

## The financial services sector's role in promoting new environmental business in London with respect to climate change

by Adarsh Varma

This note presents some of the latest developments in the financial community and environmental policy that encourage business to be more sustainable in their activities. The financial services sector can play a key role in promoting new environmental business in London. This sector has the potential to provide monetary incentives to direct finances towards sustainable green economic activity; encourage 'green investment funds'; and help investors, lenders and insurers account for climate risk in their decision-making criteria. Initially, the interest of financial companies in climate change revolved around insurers' concerns about damages caused by extreme weather events. However, recently the financial services sector has made a radical shift towards services and products to reduce carbon dioxide (CO<sub>2</sub>) emissions and encourage investment in environmentally friendly technologies. This shift is mainly due to the emergence of markets that price carbon such as the UK's Emissions Trading Scheme (ETS) and European Union's ETS (due to come into effect in January 2005). These markets and financial initiatives such as the carbon fund<sup>1</sup> are some of the main drivers for financial services playing an increased role in promoting sustainable business practices.

*Sustainability in the context of this note mainly refers to businesses accounting for climate change risks, reducing emissions and increasing energy efficiency. Financial services have developed (or are developing) specialist instruments and funds that account for climate change risks and encourage environment friendly business practices. These instruments are sometimes referred to as sustainable financial instruments. Sustainable development as defined by the London Sustainable Development Commission<sup>2</sup> can have a much wider scope covering social, ethical and environmental objectives.*

### 1. Introduction

London's financial services sector is the capital's largest employer with around 300,000<sup>3</sup> workers. London's trading culture, skills base, quality of labour and its time zone make it a leading centre for financial and business services. The average productivity per worker is around £50,000, which is nearly 28 per cent higher than the UK average. London's niche in the financial world has already led to the development of carbon markets that reward environmentally friendly business practices.

<sup>1</sup> <http://www.thecarbonfund.org/index.shtml>

<sup>2</sup> [http://www.london.gov.uk/mayor/sustainable-development/susdevcomm\\_indicators.jsp](http://www.london.gov.uk/mayor/sustainable-development/susdevcomm_indicators.jsp)

<sup>3</sup> EBS Regional Planning Service, Winter 2003/04, Greater London Authority

### 1.1 The growth of sustainable practices and products in the financial sector

Numerous policy developments and mechanisms have been introduced since 1997 that have led to financial companies having a growing interest in climate change.

**The Kyoto Protocol** (1997) to the *United Nations Framework Convention on Climate Change* was the most comprehensive environmental treaty. Under it, developed countries have legally binding targets to reduce greenhouse gas (GHG) emissions. Three mechanisms were proposed to help achieve this objective, namely Joint Implementation (JI), the Combined Development Mechanism (CDM) and emissions trading. The protocol needs to be ratified by at least 55 per cent of the signatories to become operational. The US administration under George Bush pulled out of the protocol in 2001 leaving Russia as the only country large enough to make the 55 per cent threshold. Russia, having shown clear doubts about ratifying the treaty at the UN climate change convention in Milan last December, recently agreed to take positive steps towards ratification after being backed by the European Union (EU) in its bid to join the World Trade Organisation.

The **UK's climate change programme** has an ambitious goal of reducing carbon dioxide (CO<sub>2</sub>) emissions by 20 per cent from 1990 levels by the year 2010<sup>4</sup>. The UK Government introduced the Climate Change Levy (CCL)<sup>5</sup> in April 2001 and the ETS<sup>6</sup> in April 2002 as market based instruments to increase energy efficiency and reduce carbon emissions.

One of the main reasons for financial services taking an active interest in corporate sustainability is the **EU ETS** due to start in January 2005. The directive's final text was agreed on in July 2003 and came into force in September 2003. The scheme will allow up to 17,000 industrial installations across 26 European countries to trade permits and meet their emission targets. Each country is required to submit its final *National Allocation Plan* by 30 September 2004 outlining the number of allowances given to each installation. The UK's draft *National Allocation Plan*, published on 30 April 2004, covers around 1000 installations with the number expected to rise to 1,500 for the final version in September 2004.

