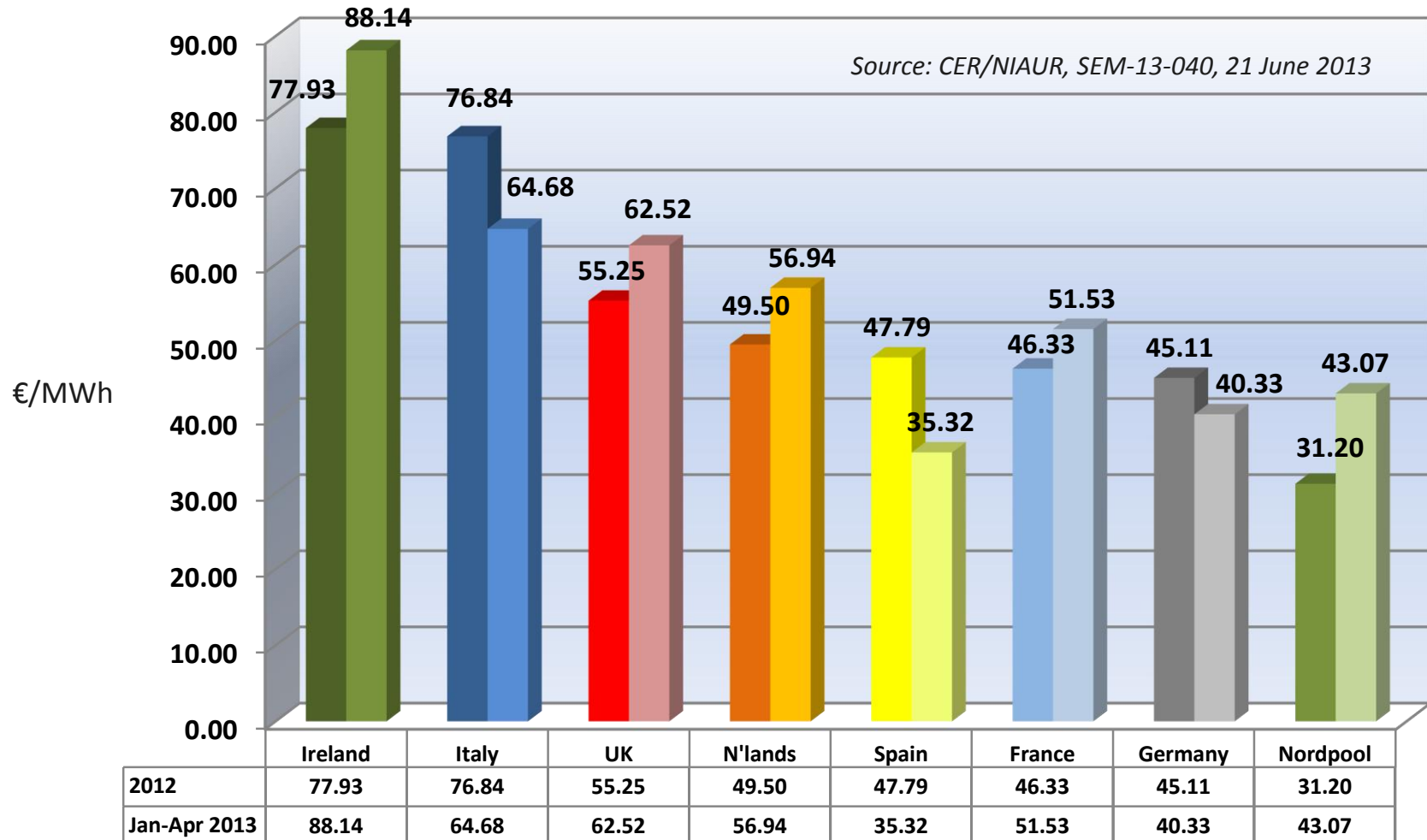


2012: SEM average is €77.64/MWh V €55.19/MWh for GB market
2013 YTD: SEM average is €79.99/MWh V €59.22/MWh for GB market

