



## GETTING CREATIVE IN CARBON

Extreme weather events from Hurricane Katrina in 2005 to the more silent climate change indicators such as record low levels of Arctic sea ice cover in 2007 have highlighted the fragility of man's relationship with the environment. As global temperatures continue their relentless rise in tandem with atmospheric carbon dioxide concentrations, the debate is circulating not around whether to act, but around how best to abate Greenhouse Gas (GHG) emissions on a global scale.

There is growing consensus that cap & trade is the optimum economic approach for tackling climate change. With its proven track record in abating SOx and NOx pollution in the US, it is now being widely adopted as the free market mechanism for abating GHG emissions. The European Union Emissions trading scheme (EU ETS) is the largest compulsory scheme currently in existence, however, various regional schemes in the US will kick off over the next few years and may well be superseded by a US federal scheme which is currently in a variety of draft proposals before the US House and the Senate. Japan, Australia, New Zealand and Alberta, the Canadian province, are planning similar schemes which will all add to the array of carbon markets around the world. These initiatives may help pave the way towards a global cap and trade scheme and create the potential for carbon to become the largest commodity market in the world.

In virtually every sector the necessity to abate GHG emissions is being recognised. The voluntary market is seeing a surge of offsetting activity as companies strive for carbon neutrality. The approach of the Kyoto commitment period (2008-2012) has increased government awareness of their Kyoto positions and how their obligations may be met. Investors are now seeing opportunities in carbon, attracted by prospects of portfolio diversification and the potential for an appreciation in carbon prices.

Barclays Capital is continuing to facilitate the economic changes required, by establishing itself as a leading intermediary in the emissions markets. We are applying the full range of our commodity trading and risk management expertise to assist our clients in efficiently managing their risks and maximising the opportunities presented by their day-to-day engagement with today's carbon markets.

**A WORLD LEADING  
ENVIRONMENTAL  
SOLUTIONS PROVIDER**

 **BARCLAYS  
CAPITAL**

EARN SUCCESS EVERY DAY

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## Barclays Capital Environmental Markets Milestones

First bank to take  
physical delivery of EU  
allowances

First swap on LEBA<sup>1</sup>  
Carbon Index

Developed standard  
for secondary  
CER trading

First bank to take physical  
delivery of CERs

Award-winning liquidity  
provider in the carbon  
markets

As a leading provider of financial and commodity risk management solutions to industry, funds and investors, Barclays Capital has quickly established itself as an award-winning liquidity provider in the environmental markets by applying our banking experience in the following areas:

- Market access and intermediation: the provision of a route to market for participants looking to buy and sell allowances and project credits
- Risk management and structuring: the development of trading strategies and risk management products enabling market participants to manage the volume and price risks associated with their emissions portfolio
- Financing and investment: the provision of debt and equity finance for emission reduction projects and the provision of finance against emission allowance holdings
- Investor Solutions: Barclays launched some of the first investment vehicles to meet the needs of investors' growing appetite for exposure to GHG prices

## Efficient Market Access via Barclays Capital

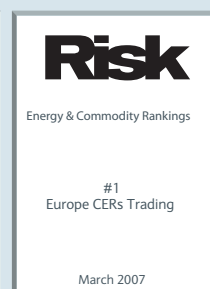
Barclays Capital's existing diverse set of global trading relationships allows us to provide customers with a cost-effective route to market for all types of carbon credits. This allows our clients to buy and sell what they want, when they want and how they want, irrespective of what is currently available in the market and without the need to establish a standalone trading operation.

This ability provides our customers with a discrete and anonymous means to optimise the timing of their trading decisions and to minimise any potential market disruption.

<sup>1</sup> London Energy Brokers' Association

## The EU Emissions Trading Scheme

- 2.2 billion allowances
- 11,500 installations
- 4,000 companies
- 27 countries
- One market leader



## Manage your Carbon Exposure with Barclays Capital

A wide range of corporates and investors now face significant commercial risks and opportunities linked to the price of carbon. Our diverse and innovative product offerings can be tailored to provide bespoke solutions for our clients, whatever their carbon market goals may be.

Our clients and the types of products we can offer them include:

Compliance buyers	<ul style="list-style-type: none"><li>• Buying and selling EUAs, CERs, ERUs, VERs and new carbon credit schemes via spot, forward and option trades</li><li>• CER/EUA swaps</li><li>• Monetisation of carbon inventories (ie. using carbon allowances as collateral against short-term lending)</li></ul>
Project developers and carbon funds	<ul style="list-style-type: none"><li>• Advisory and financing services (both debt and equity) to facilitate the development of Clean Development Mechanism (CDM) and Joint Implementation (JI) projects</li><li>• Offtake contracts to provide a route to market for primary market credit sellers</li><li>• Bespoke contract structures to allocate and share the associated registration, delivery, volume and price risks</li></ul>
Investors	<ul style="list-style-type: none"><li>• Price exposure to carbon via the Barclays family of emission indices</li><li>• Financial swaps</li><li>• Structured notes (delta one and capital protected)</li></ul>
Governments	<ul style="list-style-type: none"><li>• Development and execution of auctioning strategies for distributing carbon credits to market participants</li><li>• Carbon credits to satisfy Kyoto commitments such as CERs and ERUs</li><li>• Facilitation of AAU trading between sovereigns in association with Green Investment Schemes (GIS)</li></ul>
Corporate social responsibility	<ul style="list-style-type: none"><li>• Provision of CERs or VERs that meet appropriate environmental or sustainable development criteria to satisfy carbon neutrality goals</li><li>• Packaging of 'clean energy products' such as CO2 neutral coal</li></ul>

### Route to Market

Allowance purchases  
& sales  
EUA/CER trackers

### Risk Management

EUA/CER forwards  
Financial swaps  
CER/EUA swaps  
Options  
Auction strategies  
CSR

### Financial Solutions

Project development  
banking & borrowing  
monetisations

### Investment Vehicles

Indices  
OTC derivatives  
Structured notes

# CONTACTS

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**Find out more about environmental markets trading opportunities please**

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