

Financial aspects of emissions trading

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About Barclays Capital

- Barclays Bank is a major global financial services provider
 - Involved in banking for over 300 years
 - AA rated financial institution
- Barclays Capital is the investment banking arm of Barclays Bank Plc
- Commodities are a strong focus for Barclays Capital
 - Global market presence – Trading and Sales in Europe, Americas and Asia
 - Over 300 front office professionals with extensive industry and market experience
- Barclays have been at the forefront of the environmental markets since 2004
 - One of the market's largest liquidity providers – Over 2 billion tonnes traded
 - Clients include governments, utilities, industrials, carbon project developers
 - Specialised sales and primary CDM origination team



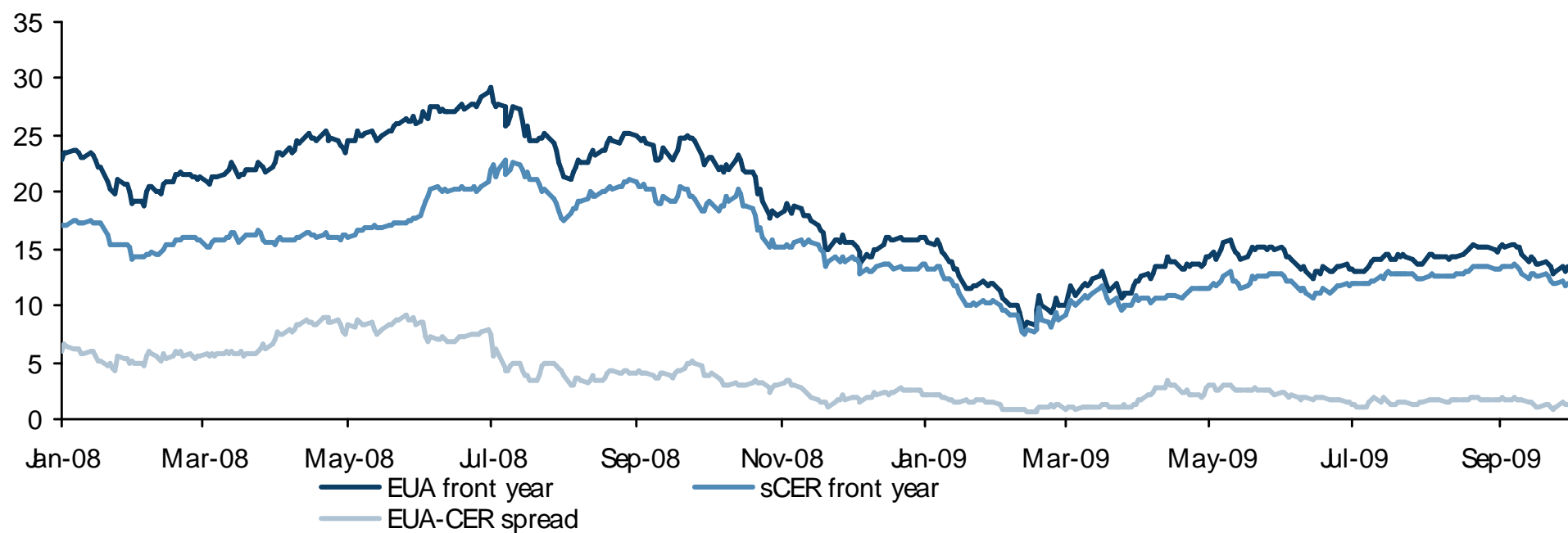
Carbon Market Outlook

Harshika Patel, Barclays Capital



EU ETS price history: phase 2

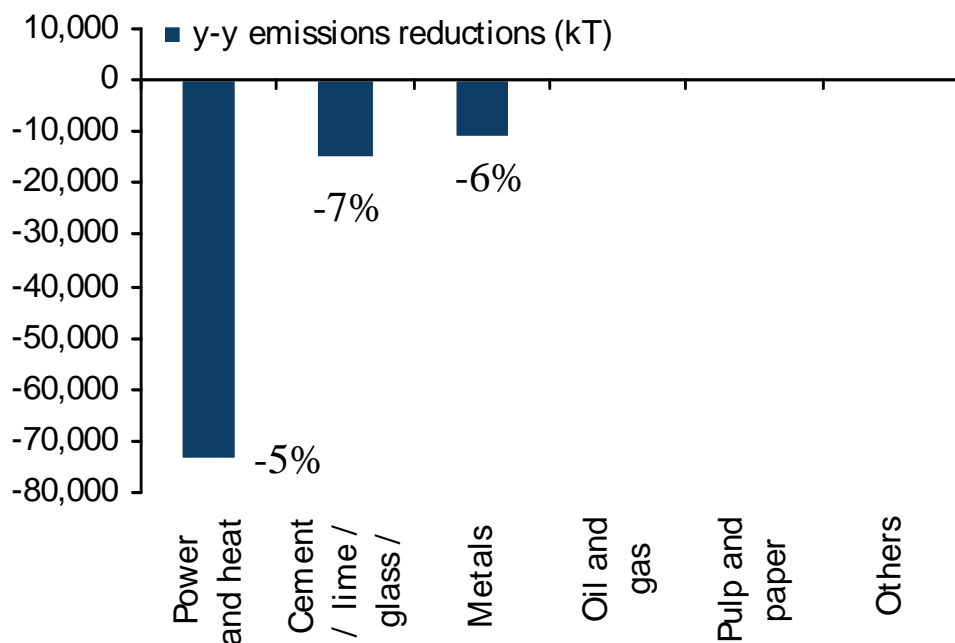
Phase 2: Impact of current recession



Source: ECX, Barclays Capital

Sector emissions performance

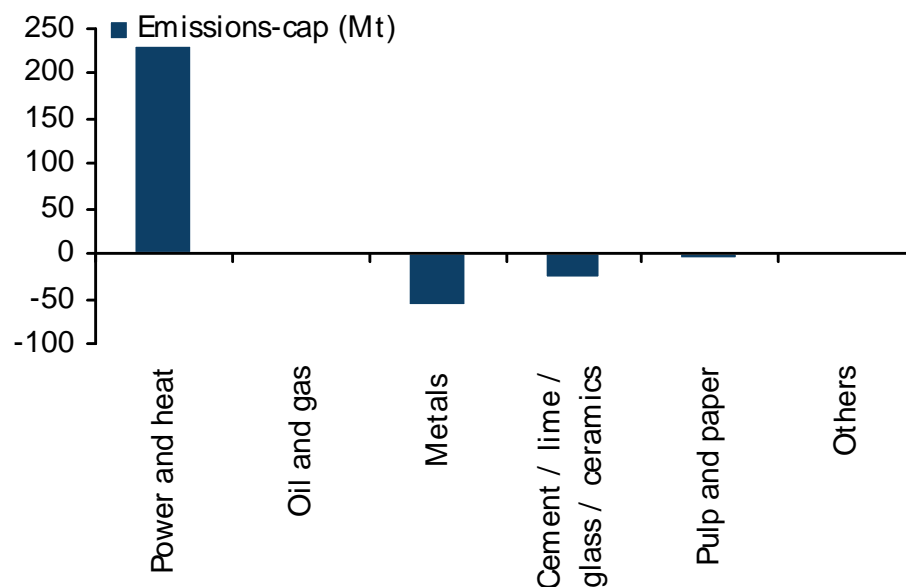