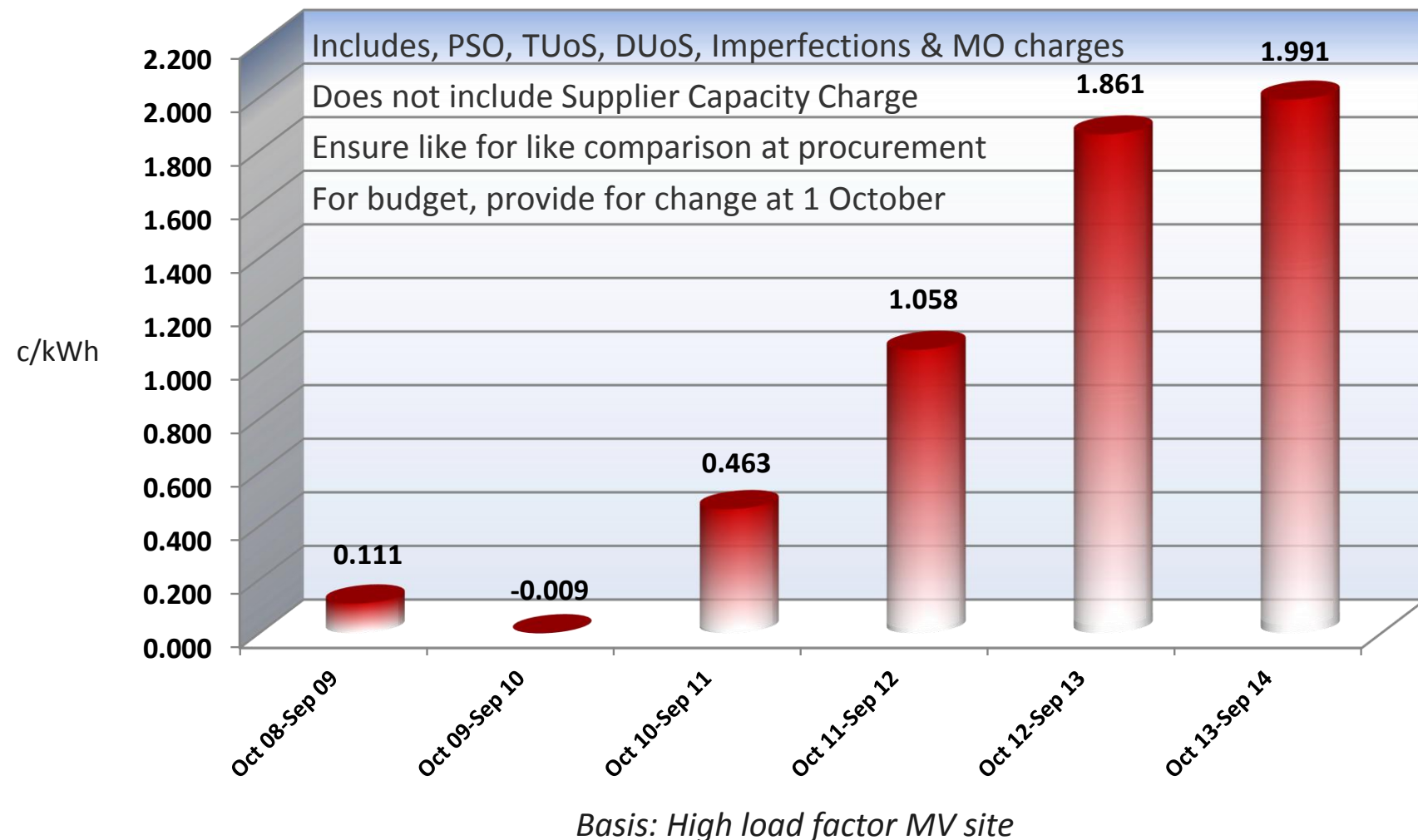
Year on year decline in Irish spark spreads: But strong premium over GB