Another important milestone for London's engagement in climate change and sustainable services has been the emergence of the **Carbon Disclosure Project (CDP)**<sup>7</sup>. The CDP is a coordinating secretariat for institutional investor collaboration on climate change. On 31 May 2002 the CDP, backed by 35 institutional investors with combined assets worth \$4500 billion, wrote to the chair of the board of the FT500 Global Index companies asking how they are managing climate-related risks and what actions are being taken. The resulting CDP report, based on company responses, found that there was broad consensus acknowledging

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<sup>4</sup> ACBE Eighth Progress Report, p10. More Information: <http://www.dti.gov.uk/acbe8/>

<sup>5</sup> Energy tax on business use of energy. More information:

<http://www.defra.gov.uk/environment/ccl/index.htm>

<sup>6</sup> Allowances are allocated on a sector or company basis based on historic emissions. Businesses are free to buy and sell allowances to comply with their binding caps. More information:

<http://www.defra.gov.uk/environment/climatechange/trading/uk/index.htm>

<sup>7</sup> <http://www.innovestgroup.com/>

the importance of climate change as a business risk and that action needed to be taken. Some companies already had strategies or were developing ways to reduce greenhouse gas emissions. Companies also realised that the financial sector has an important role to play by providing new finance for renewable technologies and energy efficiency investments. Shareholders are increasingly demanding that companies disclose carbon risks so that asset prices can reflect sustainability performance.

The CDP followed up this initial piece of work with a second report on 19 May 2004. Nearly 60 per cent of the FT500 Global Index companies responded compared to 47 per cent in the first CDP. There was a marked increase in the number of signatories from all over the world, which now represent more than \$10,000 billion worth of assets. The total emissions from operations noted to in the latest CDP report is around 13 per cent of all emissions from fossil fuel combustion worldwide.

## **2. Financial sector products and services for sustainable business practices**

The financial services sector has an important role to play in mitigating climate change risks and promoting sustainable business practices. Companies and investors face two main risks (costs) posed by climate change:

- The **direct knock-on effects of climate change** such as extreme weather conditions and changes in temperature. These have secondary impacts on economic sectors such as construction (loss of favourable construction days), insurance and tourism. Damage to life and property has implications for insurance losses and leads to higher premiums for businesses and consumers.
- The **cost of compliance** due to regulatory mechanisms (e.g. CCL and ETS). As these regulatory mechanisms favour energy efficiency and low carbon emissions practices, energy intensive companies could see their cost of production increase if they do not invest in environmentally friendly technologies. Moreover, the cost of non-compliance is not just fines and penalties for breaching environmental regulations but also loss of market image in the eyes of shareholders, investors and consumers.

Financial firms have a role to play in managing risks as new areas of uncertainty need to be underwritten. These risks include new environmental technologies, alternative energy sources and technologies, and carbon markets. Insurance companies need to safeguard themselves, their customers and their shareholders from the increased value of claims due to changing climate patterns. Table 1 shows the impact of climate change on different segments of the financial sector.

