

# Financial aspects of emissions trading

**Harshika Patel, Director, Head of Environmental Market Sales**

**Rachel Munro, Manager, Environmental Market Sales**



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- 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

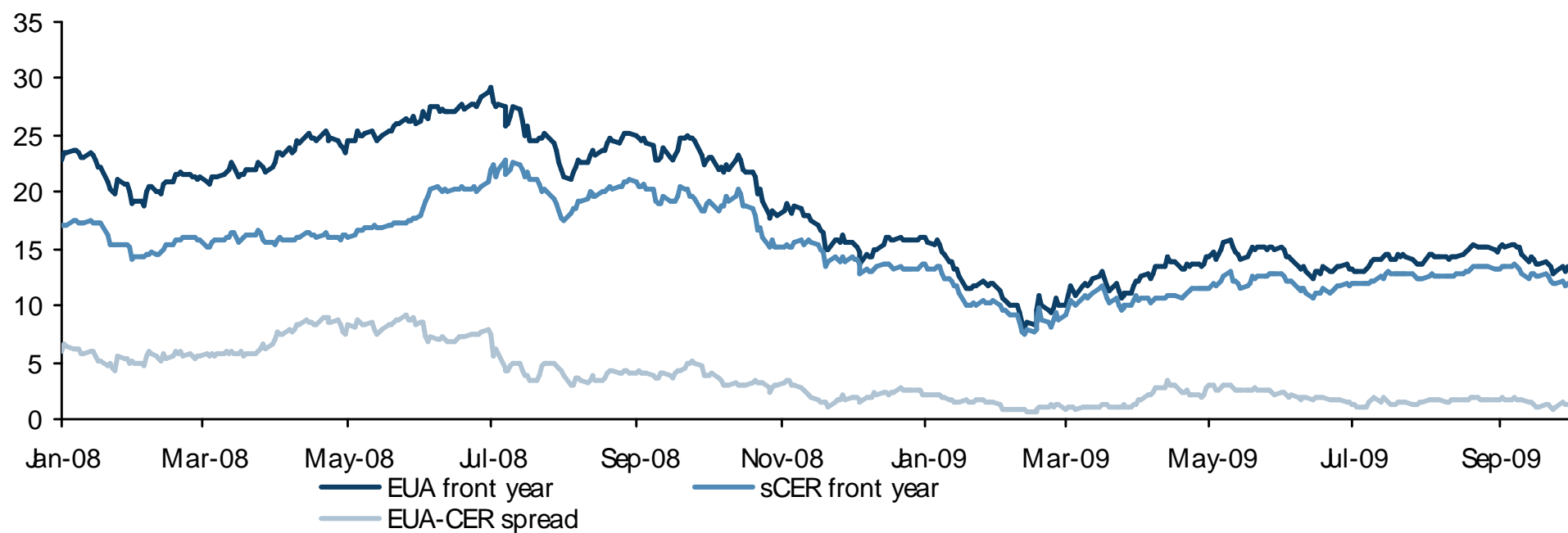
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Harshika Patel, Barclays Capital