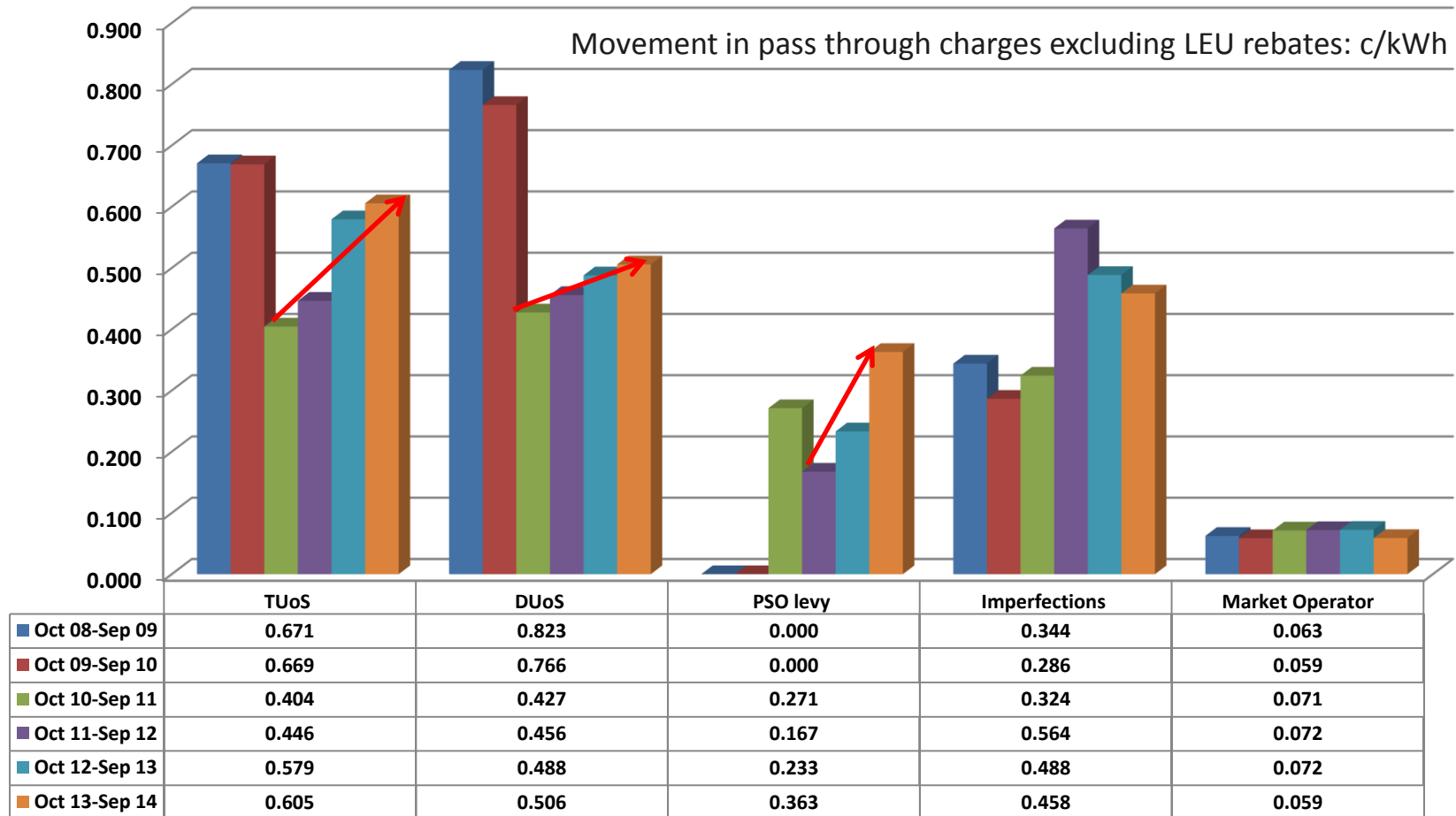
Competitive position for Ireland not improving through 2013 (but note Seasonality)



Important to understand pass through elements (electricity)



Some worrying trends in pass through charges



Basis: High load factor MV site

So now we know.....