**Table 1. Impact of climate change on the finance industry's different segments**

<b>Financial services industry segments</b>	<b>Potential impacts of climate change</b>
<b>Capital providers</b> – Individuals, corporations and foreign investment	<ul style="list-style-type: none"> <li>• Disruption to global economy</li> <li>• Reduced confidence</li> </ul>
<b>Advisers</b> – Consultants, analysts and credit rating	<ul style="list-style-type: none"> <li>• Impacts on equity value, debt quality</li> <li>• Implications for investor resource</li> </ul>
<b>Investors</b> – Fund managers, investment banks and project finance	<ul style="list-style-type: none"> <li>• Impaired investment performance</li> <li>• New markets in clean technology</li> <li>• Implications for fiduciary duty</li> </ul>
<b>Lenders</b> – Corporate banking, mortgages and commercial loans	<ul style="list-style-type: none"> <li>• Reduced corporate creditworthiness</li> <li>• Damage to property/physical assets</li> <li>• New markets in clean technology</li> </ul>
<b>Insurers</b> – Reinsurers, underwriters and brokers	<ul style="list-style-type: none"> <li>• Credit and liquidity problems</li> <li>• Increased demand for risk transfer products</li> <li>• Opportunities in GHG markets</li> </ul>
<b>Brokers/dealers</b> – Investment dealers, commodity traders and brokers	<ul style="list-style-type: none"> <li>• Growth of GHG credit trading market</li> <li>• Growth or risk management requirements</li> </ul>
<b>Users of capital</b> – Individuals, corporations and governments	<ul style="list-style-type: none"> <li>• Increased cost of mitigation requirements</li> <li>• Losses due to weather extremes</li> <li>• Public/private partnerships</li> </ul>
<b>Regulators</b> – Listing/disclosure, accounting standards and banking law	<ul style="list-style-type: none"> <li>• Demand for greater risk disclosure</li> <li>• Need for accounting guidance</li> <li>• Loss of investor confidence</li> </ul>

*Source: Climate Change and the Financial Services Industry, Module 2, Innovest*

## **2.1 Banking and Finance**

Through their core functions of risk management, project finance and asset management, the financial sector has developed products and services to minimise the risks and costs of climate change. Furthermore, they have developed new markets related to climate change mitigation projects and processes.

As Table 2 shows, the finance industry faces various threats and opportunities because of climate change.

**Table 2. Threats and opportunities to the finance industry**

Financial sub-sector	Potential threats	Potential opportunities
<b>General</b>	<ul style="list-style-type: none"> <li>• Macroeconomic downturn hurts business volume</li> <li>• Uneven and unpredictable impacts on global markets</li> <li>• Greater pressure on public purse for disaster relief and infrastructure rebuilding</li> <li>• Compounding risk across entire portfolio of converging activities (asset management, insurance, reinsurance)</li> </ul>	<ul style="list-style-type: none"> <li>• Development of new markets and demand for new products related to GHG emissions reductions and/or adaptation to climate change creates new momentum for economic expansion</li> <li>• Public/private partnerships such as in green municipal funds</li> </ul>
<b>Corporate and retail banking and project finance</b>	<ul style="list-style-type: none"> <li>• Property damage risks to project finance and real estate finance</li> <li>• Ability to cancel real estate insurance exposes property lender</li> <li>• Unanticipated GHG emissions mitigation costs at project level</li> <li>• Impaired value of GHG-intensive capital stock</li> <li>• Physical damage to corporate assets</li> <li>• Regulatory and political risks</li> <li>• Reduction in disposable income as climate change costs rise</li> </ul>	<ul style="list-style-type: none"> <li>• Financing clean energy technology development</li> <li>• Financing infrastructure development arising from adaptation</li> <li>• Enhanced project returns from sale of credits</li> <li>• Lending by commercial banks to customers for energy efficiency-related projects</li> <li>• New markets, e.g. regulatory risk transfer</li> </ul>
<b>Private equity</b>	<ul style="list-style-type: none"> <li>• Reduction in competitiveness of GHG-intensive business</li> </ul>	<ul style="list-style-type: none"> <li>• Growing demand for low carbon technologies and related goods and services</li> </ul>
<b>Other</b>	<ul style="list-style-type: none"> <li>• Compounded carbon risks for diversified fund</li> <li>• Managing hedge funds</li> <li>• Potential deterioration in project economics and investment viability due to national financial policy responses to climate change</li> </ul>	<ul style="list-style-type: none"> <li>• Hedging services for uninsurable GHG credit and energy price risks</li> <li>• GHG credit brokerage and trading</li> <li>• Consulting and advisory services</li> <li>• Microfinance opportunities in developing countries</li> </ul>

*Source: Climate Change and the Financial Services Industry, Module 1, Innovest*

## 2.2 Examples of sustainable financial products

- UBS Warburg have started an environmental risk management system to assess and manage credit risk, risks to reputation and the viability of loan or project finance. Banks such as Barclays, the Royal Bank of Scotland, HSBC and Lloyds TSB also have similar screening systems to manage those risks on their commercial loan books.