# EU ETS price history: phase 2

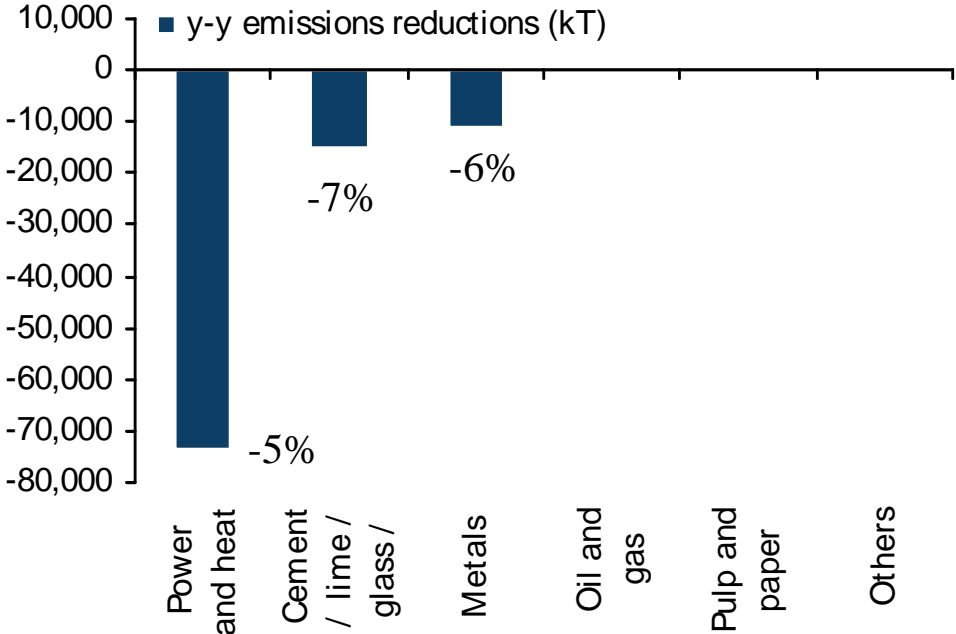
## Phase 2: Impact of current recession



Source: ECX, Barclays Capital

# Sector emissions performance

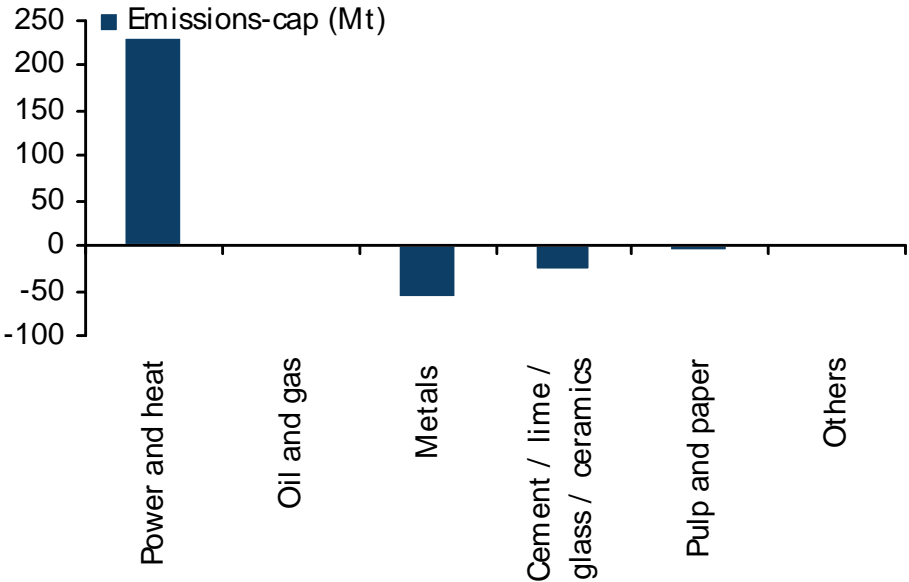
**2008 emissions were down 4-6%**



Source: CITL, Barclays Capital

**Biggest proportional reductions in cement, lime and