Energy markets rise and fall, often rapidly

Differential between market highs and lows is significant

Recognising value in the market (a “good price”) can be difficult

Increasing complexity and changing market dynamics adds to the problem

Having a strategy that will deal with all eventualities provides solution

Risk Management Strategy



Budget certainty

Cost Competitiveness

Lower Energy Costs

And peace of mind

STRATEGY

Getting the strategy right



Pre agreed triggers for fixing & unfixing positions (gas element of electricity price)

Appropriate balance between budget risk and market risk

Timely protection of positions in a rising market

Cautious un-fixing of positions in a falling market

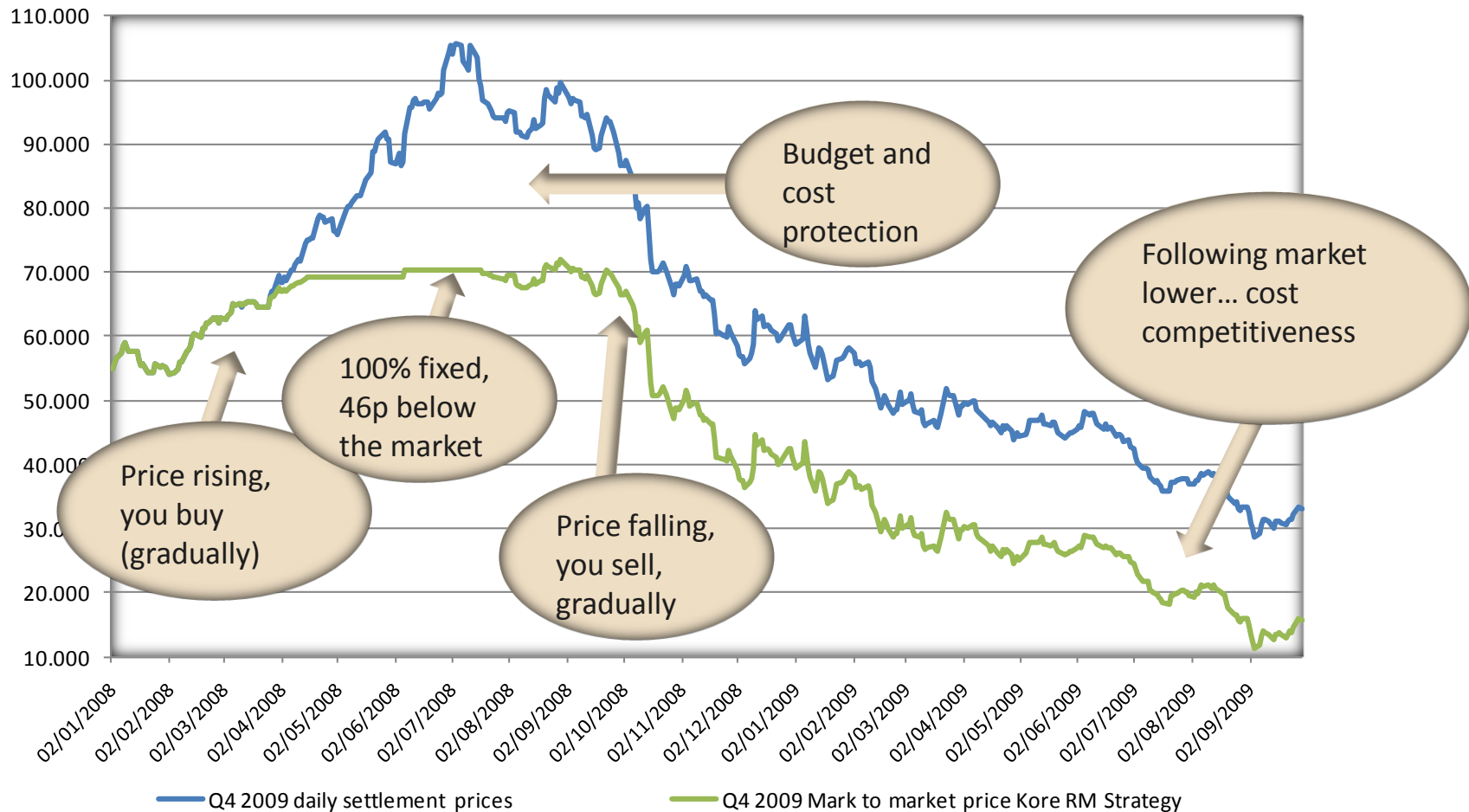
Clear written risk management policy & stakeholder commitment