- Cooperative Bank has an ethical policy, developed by extensive consultations with its depositors and other stakeholders, to screen their loans. The bank reports on the number of loan applications rejected on grounds of damaging environmental, social or ethical objectives. The bank's sustainability report provides a useful model for external verification and measuring sustainability impact. The bank provides a sustainability cost-benefit analysis for each part of their business. Overall, it is estimated that sustainable policies contribute around 15-18 per cent of the bank's profits.
- Deutsche Bank initiated a micro-credit development fund in the UK. The aim is to provide financial and operational sustainability for micro-credit institutions in the UK and in developing countries.
- Small-scale intermediaries such as Street UK and Triodos-UK have the cost structure and expertise to deliver sustainable ventures in community micro-credit and environmental finance respectively.
- In 2000, Merrill Lynch Investment Management set up the Merrill Lynch New Energy Technology investment trust to invest up to £200 million in companies working on renewable energy, automotive and on-site generation (fuel cells and micro turbines), energy storage, and enabling energy technologies (including green power marketing and companies involved in emissions trading). The trust invests in small unlisted ventures (up to 25 per cent of total assets) as well as listed equities, providing support and finance for new energy ventures throughout their development lifecycle.
- Energy production is gradually shifting towards renewable sources. Financial institutions are investing in 'new energy' companies such as Credit Suisse's investment in Prime New Energy. Prime New Energy's investment focus is on pioneering firms in energy efficiency, renewable energy and energy information technology management. According to Credit Suisse, the potential for profit or loss is equivalent to investments in comparable shares.
- Credit Suisse has a fund that rewards environmentally friendly business practices. The *Equity Fund (Lux) Global Sustainability I* aims to achieve the highest possible capital growth by investing worldwide in companies that have products and services that generate long-term economic, ecological<sup>8</sup> and social benefits.
- German insurer Allianz has created a dedicated sustainability study centre and is exploring the possibility of using €200 million worth of credit to fund renewable technologies.
- Swiss Re's *Greenhouse Gas Risk Solutions* offer financial services and products that support GHG reductions. These solutions include investments related to *Kyoto Protocol* mechanisms, emission reduction credit guaranties, project finance and insurance (emission reduction credit insurance and professional liability insurance).

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<sup>8</sup> 'Ecological benefits' also comprise eco-efficiency which is the ability to generate added value by reducing resource consumption, waste and emissions.

## 2.3 Insurance

As weather risks increase, the demand for innovative risk transfer solutions has also increased. Insurance of new environment technologies and carbon abatement equipment has led to underwriters developing specialist knowledge about the risks. As Table 3 shows, there are various threats and opportunities for the insurance sector resulting from climate change.