glass**

**Power was the only short – but a big short**



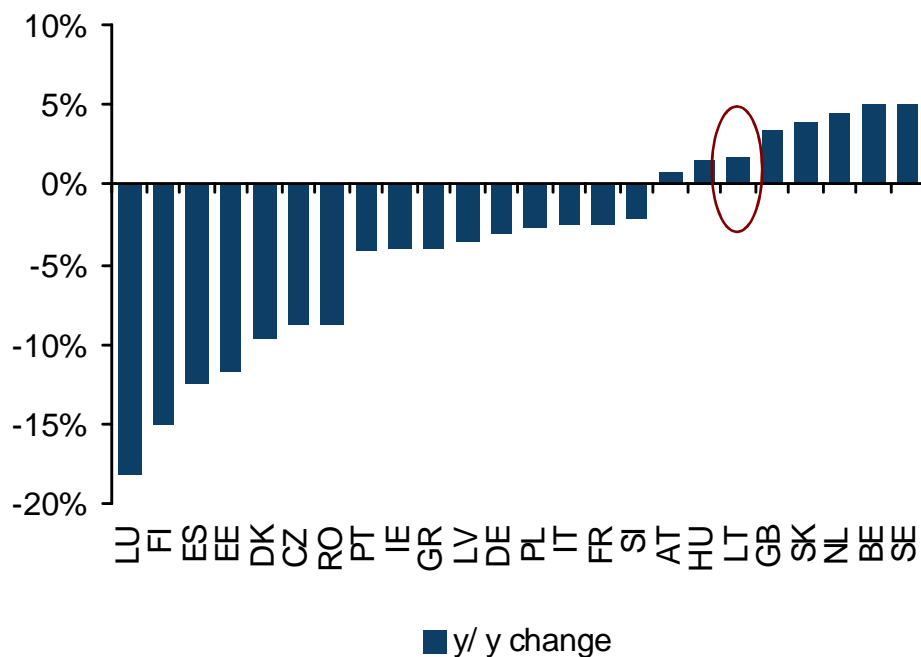
Source: CITL, Barclays Capital

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



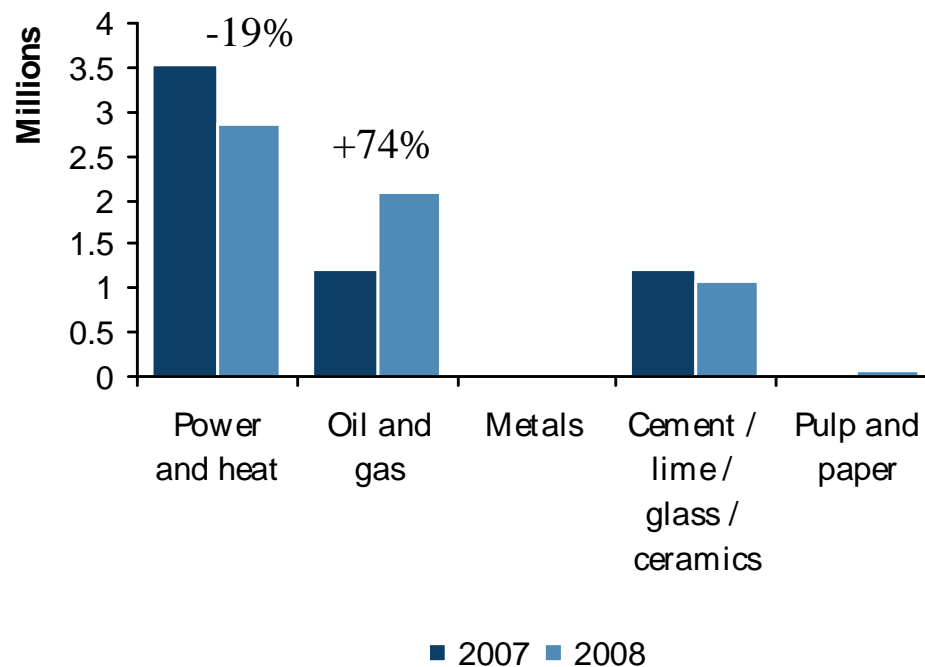
# Country emissions performance

**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

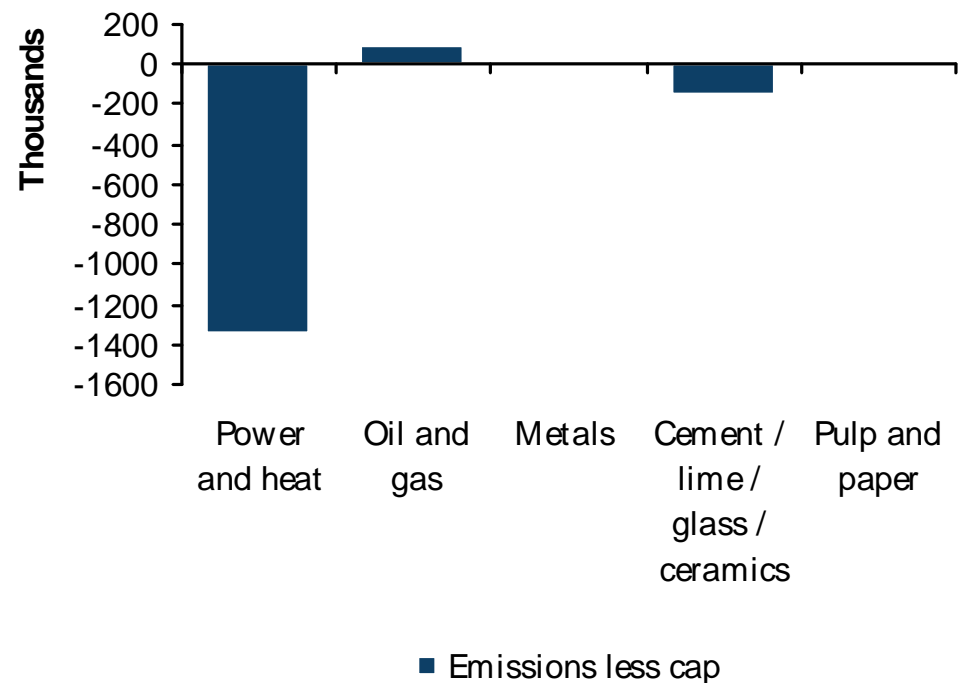