2008 emissions were down 4-6%



Source: CITL, Barclays Capital

Biggest proportional reductions in cement, lime and glass

Power was the only short – but a big short

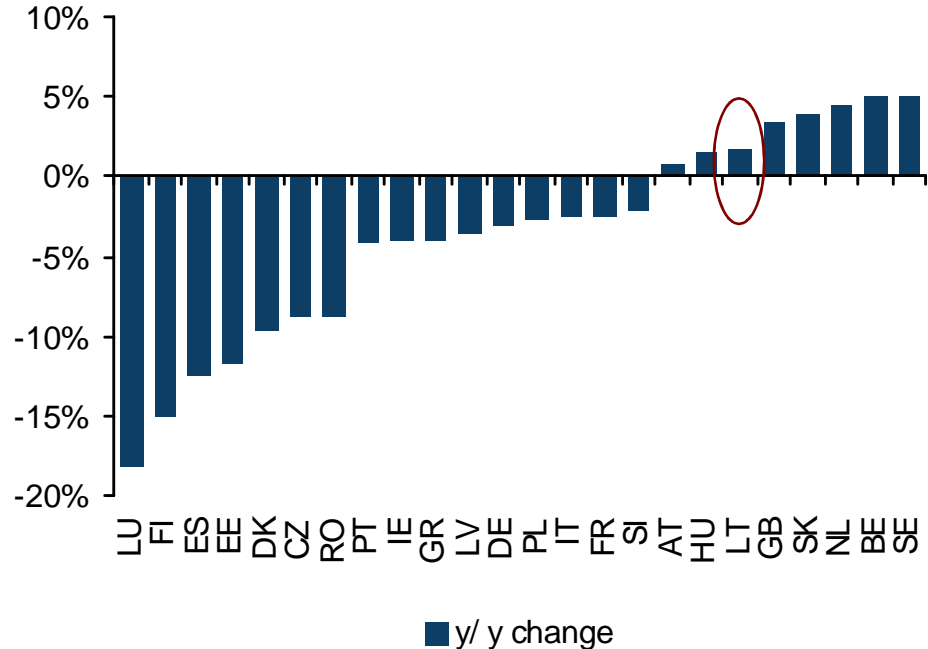


Source: CITL, Barclays Capital

Overall short was 116 Mt but average price was 22 €/t

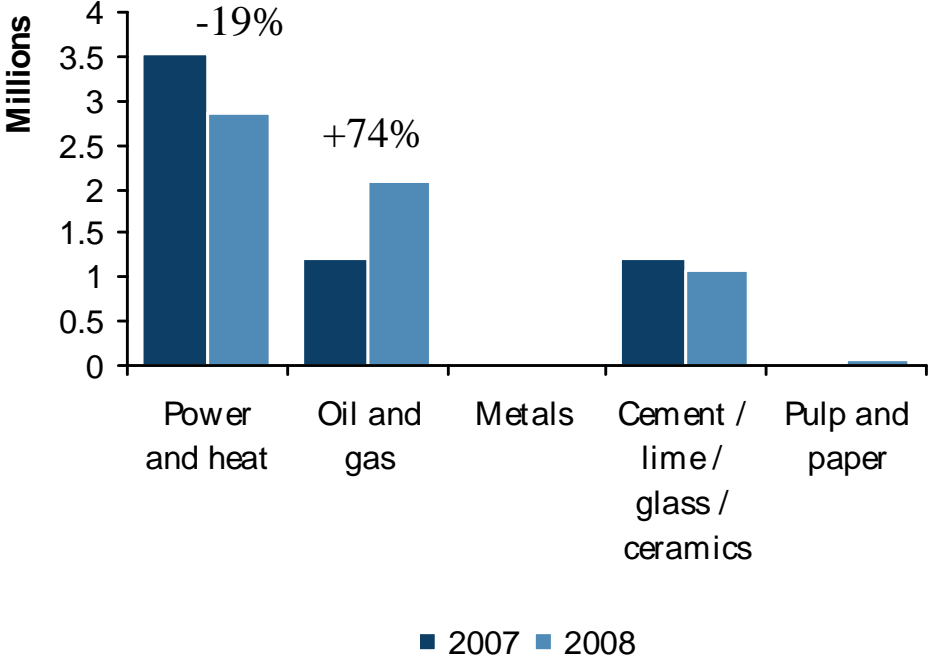
Country emissions performance

Lithuania saw an emissions increase of 2% or 0.1 Mt



Source: CITL, Barclays Capital

Lithuania's increase driven by oil and gas emissions



Source: CITL, Barclays Capital

Despite big % reduction in power