Regular performance review

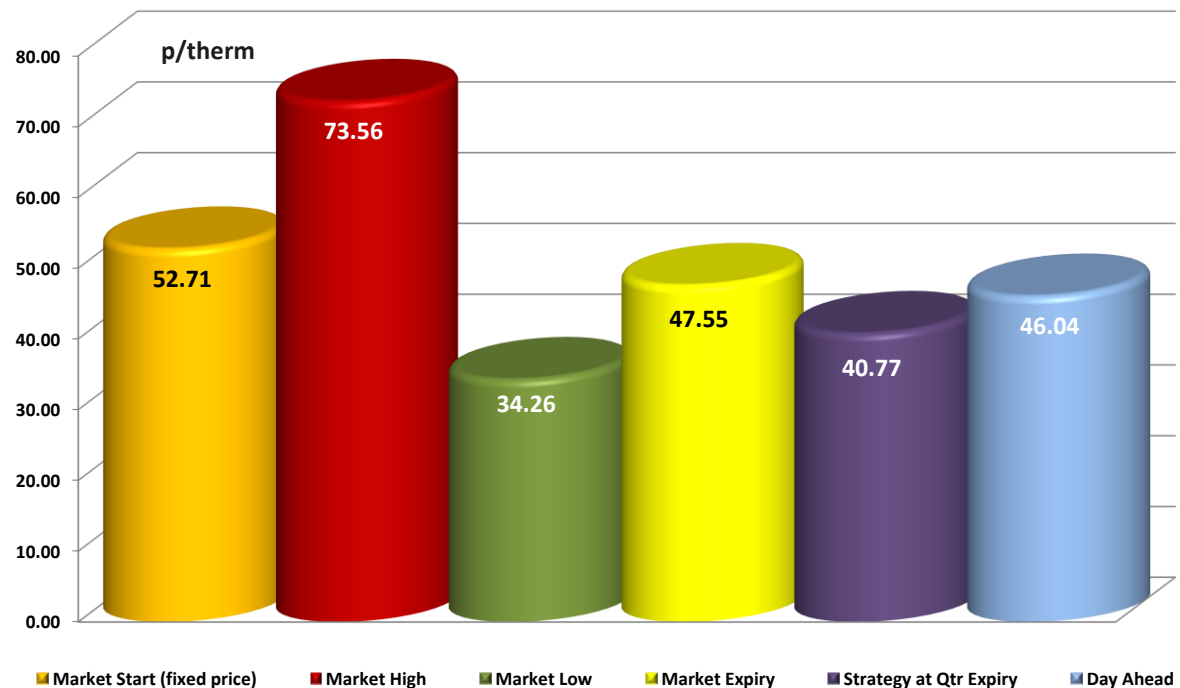
Daily market analysis to support decision making

Real-time trading

Flexible strategy: How does it work?