## 2008 EU ETS performance

Total emissions = 6.1 Mt

Allocated = 7.5 Mt

Net long = 1.4 Mt

### Power and heat was the main long

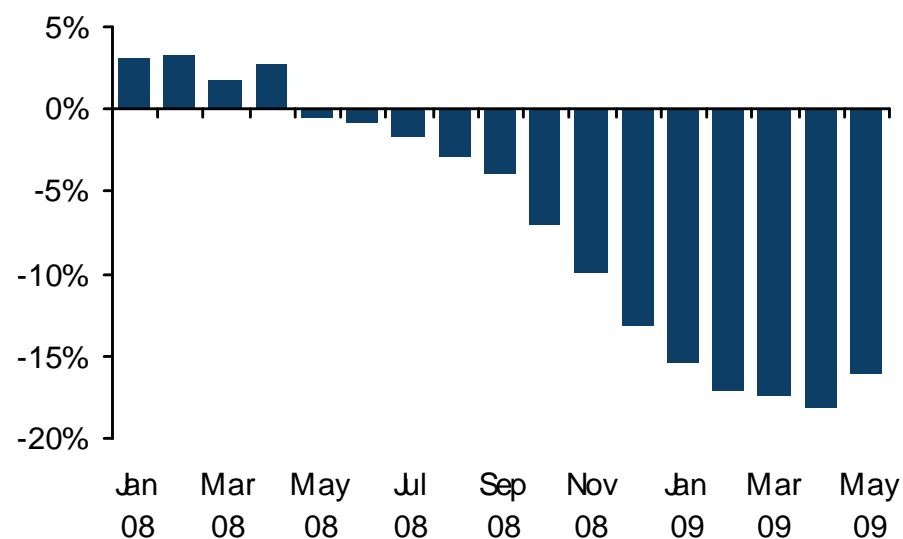


# Looking forward – 2009 economic activity has been poor

## 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**

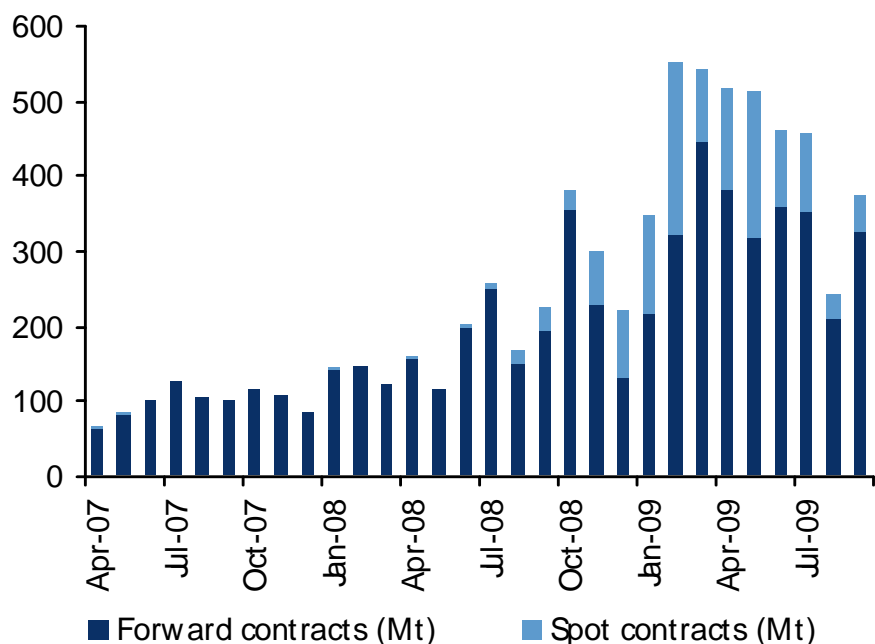