2008 sector performance: Lithuania

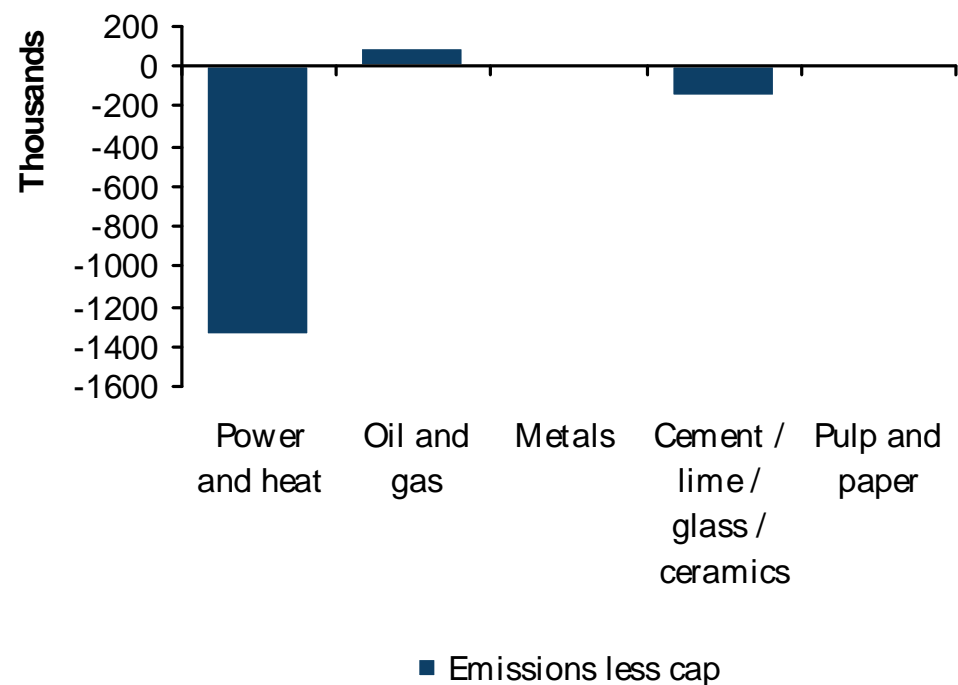
2008 EU ETS performance

Total emissions = 6.1 Mt

Allocated = 7.5 Mt

Net long = 1.4 Mt

Power and heat was the main long

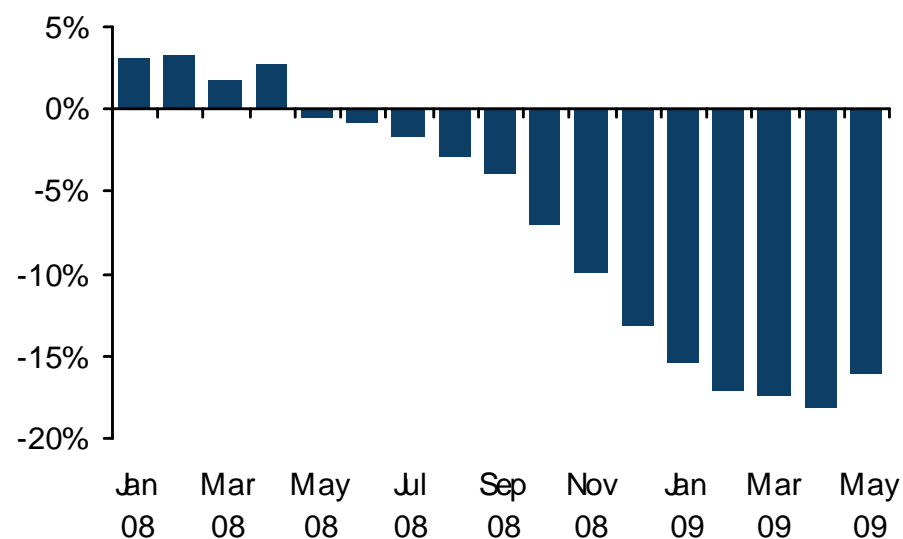


Looking forward – 2009 economic activity has been poor

GDP outlook now stabilising

	Western Europe	Central Europe	EU
Dec-08	-0.5%	2.8%	-0.2%
Apr-09	-3.2%	-1.7%	-3.2%
July-09	-4.3%	-4.9%	-4.4%
October -09	-3.7%	-4.7%	-3.8%

Source: Barclays Capital



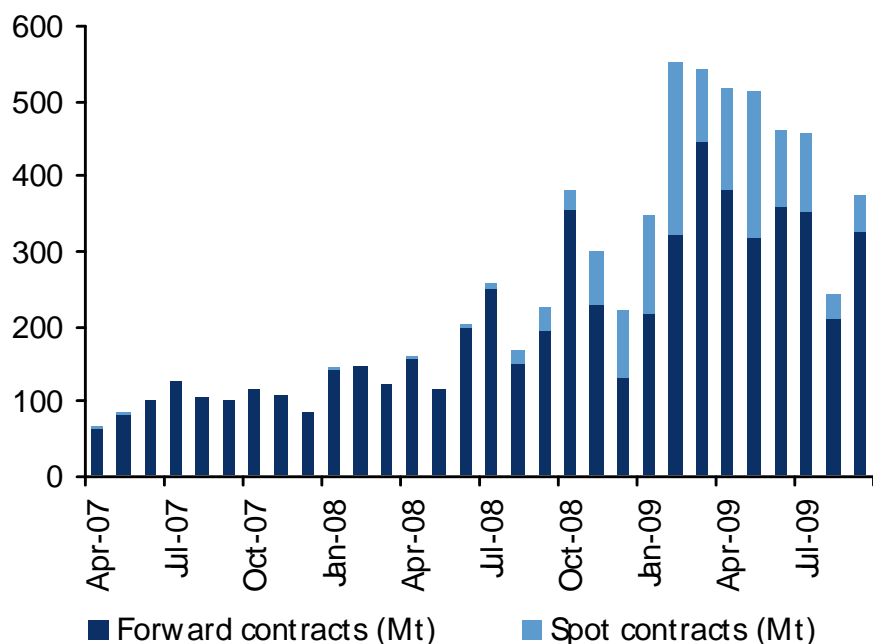
Industrial performance remains poor – 17% down y/y for H1 2009