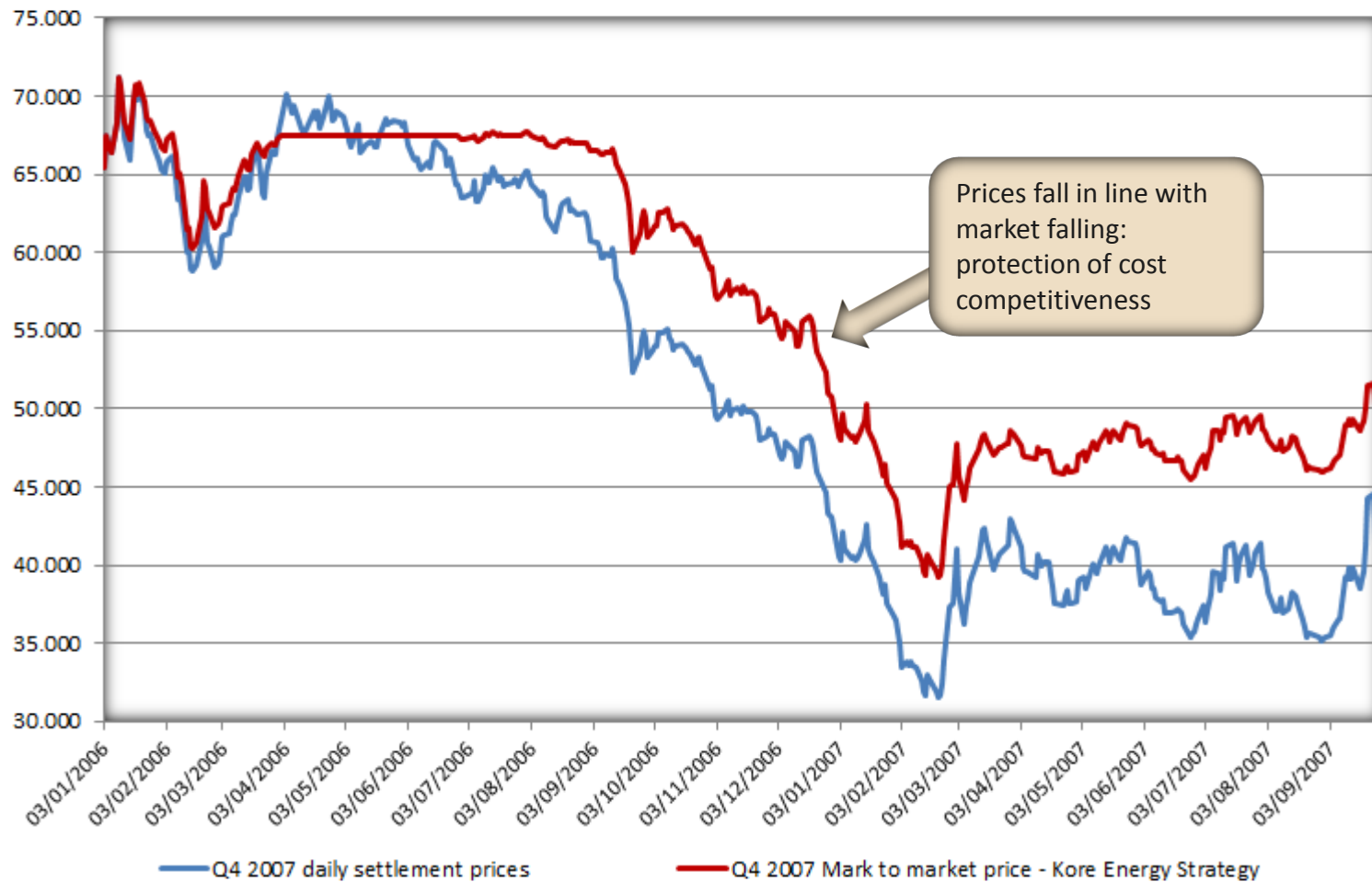
Strategy performance V market over past 6 years