■ Y/ Y change in EU industrial production (%)

Source: Eurostat, Barclays Capital



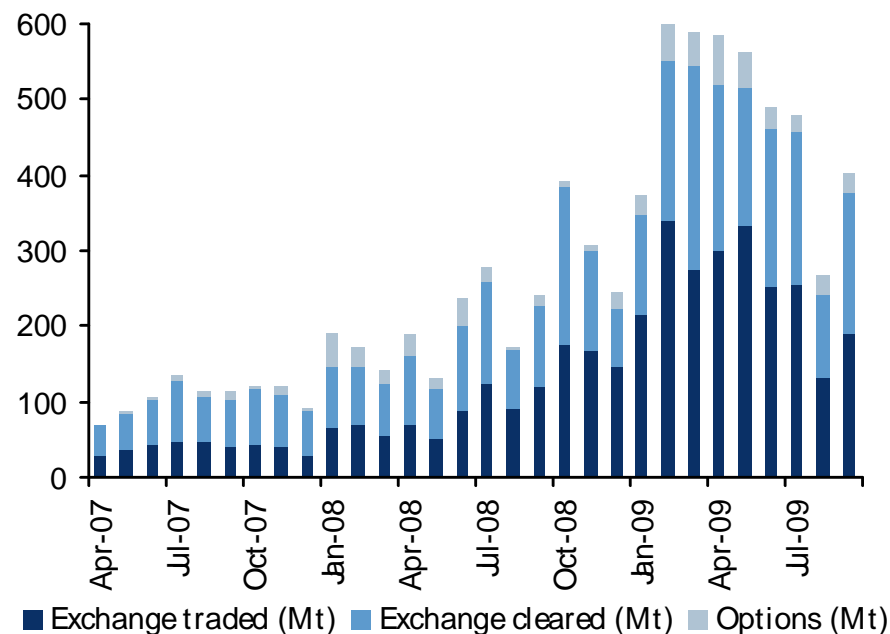
# Price dynamics reflected in nature of trade

**Percentage of spot has varied between 20-40%**



Source :ECX, Barclays Capital

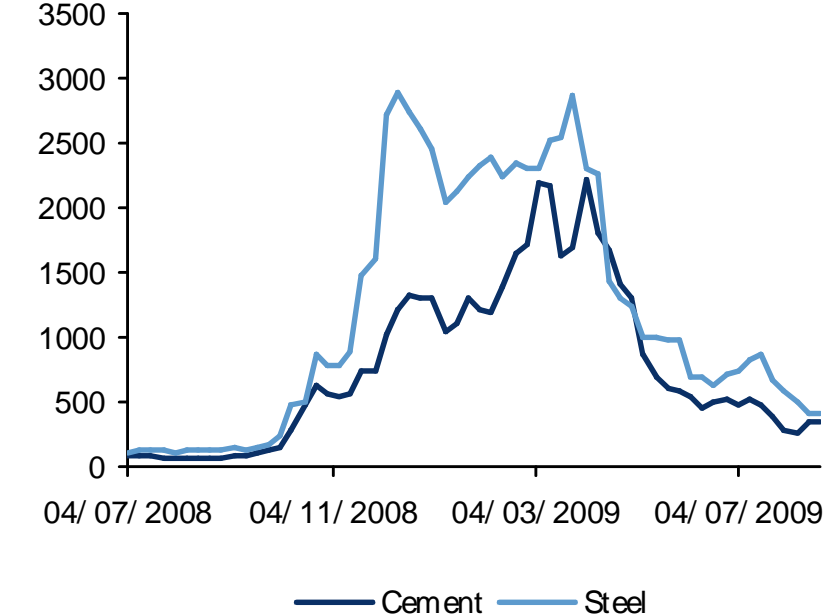
**Option volumes have been strong but stable**