**Table 3. Threats and opportunities to the insurance sector**

Insurance sub-sector	Potential threats	Potential opportunities
<b>General</b>	<ul style="list-style-type: none"> <li>• New and existing markets become unviable as climate change increases regional exposure</li> <li>• Asset management risks; loss of long-term value in securities affected by adaptation/mitigation regulations and measures</li> <li>• Compounding risk across entire portfolio of converging activities (asset management, insurance, reinsurance)</li> </ul>	<ul style="list-style-type: none"> <li>• Use of pre-existing insurance tools (e.g. errors and omissions insurance to protect against errors in forward selling of climate-influenced contracts; business interruption insurance to be better prepared than competitors)</li> <li>• Technology insurance and/or contingent capital solutions to guard against nonperformance of clean energy technologies due to engineering failure</li> </ul>
<b>Property/casualty</b>	<ul style="list-style-type: none"> <li>• Physical damage to insured property from extreme/more frequent weather events unbalancing insurer's assets and liabilities</li> <li>• Liquidity problems due to above point</li> <li>• Increases in population and infrastructure densities multiply size of maximum potential losses from extreme weather events</li> <li>• Regulatory change, for example relating to design standards</li> <li>• Insufficient capital</li> </ul>	<ul style="list-style-type: none"> <li>• Increase in demand for underwriting services as weather risk increases</li> <li>• Insurance of GHG offset, clean energy projects and related financial services e.g. professional indemnity for carbon credit guarantors and certifiers</li> </ul>
<b>Life/health</b>	<ul style="list-style-type: none"> <li>• Increased risks to human health (thermal stress, vector-borne disease, natural disasters)</li> </ul>	<ul style="list-style-type: none"> <li>• Increase in global demand for life/health insurance as human health risk increases</li> </ul>
<b>Other</b>	<ul style="list-style-type: none"> <li>• Business interruption risks becoming unpredictable and more financially relevant</li> <li>• Disruptions to construction/transportation sectors</li> <li>• Increased losses in agro-insurance</li> <li>• Political/regulatory risks surrounding mitigation</li> </ul>	<ul style="list-style-type: none"> <li>• Collaboration with others in pooling capital to expedite Kyoto mechanisms</li> <li>• Microinsurance</li> <li>• Weather derivatives</li> <li>• Catastrophic events bonds</li> <li>• Consulting/advisory services</li> </ul>

Source: *Climate Change and the Financial Services Industry, Module 1, Innovest*

## 2.4 Examples of sustainable risk management instruments

- The London International Financial Futures and Options Exchange (LIFFE)<sup>9</sup> have introduced a number of weather indices to allow investors and agricultural, entertainment and other businesses to hedge against extreme weather events. Since it is already recognised that climate change is causing unstable weather patterns, these risk management tools are increasingly valuable and allow a higher level of economic activity than would otherwise be the case.
- Aviva, UK, offer insurance products that are linked to reductions in GHG emissions, potentially offering products to customers that other competitors do not offer. A pay-as-you-drive motor insurance premium is currently being trialled in Aviva's UK businesses, which links the distance and frequency of travel to the insurance premium paid. In this manner, the quantity of emissions generated by the policyholder's vehicle is indirectly measured. These measurements are recorded by a black box installed in the policyholder's vehicle.
- UBS Warburg has introduced a number of derivative products based on the FTSE4Good equity indices, allowing ethical and socially responsible investment (SRI) investors to take on or reduce their risk in this style of investing.
- Royal & Sun Alliance have developed specialist knowledge and undertaken substantial business underwriting projects in the wind energy sector. Expertise in this area can play a significant role for attracting investment into these emerging technologies.

## 2.5 Asset management

Pricing assets and exercising ownership is a key function of financial services. In order to account for sustainable development, asset prices need to reflect green credentials. Table 4 examines the threats and opportunities faced by asset managers in terms of climate change.

**Table 4. Threats and opportunities for asset managers**

	Potential threats	Potential opportunities
<b>Asset management</b>	<ul style="list-style-type: none"> <li>• Climate related risks and mitigation policies could impair market values of securities</li> <li>• Real estate impaired by weather events and increased energy costs</li> <li>• Potential absence of property insurance</li> <li>• Macroeconomic disruptions impairs long-term asset appreciation</li> <li>• Pension funds see climate change issues as a potential threat to their interests</li> </ul>	<ul style="list-style-type: none"> <li>• Investment in climate leaders and best-in-sector securities</li> <li>• Hedge funds investing in GHG credits</li> <li>• Innovative climate-related theme funds e.g. renewable energy</li> </ul>

<sup>9</sup> Now known as Euronext.life which is the international derivatives business of Euronext, comprising the Amsterdam, Brussels, LIFFE, Lisbon and Paris derivatives markets. It was formed following the purchase of LIFFE by Euronext in 2001.



