

Global Banks and the Role of Finance in Combating Climate Change

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The Scale of the Challenge Requires Action By All Parties

- ◆ Emissions must be reduced by 50-80% (from 2000 levels) by 2050, equaling a 60-70 GtCO₂e reduction from business as usual levels, to stabilise average temperatures at 2°C above current levels¹
- ◆ The magnitude of reduction will require a rapid transition to low carbon energy sources, decreased energy consumption through efficiency measures and other mitigation measures such as reduced deforestation
- ◆ National governments and international bodies can provide the regulatory framework to put a global price on carbon, encourage investment in the low carbon economy and incentivise individual behaviour
- ◆ The private sector has a major role to develop innovations in technology and new consumer products and to commercialise low carbon solutions

Global Banks Provide Financial Services to a Broad Range of Clients

Corporate Clients	<ul style="list-style-type: none">◆ Public and private companies◆ Require financing for developing business and new projects, strategic advice to grow business, hedging of risks◆ Banks provide financing, advisory, trading and risk management services
Intermediaries	<ul style="list-style-type: none">◆ Private equity, venture capital, hedge funds◆ Require financing for acquisitions and leveraged investments, advice on mergers and acquisitions, trading services◆ Banks provide financing, valuation advice, brokerage services
Institutional Investors	<ul style="list-style-type: none">◆ Large institutional investors e.g. pension funds, insurance companies◆ Seeking to manage a portfolio of assets to produce an income and capital growth to match their liabilities◆ Banks provide equity research, investment products and brokerage services
Private Clients	<ul style="list-style-type: none">◆ High net worth individuals and family offices◆ Seeking an income and/or capital growth based on specific risk/return preferences◆ Banks provide advice on investment strategy and investment products (e.g. funds)

Finance is Key to a Low Carbon Future

◆ Renewable Energy

- It is estimated that over \$10 trillion will need to be invested in renewable energy and energy efficiency over the next 20 years to avert significant climate change¹. Companies access public capital markets to raise finance
 - \$2.595 bn IPO of Chinese wind generator China Longyuan Power Corp (December 2009)
 - €1.8 bn IPO of European wind power generator EDP Renováveis (June 2008)
 - €930 m IPO for integrated solar PV manufacturer REC (June 2006)

◆ Energy efficiency

- Although most energy efficiency measures pay for themselves over time, the initial investment can be a disincentive. Financing structures provide capital upfront to be repaid by future energy savings.
- Some energy efficiency measures can produce carbon credits
 - An Asian company producing energy efficient products in discussions to refit hundreds of municipal buildings. Revenue from carbon credits makes the project economically viable

◆ Reduced Emissions from Deforestation and Degradation

- Retaining standing forest is one of the most cost effective ways to mitigate climate change. REDD seeks to realise the monetary value of standing forests
 - Owner of large tropical forest seeking to sell this asset and is considering alternatives to selling to a timber company

Market Mechanisms can be a Tool to Combat Climate Change

- ◆ **Carbon markets, based on a cap and trade system, can promote efficient and effective emissions reductions**
 - The market establishes a price for carbon that can facilitate long-term investment decisions
 - The ability to sell unneeded allowances and to buy carbon offsets direct investments to the cheapest form of abatement
 - A single global market would be the most effective mechanism but may not exist for some time
 - The existing regional markets are currently linked by the common currency of carbon credits
- ◆ **In 2008 the carbon markets were worth \$118bn¹**
 - European corporations' compliance commitments under the EU Emissions Trading Scheme (EU ETS) and sales of carbon credits from emissions reduction projects in developing countries currently account for 99% of traded volume²
- ◆ **By 2020, the addition of markets in the United States and other major economies is expected to increase the aggregate value to over \$1trn³**
 - The Regional Greenhouse Gas Initiative (RGGI) covering 10 Northeastern US states was launched in January 2009; further regional markets are planned in North America, Australia, New Zealand, South Korea and China by 2012

Investors' Need for Information and Investment Products Help Drive the Low Carbon Economy

◆ Environmental Disclosure

- Carbon Disclosure Project: 2,500 organizations in over 60 countries measure and disclose their greenhouse gas emissions and climate change strategies through CDP
- The CDP Water Disclosure Project: Launches in April 2010. Questionnaires will be sent to more than 300 of the world's largest companies in sectors that are water intensive or particularly exposed to water-related risk.
- Forest Footprint Disclosure Project: Launched in 2009, companies are asked to disclose information in 11 key sections, including Risk Assessment, Sustainable Supply Chain Development and Governance Process
- Securities and Exchange Commission : Guidance on disclosure of material climate change risks and opportunities in various public filings

◆ Equity Research

- Thematic research providing thought leadership on climate change
- Sector research integrating the effects of climate change into specific sectors
- Dedicated renewable energy equity research providing stock-specific recommendations

◆ Investment Products

- **Exposure to macro trends:** UBS IB Europe Carbon Optimized Index
- **Access to specific investment themes:** UBS Climate Change Strategy and Water Strategy certificates
- **Matching long-dated liabilities:** UBS European Solar Fund

Challenges

◆ Carbon Price

- No global market
- Current carbon price driven by difference between coal and gas prices, resulting in long-term investment decisions driven by short run pricing mechanism. Result is that investment decisions not being made
- Inefficient market because lack of political will to decrease caps

◆ Carbon credits

- CDM future unclear
- REDD still unclear

◆ Financing of Energy Efficiency

- Small scale projects require aggregation
- Financing liabilities and benefits need to attach to the property, not the owner or tenant

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