Source :ECX Barclays Capital

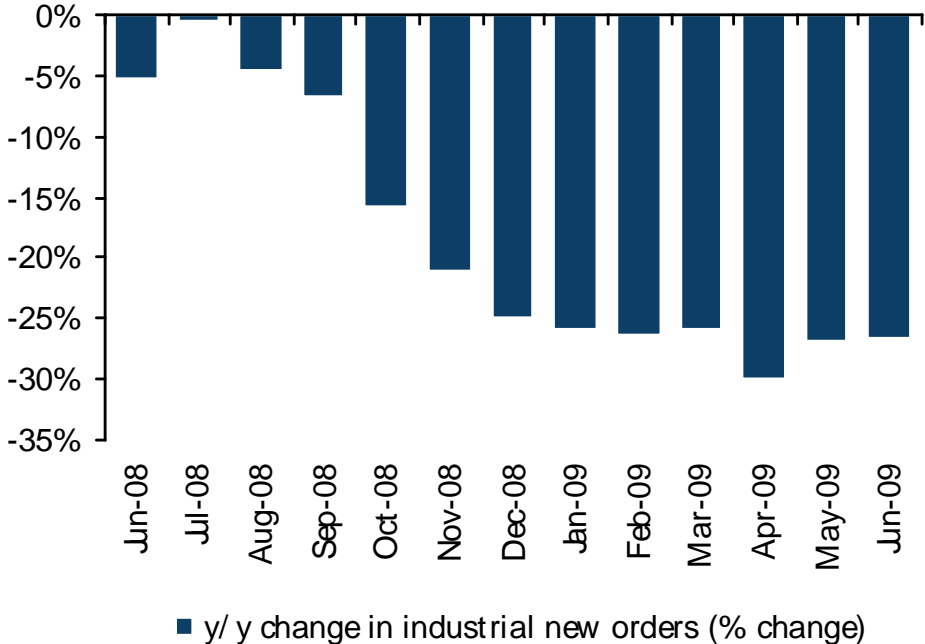
# Will the industrials sell???