■ Y/ Y change in EU industrial production (%)

Source: Eurostat, Barclays Capital

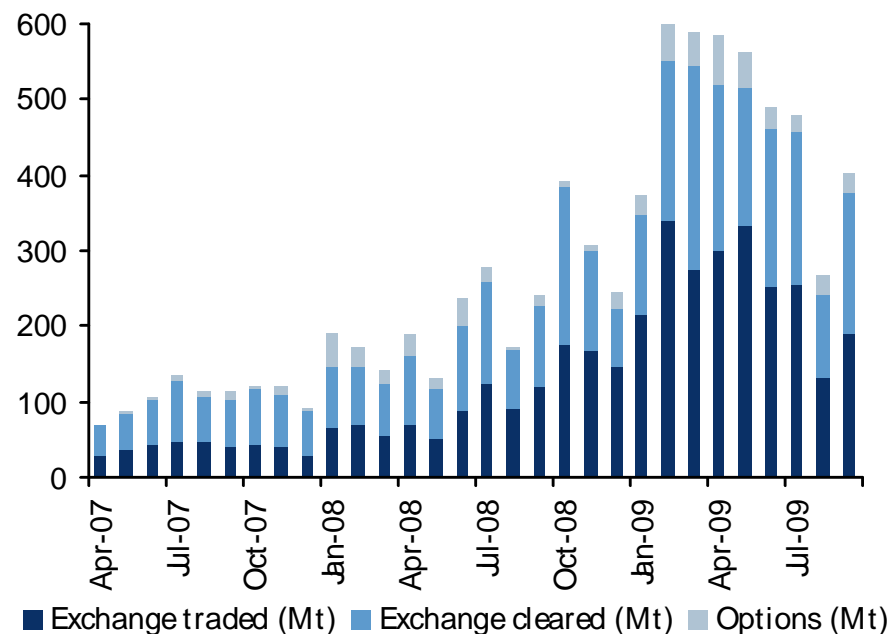
Price dynamics reflected in nature of trade

Percentage of spot has varied between 20-40%



Source :ECX, Barclays Capital

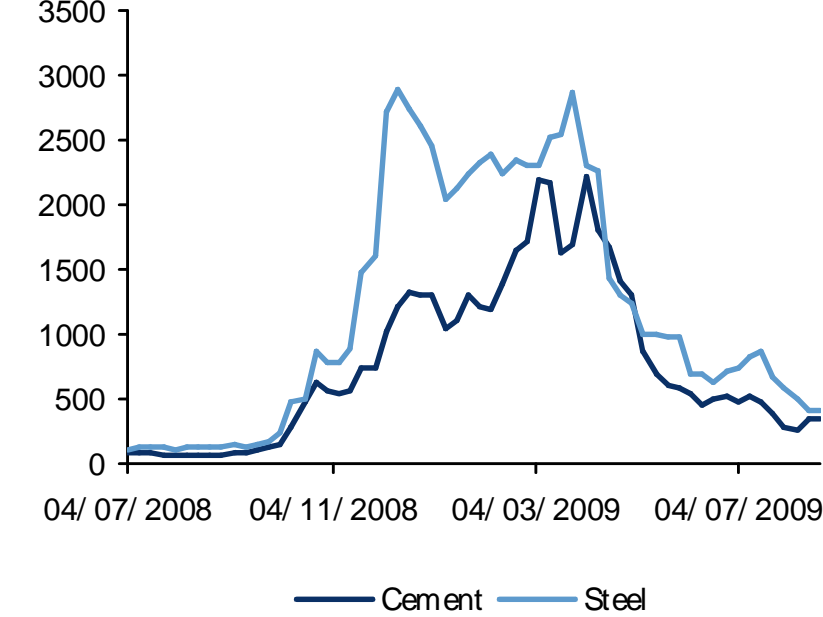
Option volumes have been strong but stable