## **2.6 Innovations that recognise sustainability in asset management practices**

- Morley Fund Management, the fund management arm of Aviva, require FTSE 100 companies to publish an environmental report to avoid a vote against them at the company's Annual General Meeting.
- The UK's Universities Superannuation Scheme published a paper<sup>10</sup> in 2001 outlining what institutional investors can do to better manage the risks and opportunities associated with climate change. It identifies possible actions and measures such as the management of directly held property, to broader governance and engagement activities. At the strategic level it advocates active and positive involvement in the development of responsible public policy on climate change.
- The Institutional Investors Group of Climate Change<sup>11</sup>, a collaboration of 19 pension funds and fund managers representing around €700 billion of assets under management, has been one of the pioneers of collaborative action to recognise climate change as a critical investment issue. In 2003, the group wrote to the 27 largest sell side brokers in London for a more systematic approach to this issue. By November 2003 they received five replies and plan to follow up with the other 22 in 2004.
- The Association of British Insurers' guidelines have been based on collaboration between the SRI Forum of major UK companies and asset managers.
- UK fund managers ISIS Asset Management are working towards developing a 'carbon risk' screening tool for investment screening as part of their sustainability-oriented investment strategies. They have also collaborated with State Global Advisers to offer index-tracking funds with an engagement overlay. This engagement overlay is a policy of their SRI team that involves putting pressure on companies to improve environmental and social performance which also helps improve their financial performance. This form of engagement to improve performance as an overlay to the index-tracking investment process is an option for disinvestments if a company underperforms on environmental or social criteria.
- Some fund managers have set up specialist environmental technology funds, such as the Merrill Lynch New Energy Technology plc, FIS's ISIS Ecotec Environmental Technologies Fund and the Impax Capital Environmental Technologies Fund, to invest in listed stocks in sustainable energy, water, waste and resource management.
- HSBC have set up a service to provide research on corporate sustainability performance for mainstream analysts and SRI clients.

## **3. Emissions trading**

The emissions trading market is steadily growing. In 2003, 70 million tonnes of carbon dioxide equivalent (CO<sub>2</sub>e) was traded across all markets compared to around 20 million

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<sup>10</sup> Climate Change – A Risk Management Challenge for Institutional Investors, Universities Superannuation Scheme, 2001

<sup>11</sup> <http://www.iigcc.org>

tonnes of CO<sub>2</sub>e in 1998<sup>12</sup>. Regional schemes are already functioning in the UK, Denmark, Slovakia, Australia and the northeast USA. The proposed EU Scheme has increased the role of financial companies with tasks such as consultancy, brokerage and verification.

Financial companies have two main interests in emissions trading:

- 1) Potential financial gains from trading emission allowances. This involves brokerage, verification and certification of allowances.
- 2) Implications for their clients' business performance impacts on companies they invest in. This involves helping clients integrate climate change considerations, emission abatement and energy efficiency strategies, regulatory compliance, and profit maximising opportunities into their business strategy. Financial services such as business management, accounting and insurance can help in the identification of the most cost-effective emissions reduction project, verifying emission reduction, assessing sustainable development benefits and developing carbon asset management risk strategies.

## **4. Barriers**

Even though climate change poses substantial threats and opportunities for financial companies, very few have taken a proactive role. Lack of substantial data and analysis on climate change and its impact on the economy has led to most financial companies taking a 'wait and watch' approach. Reinsurance companies are the trendsetters in this area and have taken a leading stance by developing services and products supporting GHG reductions. Regulatory barriers and the complex nature of the mechanisms involved are further obstacles that discourage positive action from the financial community. London has a large share in most global financial markets and has great potential in becoming a global leader in sustainable financial services if the right incentives prevail.

### **4.1 Major barriers discouraging positive action**

#### ***Unified effort is lacking***

The Innovest reports find that commercial banks and insurance companies are not working in tandem on this issue. Banks are hesitant to provide loans where climate change effects may hinder debt servicing and insurance is not available.