**CDS points to big improvement in credit market**



Source :Bloomberg, Barclays Capital

**New orders – getting better but not good**



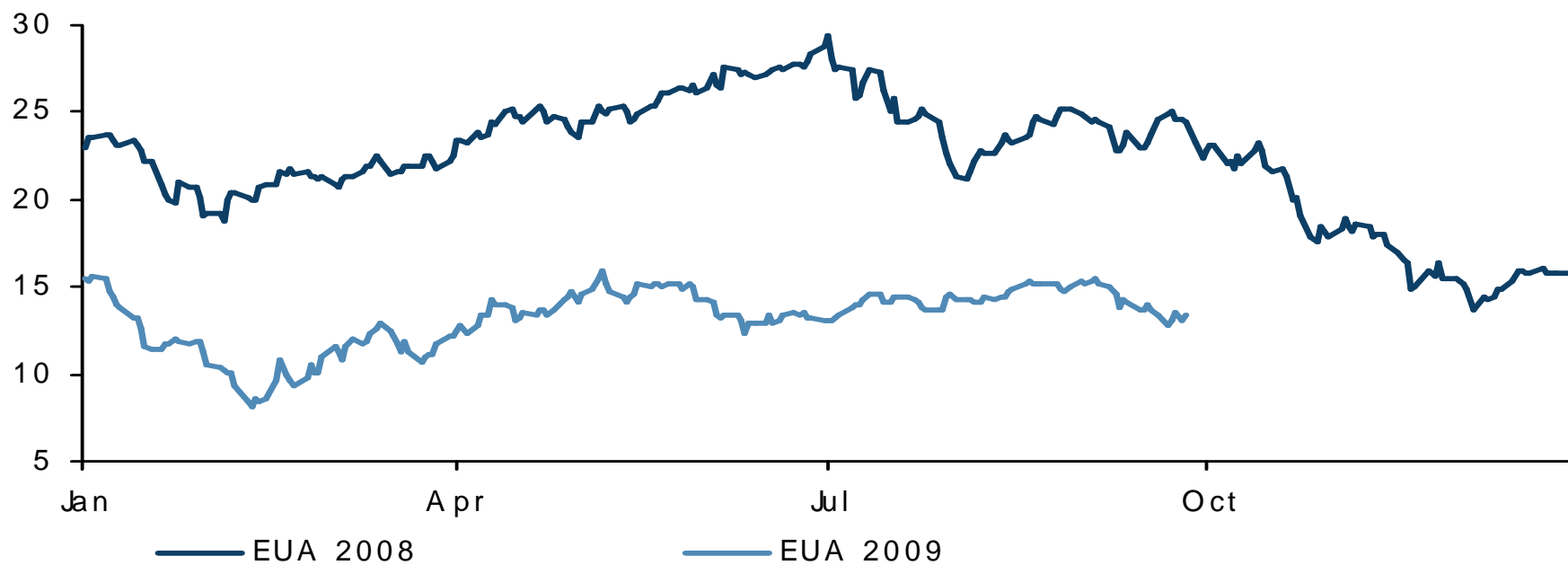
Source :Eurostat, Barclays Capital

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



# Will history repeat itself?

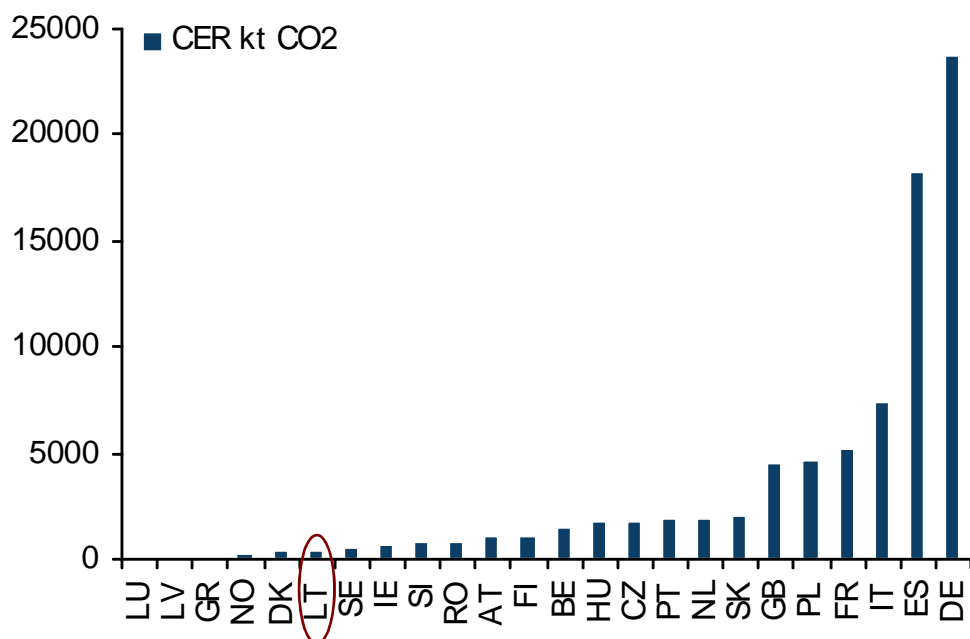
**The sell-off for industrials started for real in October...**