Source :ECX Barclays Capital

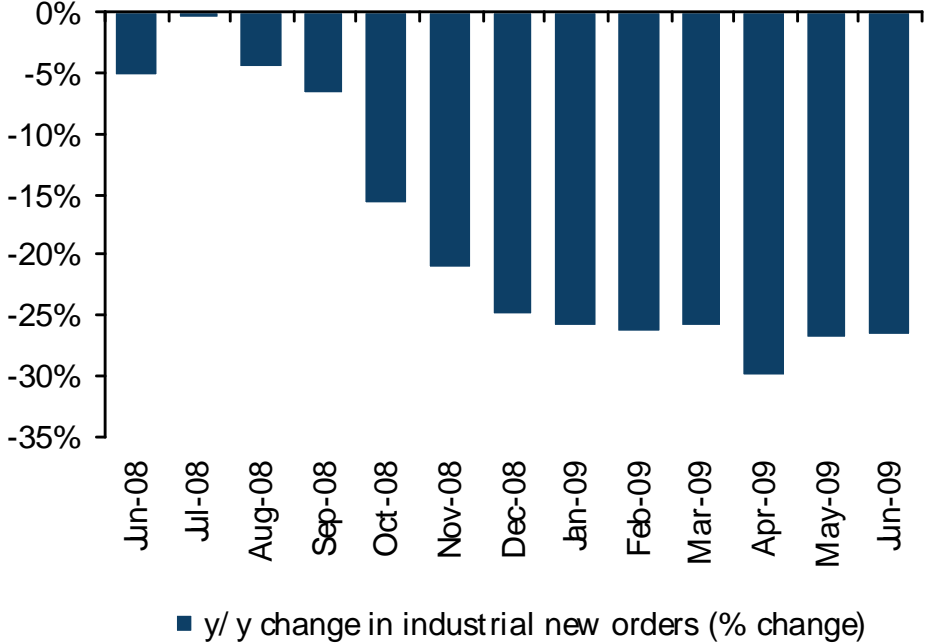
Will the industrials sell???