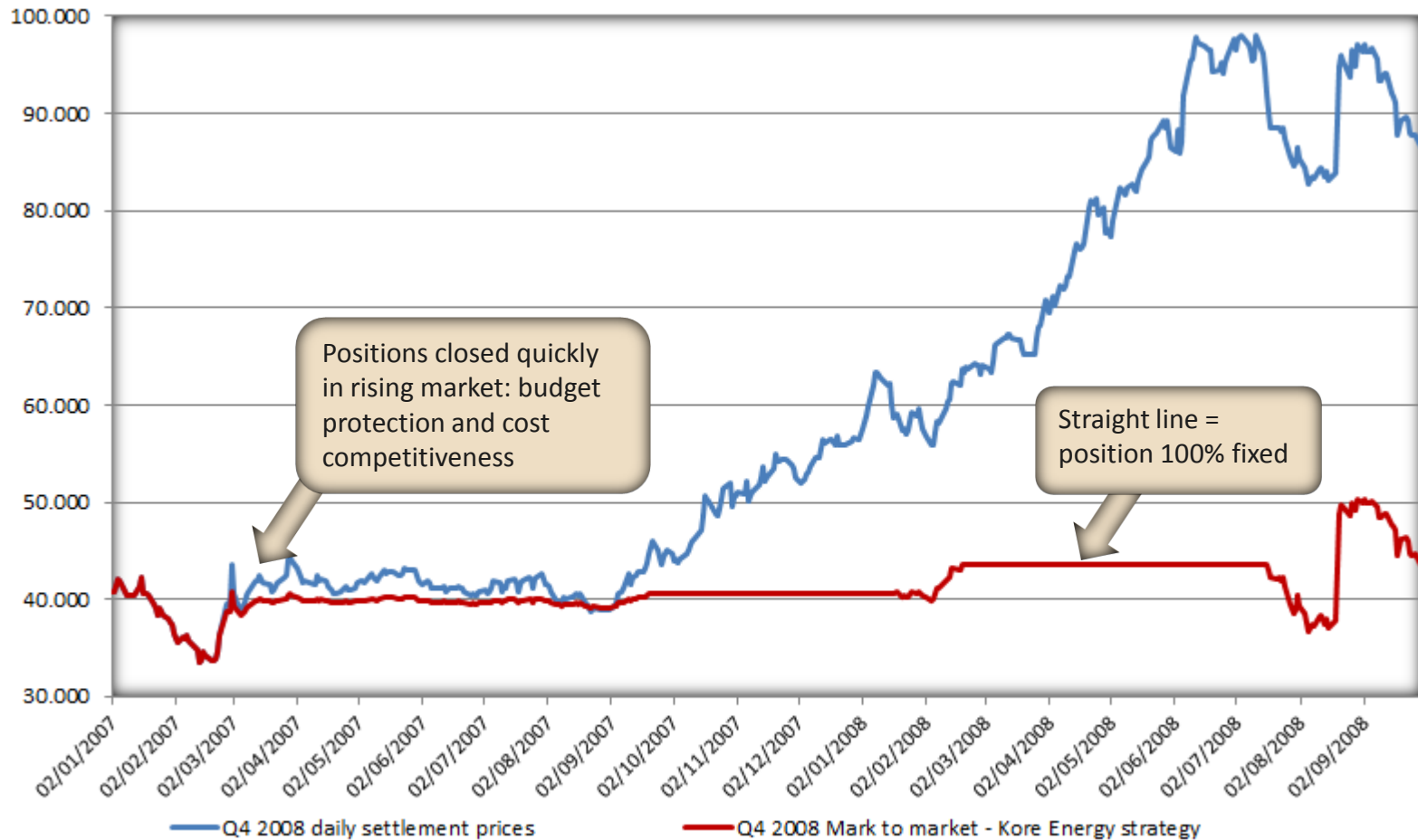
- Strategy = 40.77 p/therm
- Equates to 3.36 c/kWh (excluding spark spread, carbon, pass-through etc.)
- Market high of 73.56 p/therm = 6.058 c/kWh
- Strategy is within 6.51 p/therm (0.54 c/kWh) of market low
- Strategy averages 11.94p (0.98 c/kWh) below fixed price

	Market Start (fixed price)	Market High	Market Low	Market Expiry	Strategy at Qtr Expiry	Strategy V Mkt start	Strategy V mkt high	Strategy V Market low	Strategy V Market Expiry	Day Ahead
2007	61.91	66.82	24.04	28.65	32.36	-29.55	-34.46	8.32	3.71	29.70
2008	37.45	72.11	30.87	66.19	41.26	3.81	-30.84	10.40	-24.93	57.84
2009	51.20	100.37	28.36	30.67	19.25	-31.95	-81.11	-9.10	-11.41	31.00
2010	58.06	62.05	30.56	39.69	45.54	-12.53	-16.51	14.98	5.85	41.98
2011	48.35	67.23	38.20	62.20	46.27	-2.09	-20.97	8.06	-15.93	56.21
2012	59.28	72.82	53.54	57.88	59.93	0.65	-12.88	6.40	2.05	59.54
Average	52.71	73.56	34.26	47.55	40.77	-11.94	-32.80	6.51	-6.78	46.04