#### ***Low data availability***

A survey of the UK's FTSE 100 by Morley Fund Management found that only 30 per cent of companies report comprehensive GHG data. Many of these companies are in sectors such as chemicals and construction, which face potentially high climate change risk. This general lack of good quality information on GHG emissions and climate change strategies undermines any serious attempt to incorporate climate change factors into stock evaluation.

#### ***Complex market structure***

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<sup>12</sup> Prototype carbon fund: State and Trends of the Carbon Market 2003, World Bank, 2003

The nature of the instruments and markets involved are inherently very complex. The UK ETS has been heavily criticised on the grounds of having high transaction costs, time consuming legal advice and lack of certainty over rules.

#### ***Low awareness of sustainability benefits***

There is limited understanding of the monetary value of sustainable business practices. Investors require stronger and clearer market signals for channelling funds into new environmental technologies. Mechanisms, as a result of government policy, that encourage renewable technologies and emissions trading, such as in the UK and Scandinavia, are vital in providing signals for institutional investment.

#### ***Commitment and clarity from policy makers***

Governments have not provided the right signals and incentives for reducing emissions. There is a lot of uncertainty about environmental regulations and concern regarding the compliance costs of adhering to changing regulations. Policy makers need a better understanding of the role and functions of the financial services industry's segments. Each segment plays a unique role in helping understand the risks of climate change and determining how these risks should be included in investment decisions.

### **5. London's potential: The global centre for environmental-financial services**

London's position in the financial community is highly strategic and of great global importance. Its major competitive advantages include a highly skilled labour force, a strategic time zone, international transport links, relatively low levels of corporate and personal taxation, and the use of English as the language of business.

#### **5.1 Some of London's financial sector's key facts**

- London has more banks than any other world centre with 287 branches and subsidiaries of foreign banks in the capital in March 2003<sup>13</sup>.
- London is the world's largest international insurance market with a 2002 gross premium income of £25 billion. It is also the main skill centre for the world reinsurance business which is the most active financial sector in developing climate risk instruments. The underwriting capacity of Lloyds of London was around £14 billion in 2003<sup>14</sup>.
- London, compared to other world cities such as New York and Tokyo, had the largest equity investments in 1999 with assets valued at \$2500 billion<sup>15</sup>.
- London is a major international market for accounting and related services generating net exports of £461 million in 2002<sup>16</sup>.

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<sup>13</sup> International financial services London <http://www.ifsl.org.uk/research/index.html>

<sup>14</sup> The City's Importance to the EU Economy, Corporation of London, January 2004

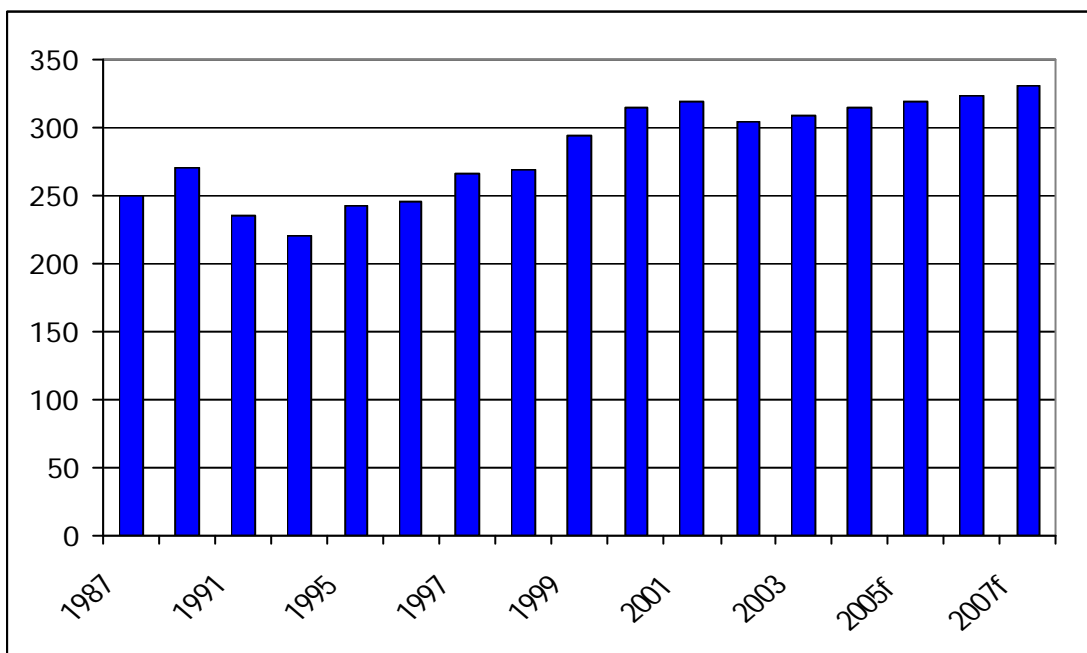
<sup>15</sup> The City's Importance to the EU Economy, Corporation of London, January 2004