CDS points to big improvement in credit market



Source :Bloomberg, Barclays Capital

New orders – getting better but not good



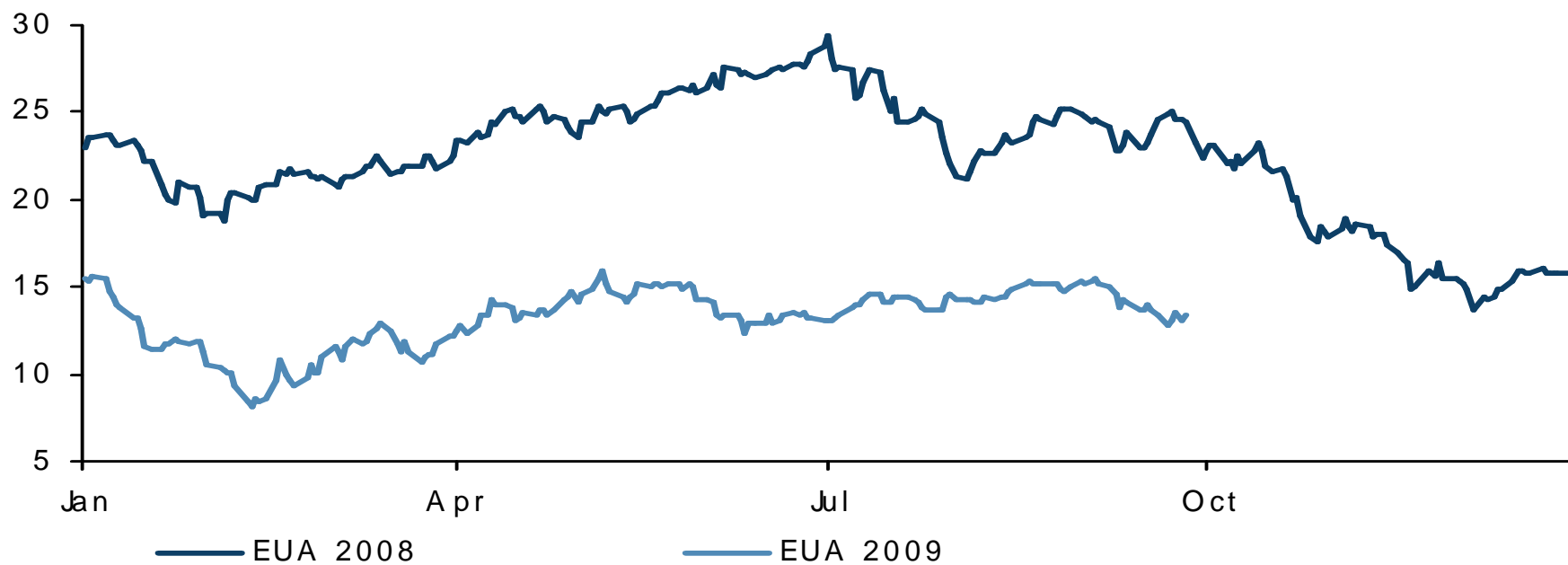
Source :Eurostat, Barclays Capital

The bottom line is that bottom lines could be made better by monetising the credits



Will history repeat itself?

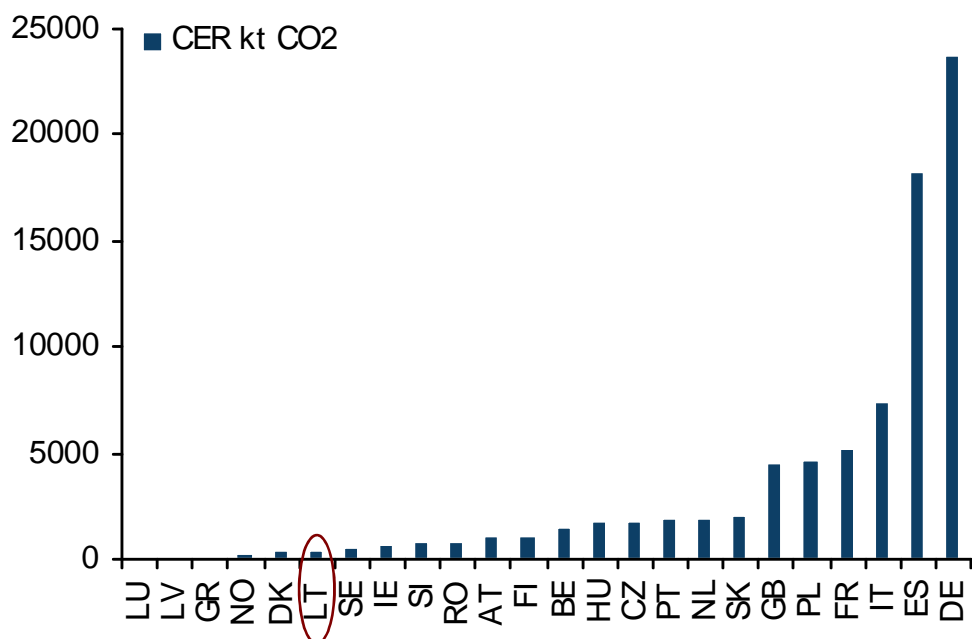
The sell-off for industrials started for real in October...