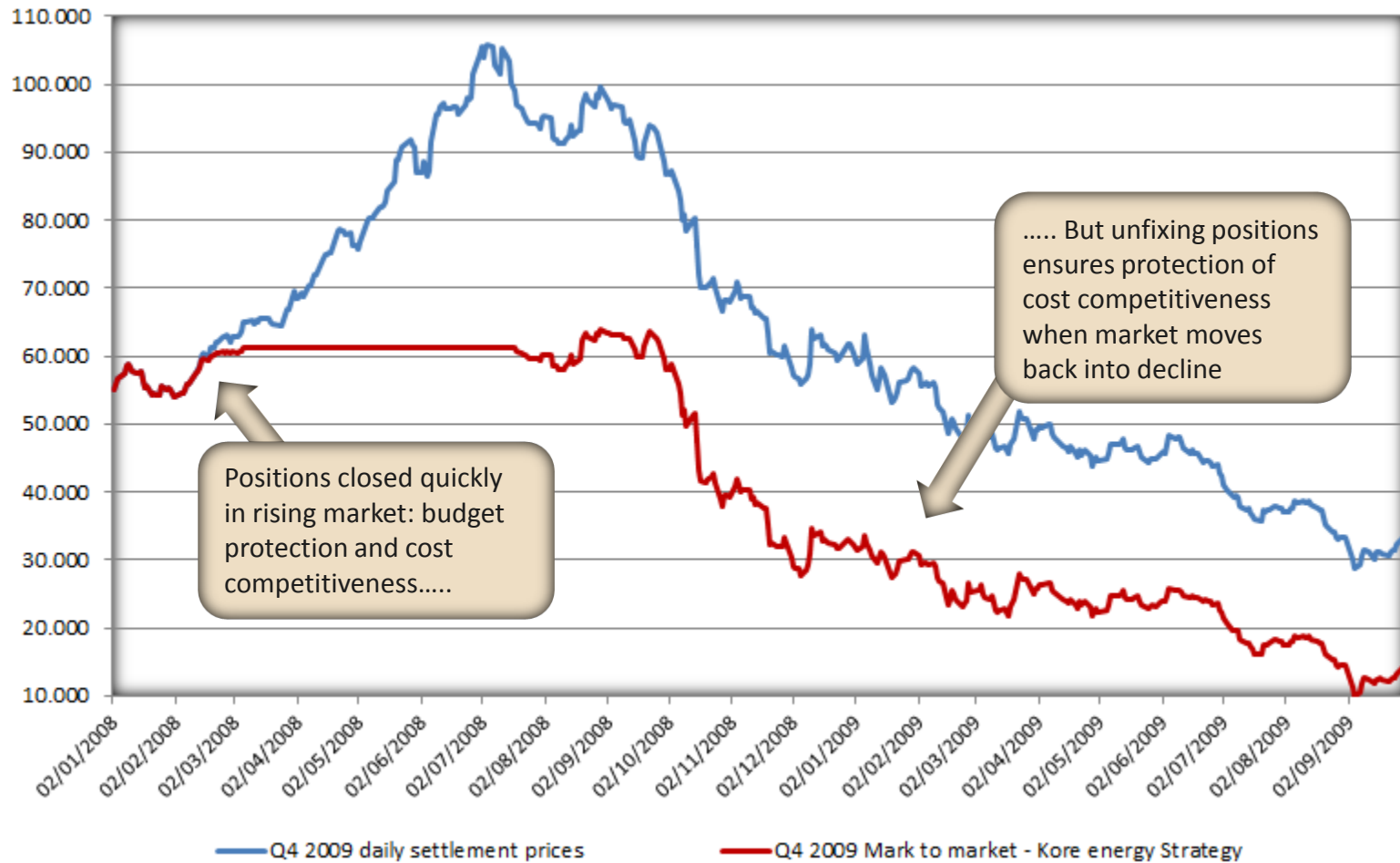
Works well in a falling market



And works well in a rising market



And in one that rises *and* falls



**..... Not just “colour by numbers”
... market intelligence is also key**



Monitoring and evaluating

Daily reporting, prices, supply & demand...

Price projections

Crude oil, power, LNG, coal, carbon

Changing market dynamics.... Shale gas...



In summary



Wholesale energy markets are the single key driver of energy costs in Ireland

Wholesale energy markets will rise and fall over time

Important to understand cost and benefit of alternatives, fixed, indexed, flexible

Flexible strategy, including fix and unfix transactions, provides optimum solution

Achieve competitive energy costs without forsaking budget certainty

Thank You



Energy Procurement



Risk Management



Carbon Management



Market Intelligence



Tip the scale in your favour

Contact Us

Phone: +353 1 808 5555

Fax: +353 1 808 5554

energy@kore.ie

www.kore.ie