Source :ECX, Barclays Capital

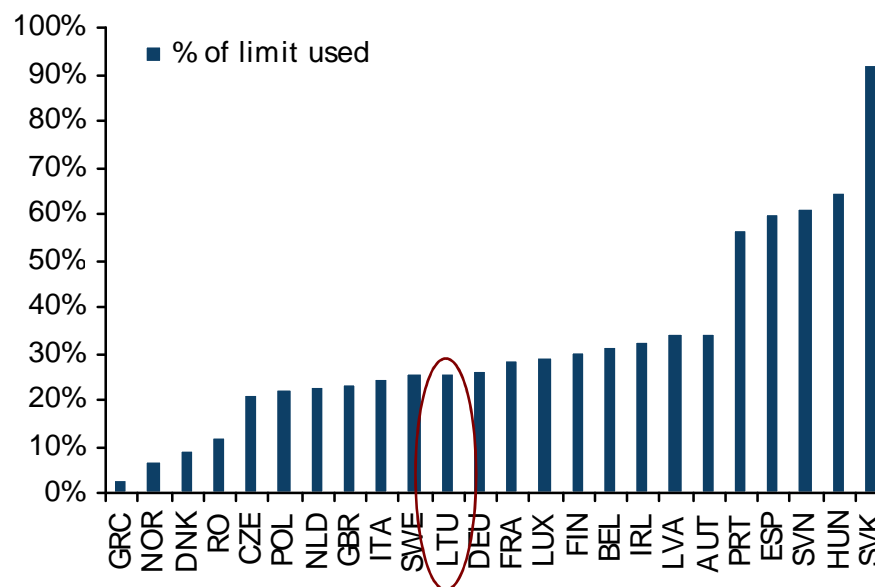
# Compliance strategies

## 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

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Harshika Patel, Head of Environmental Market Sales, Barclays Capital

Rachel Munro, Environmental Market Sales, Barclays Capital



# Why trade your carbon allowances?

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- 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

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## 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

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

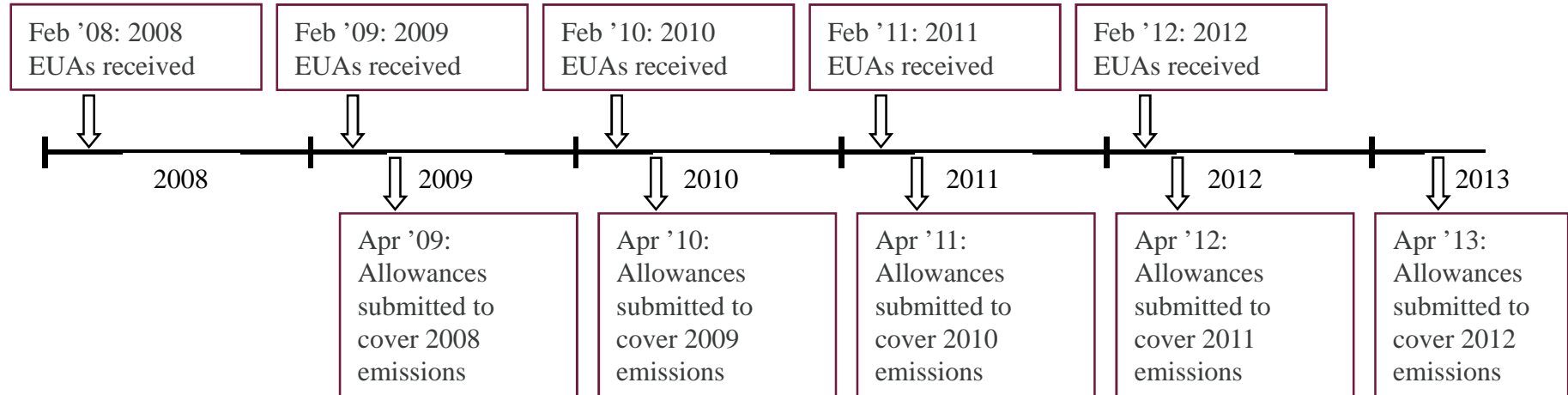
Pricing as per 30<sup>th</sup> October 2009



# Financing opportunities

## Financing

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



# Executing a trade

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

# Accounting and tax considerations

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- Accounting standards
- Tax considerations
- Other requirements

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