Source :ECX, Barclays Capital

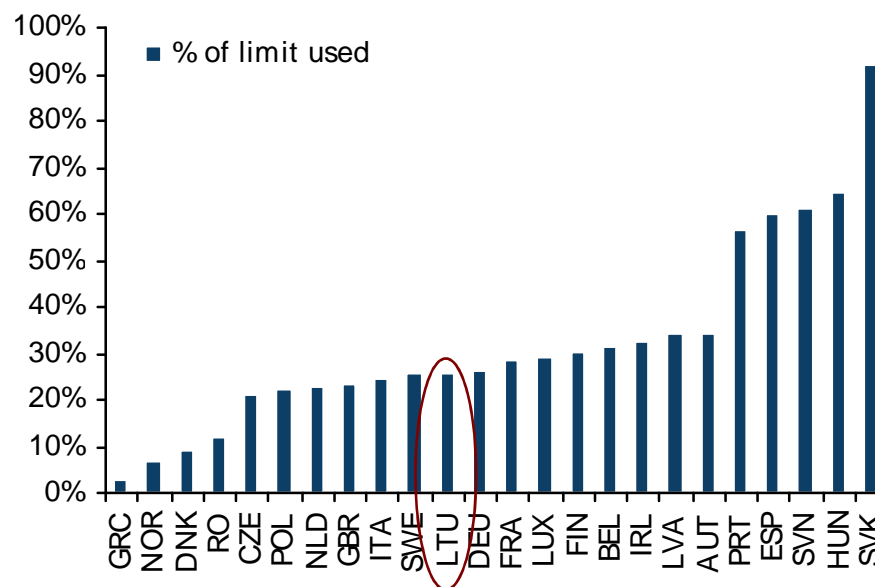
Compliance strategies

Lithuanian installations submitted <1 Mt CERs for compliance in 2008



Source: CITL, Barclays Capital

Lithuanian installations used an average proportion of their CER allowance – around 25%



Source: CITL, Barclays Capital

A total of 80 Mt were submitted across the EU

Optimising Your Carbon Position

Harshika Patel, Head of Environmental Market Sales, Barclays
Capital

Rachel Munro, Environmental Market Sales, Barclays Capital



Why trade your carbon allowances?

- Simplest option – Do nothing
- Reasons to trade:
 - Necessary if emissions exceed allocation or your allocation exceeds your actual emissions
 - Generate additional cash flow
 - Purchase Kyoto Units
 - Financing transactions
 - Generate working capital
 - Price certainty

Optimising carbon positions – motivations

Hedging

- Strategies which:
 - Manage uncertainty
 - Manage price volatility
 - Secure cash flows
 - Defend against downturns

Enhancement

- Strategies which:
 - Maximise portfolio value
 - Subsidise derivative costs

Financing

- Strategies which:
 - Generate immediate cash flow

Flexible sale structure

Hedging

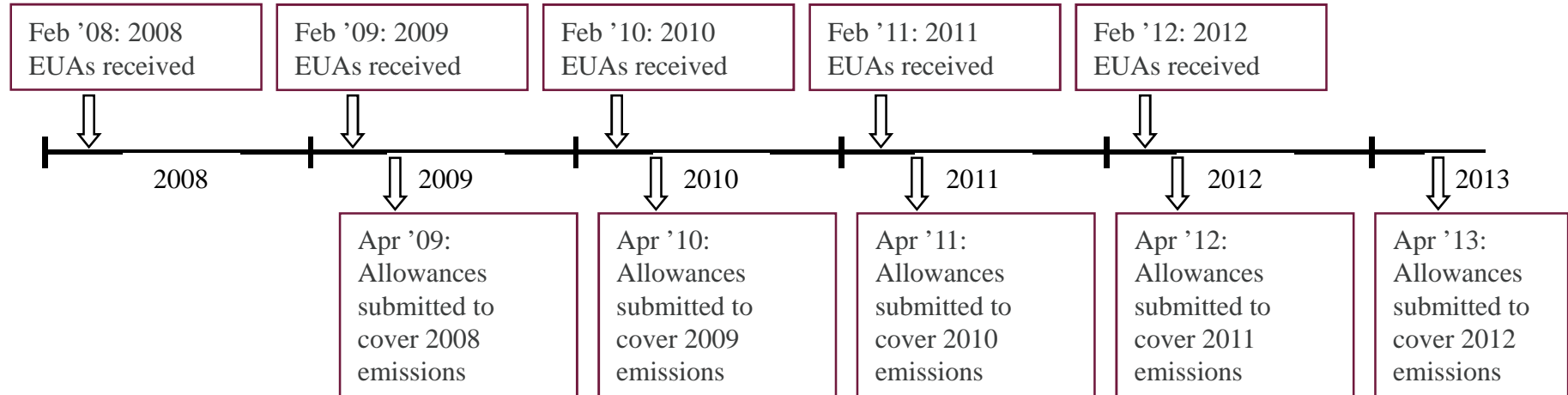
Seller	Client
Buyer	Barclays
Volume	200,000 mt
Additional Volume	50,000 mt
Price	€14.36
Delivery	Spot
Expiry	9 th December 2009
Ref Spot Price	€14.75

Pricing as per 30th October 2009

Financing opportunities

Financing

- Timing of allocations provides installations with an excess of credits up until April 2012



Executing a trade

- Account Opening
- Indicative Pricing
- Execution
- Trade Recap
- Confirmation and Invoicing
- Settlement
- Additional Services

Accounting and tax considerations

- Accounting standards
- Tax considerations
- Other requirements

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