<sup>16</sup> International financial services London <http://www.ifsl.org.uk/research/index.html>

- London, with 36 per cent of global turnover, was the biggest market in the world for derivatives traded over-the-counter in April 2001. It was also the second largest after Chicago for exchange traded futures and options. In the first nine months of 2003, London accounted for 45 per cent of Eurex<sup>17</sup> trading based in the UK. LIFFE is the world centre for euro money market derivatives trading. Every day, trading to the value of £500 billion takes place at LIFFE, more than any other exchange in the world.

Chart 1 below shows London's *city-type* employment from 1987 forecast until 2007. *City-type* activities include commercial, private, international and corporate banking; fund management; corporate finance; foreign exchange; securities; commodities; the shipping and derivatives market; and professional advisory services.

**Chart 1. City-type employment in London**  
(annual average, '000s)



Source: cebr City Jobs Confidential Briefing, December 2003; f-cebr forecast

## 6. Conclusion

This note highlights the role and potential of London's financial centre in encouraging sustainable business practice. A business case for the environment needs to be created for sustained action on behalf of the financial community. This is important as climate change effects are complex to understand and long-term market forces alone cannot change investment decisions towards more sustainable practices. Sustainable business practices require shared responsibility between corporations and governments to develop a fiscal and regulatory environment. This regulatory environment should make positive actions and sustainable business practice a clear value driver and provide shareholders with a superior return that reflects this green practice status.

<sup>17</sup> Eurex is the world's leading futures and options market for euro denominated derivative instruments.

## **7. Recommendations**

- Financial industry regulators should look at making it mandatory for listed companies and their financial advisers to provide investors with appropriate information on climate risks. Investment related documents, company profiles and stock market prospectuses should contain climate change risks.
- Insurance companies can influence investors to account for climate change risks in the structure of the insurance coverage. By specialist underwriting procedures and developing new risk transfer products, insurers can ensure that economic adverse effects of climate change can be internalised in investment decisions.
- Asset managers have a vital role to play in directing capital towards new environmental technology by designing products that encourage institutional investment in these technologies. They should be encouraged to develop more robust, quantitative tools that account for the implications of GHG regulations and climate risks on equity prices, corporate earnings and relative sector risk.
- Companies should report on GHG data.
- In order to tackle the risks posed by climate change, all financial institutions should be encouraged to work for the 'collective interest' as well as their own.
- By pricing climate change risks into loan terms and conditions, commercial banks can protect their own interests as well as encourage borrowers to adopt adequate climate mitigation strategies.

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### **Abbreviations**

CCL – Climate Change Levy  
CDP – Carbon Disclosure project  
CO<sub>2</sub>e – Carbon dioxide equivalent  
ETS – Emissions Trading Scheme  
EU – European Union  
GHG – Greenhouse gas  
SRI – Socially Responsible Investment

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