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Developing the Kazakh Emissions Trading Scheme
Price discovery, liquidity and efficiency

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Helping companies and institutions to be successful in carbon markets

We assist Governments, industrials, trade groups and others to understand and manage their exposure or potential exposure to carbon markets.

Our experience and understanding of traded carbon markets is unparalleled

BARCLAYS

- CEO Louis Redshaw started the carbon business of Barclays and ran it for 10 years
- Played a leading role in standardising EU carbon trading documentation
- Key EU ETS liquidity provider and official market-maker of the Bluenext exchange
- The team standardised trading terms for the secondary CER market to allow price-discovery
- Leading role in cleansing the EU carbon market of fraud
- First to bring mainstream investor money into EU Allowance financing trades
- Director on the board of IETA for 4 years
- **The team has traded more than 8 billion tonnes of carbon, more than any other**
- Currently working with the European Commission, Korean Electricity Generators Association, project developers and industry across Europe

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Price discovery, liquidity and efficiency

- Liquidity is everything: defining liquidity
- How did trading in the EU ETS become so successful?
  - Market design features that boost liquidity
  - Market design features that harm liquidity
  - The main reason why the EUA traded market is successful
- The role of speculators and how to control them
- How AIFC and an exchange might improve the Kazakh ETS function
- How to bring international investment to the Kazakh ETS

Liquidity is everything: defining liquidity

A market is liquid if it possesses the following features:

- Price disclosure X
- Low barriers to entry X
- Low transaction cost ?
- Narrow bid-offer spread during trading hours X
- Many participants X
- Ability to transact in size without moving the market X

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How did trading in the EU ETS become so successful?

Market design features that boost liquidity

- Auctions
- Banking
- Low participation threshold (>=25kt)
- Rule stability and design
- Lengthening fixed rule periods (phases) and caps (3, 5, 8 years)
- Enforced penalties
- Use of international offsets
- Scale - 1.8bn tonnes covered
- Use of *limited* auction revenue for carbon projects

How did trading in the EU ETS become so successful?

Market design features that boost liquidity – what Europe DIDN'T do was critical

- No mandatory exchange clearing (but price disclosure still very important)
- Unrestricted trading of spot, forward and futures (OTC and cleared) - the market was left to come up with trading instruments based on demand
- Unrestricted participation; broking, registries, ownership of EUAs
- Derivatives regulated in the normal way
- No allocation changes (those with excess sold, those short bought)

How did trading in the EU ETS become so successful?

Market design features that harm liquidity

- Free allocation
- Borrowing
- No definition of property rights
- Oversupply / overallocation
- Oversupply caused by overlapping policies
- Coverage
- No or very limited domestic offsets

How did trading in the EU ETS become so successful?

The main reason why the EUA traded market is successful: the EU power markets are fully de-regulated, highly networked and privatised.

- Companies seek to maximise the optionality they have in their generation portfolios:

Cause	Effect
Coal price rise	Utilities sell carbon
Coal price fall	Utilities buy carbon
Carbon price fall	Coal power production increases
Carbon price rises	Coal power production decreases
FX rates change	Coal power production varies
Power prices rise or economy improves	Utilities buy carbon
Competitor has higher cost of production	Utilities buy carbon
Utilities are privatised	Utilities buy 3 years worth of carbon

Major European power generators (there are 15-20) optimise their carbon positions constantly

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The role of speculators and how to control them

Why speculators are bad for markets
- They create artificial volatility
- Unscrupulous speculators manipulate markets

Why speculators are good for markets
- They are an extra source of liquidity
- They help move the market to where it needs to be more quickly
- Speculators sell (go short) they don't just buy
- Speculators remove market inefficiencies

There are hidden speculators
- A company that is long that doesn't sell
- A company that needs to buy but waits
- A company in an ETS that consciously speculates on carbon price moves

Example
- Steel companies in Europe
- Most small and medium industrials in Europe
- EU utilities are the biggest speculators in the EU ETS

The role of speculators and how to control them

Measures to control speculation	How it works
Price caps (including price intervention)	Stops speculators holding on to positions in extreme situations
Limit holdings of speculators (and direct market participants)	Stops one or two companies cornering the market, smaller markets are more susceptible
A robust regulatory environment	Severely punishment for market manipulation is a powerful disincentive
An efficient carbon price (one reflecting fundamental supply and demand) moderates speculator activity	**Speculators hunt out market inefficiencies, when the price is too low or too high they act. Otherwise they don't.**

The real fear is therefore:

Unscrupulous speculators manipulating markets	Answer: robust sanctions against offenders

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How AIFC and an exchange might improve the Kazakh ETS function

Forcing all trade to go via an exchange can result in opposing outcomes:

- Concentrating trading on one platform with one set of rules maximises liquidity
- Exchanges can create barriers to trade (e.g. cost, membership, regulation)

So AIFC can:

- Take over the ETS exchange function from Caspi and provide full price disclosure
- Create a permissive environment: allow futures trading including shorting
- Facilitate diverse participation, low barrier to entry
- Consider forging a link with a foreign exchange
- Consider a Government market-making programme

Idea: work with an EU exchange to allow spread trades (e.g. EUA / KA spreads)

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How to bring international investment to the Kazakh ETS

Foreign investment in this sector will be difficult:

- Scaling up international investment requires trust
- Western investment banks are cautious
- Rule uncertainty discourages most
- Investor appetite for any carbon project is rock-bottom

Key first steps are:

- A meaningful carbon price
- Domestic offset projects
- An market-place for emissions trading that is open to all
- Local institutions leading the way

The reward for all the hard work

"A reformed ETS can close 94% of Kazakhstan's emissions gap"

German Emissions Trading Authority (DEHSt) and the Alexander van Humboldt Foundation


Helping companies
to be successful in carbon markets
Redshaw Advisors gives companies we work with, both large and small, the confidence to execute strategies that manage their carbon costs. This allows them to concentrate on what they do best. We can tell you how the carbon market will impact your company and give you the tools to do something about it.
Discover more:
www.redshawadvisors.com
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Environmental Finance 2015
Annual Market Rankings
Winner

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The main reason why the EUA traded market is successful: the EU power markets are fully de-regulated, highly networked and privatised.

- Companies seek to maximise the optionality they have in their generation portfolios
- As coal price goes up, gas power production goes up, carbon demand goes down
- As coal price goes down, coal power production goes up and carbon demand goes up
- As carbon price drops, coal production goes up and carbon demand goes up
- As carbon price goes up, coal production goes down and carbon demand goes down
- As power prices go up, utilities seek to sell more power (forward), carbon demand goes up
- As FX rates change, coal that trades in USD varies in price in EUR
- As the economy picks up, demand for long term power contracts go up
- Privatised companies hedge long term power, 3 or more years in advance
- Competition from parts of Europe with differing generation costs increases or decreases

Major European power generators (there are 15-20) optimise their carbon positions constantly

The role of speculators and how to control them

Why speculators are bad for markets	Why speculators are good for markets
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Unscrupulous speculators manipulate markets	They help move the market to where it needs to be more quickly
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The hidden speculators	Example
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A company that needs to buy but waits	Most small and medium industrials in Europe
A company in an ETS that consciously speculates on carbon price moves	EU utilities are the biggest speculators in the EU ETS