

Lead in Risk Analysis

1. *Support and undertake research on climate change to inform our business strategies and help to protect our customers' and other stakeholders' interests.*

Catlin has undertaken a detailed evaluation of climate change model projections derived from the Intergovernmental Panel for Climate Change (IPCC) and other independent bodies to assess the potential impacts of gradual and extreme climate events in key worldwide regions. This and continual climate change research forms an integral part of Catlin's business strategy review.

Catlin has started using the latest climate model projections to perform sensitivity studies and enable the assessment of potential future losses in key regions where Catlin currently underwrites.

2. *Support more accurate national and regional forecasting of future weather and catastrophe patterns affected by changes in the earth's climate.*

Catlin is currently conducting detailed research to identify whether there are climate change models/tools which Catlin can adopt or invest in to provide an improved understanding of local climate change at shorter timeframes and support improved future strategic decision-making on risk pricing and allocation.

Initial research for this workstream resulted in the identification of three potential climate models/tools which are currently being investigated including:

1. **Met Office** – Decadal Prediction system
(see <http://www.metoffice.gov.uk/corporate/pressoffice/2007/pr20070810.html>)
2. **Planalytics** – Weather Prediction Tool
(see <http://www.planalytics.com/Content144.phtml>)
3. **WSI/Guy Carpenter** - WSI LiveCat Forecast
(see <http://www.guycarp.com/portal/extranet/popup/press/PDF/2007/WSI%20AL%20102207.pdf?vid=1>)

Current investigation and research for each of these tools is focused on assessing the following areas:

1. What are the capabilities to identify specific threshold climate conditions in key vulnerable areas at regional/local level and at shorter timeframes?
2. How accurate have forecasts and projections been historically?
3. Does each model presently have the capability to support decision-making on risk pricing and allocation?
4. How (and in what timeframes) is the forecasting accuracy and performance of each model expected to develop in the future?
5. What are the benefits of investing in the use of each model in the short-term versus the long-term?

The output of this research will provide us with the required information to support our decision making as to what tools/models we can potentially adopt. This will also provide us with the required information to identify which tools we can invest in to support further development of the capabilities that meet the needs of Catlin and the insurance industry.

3. *Use research and improve data quality to inform levels of pricing, capital and reserves to match changing risks.*

Catlin's initial research into the impacts, challenges and opportunities of Climate Change included conducting detailed sensitivity studies to review the Group's capital, liquidity and pricing assumptions. This included carrying out simulations of increased tropical cyclone frequency with the Aggregate Modelling Team using the internal RMS loss model. This simulation tested the impacts on gross losses from a gradual increase in tropical cyclone frequency (i.e. 0-40%) of single events in the US, Europe and Japan and assuming no change in landfall frequencies.

4. *Evaluate the risks associated with new technologies for tackling climate change so that new insurance products can be considered in parallel with technological developments.*

Catlin is currently conducting detailed research to identify potential threats to existing products and opportunities for new product and service opportunities due to climate change and the low carbon economy.

This research is currently work-in-progress and has so far included conducting several workshops with a select number of Underwriting representatives from key relevant Product Group areas (i.e. Liability, Energy and Property, Casualty and Credit) to:

1. Review and Assess the impact on existing industries and relevant product lines from future legislation change for low carbon economy?
2. Review and Assess the potential of key opportunities/markets (i.e. Low Carbon Economy Products, Financial Products – Carbon Markets/Trading, Climate Risk Management Services) for the development of new products
3. Identify potential short and long-term product opportunities for development

As part of this internal research exercise, we have also actively engaged with leading broker institutions which have provided support in regards to providing market intelligence, supporting the ongoing workshops outlined above and indentifying key areas of demand originating in specific markets/industries.

5. *Share our research with scientists, society, business, governments and NGOs through an appropriate forum.*

Catlin is a founder member of the Lighthill Risk Network, a not-for-profit organisation which brings together scientific researchers worldwide, industry, government and third party organisations to exchange risk-related expertise. Catlin has worked closely with the Lighthill members to share and develop a knowledge base of key areas relating to climate change. Catlin also contributes to the identification and related advancement of future climate change research through this initiative.

Catlin is primary sponsor of the Catlin Arctic Survey, a major scientific effort to measure the thickness of the remaining permanent Arctic Ocean Sea ice to assess the impact of climate change.
(see http://www.catlin.com/cgl/about_us/arctic/)

The Survey is a collaboration with leading international scientists to help them more accurately assess the state of the rapidly receding Arctic sea ice. This 73-day Arctic expedition, led by British polar explorer Pen Hadow, carried out a programme of scientific undertakings along a 400-kilometre route, including 1,500 physical measurements of the thickness and density of the Arctic sea ice and 15,000 visual observations.

The data gathered by the explorers are now being interpreted by scientists. The conclusions drawn from this analysis will be shared and presented at the UN Climate Change Conference to be held in December in Copenhagen to support the negotiation of the replacement to the Kyoto protocol agreement.

Inform Public Policy Making

1. *Work with policy makers nationally and internationally to help them develop and maintain an economy that is resilient to climate risk.*

See **Lead in Risk Analysis** – Point 5

2. *Promote and actively engage in public debate on climate change and the need for action.*

Catlin has been investigating the practicalities and potential benefits of working jointly with governments and local authorities in order to encourage the implementation of adaptation measures in key vulnerable areas. Catlin has been actively engaging with key bodies which are participating and driving the public debate for Adaptation measures and policies. This has so far included key bodies such as the Association of British Insurers (ABI), Resilient Coast Project (see http://www.heinzctr.org/Press_Releases/resilient_coasts.shtml) and Lloyd's.

Catlin are currently investigating the potential benefits of joining the Munich Climate Insurance Initiative (see http://www.climate-insurance.org/front_content.php) as a channel to encourage and influence the development of Adaptation policies both at global and national levels.

3. *Support work to set and achieve national and global emissions reduction targets.*

See **Lead in Risk Analysis** – Point 5

See **Inform Public Policy Making** – Point 2

4. *Support Government action, including regulation that will enhance the resilience and reduce the environmental impact of infrastructure and communities*

By joining ClimateWise, Catlin is expressing its support for the work being pursued by the insurance market. More specifically, as a managing agent, we work closely with Lloyd's in supporting their activities in promoting public awareness and debate on the need to take Government action on climate change. Click [here](#) to read in detail the action being taken by Lloyd's

See **Inform Public Policy Making** – Point 2

5. *Work effectively with emergency services and others in the event of a major climate-related disaster.*

By joining ClimateWise, Catlin is expressing its support for the work being pursued by the insurance market. More specifically, as a managing agent, we work closely with Lloyd's in supporting their activities in promoting public awareness and debate on the need to take Government action on climate change. Click [here](#) to read in detail the action being taken by Lloyd's

Support Climate Awareness Amongst Customers

1. *Inform our customers of climate risk and provide support and tools so that they can assess their own levels of risk.*

Catlin has started the process of advising and encouraging customers to take note of climate change and adapt their behaviour accordingly with the launch of "FleetDirections", an initiative targeted at the motor fleet manager. We now provide a comprehensive "green fleet" approach including a free CO2 emissions calculator and green fleet healthcheck. Catlin are the first insurer to recognise green credentials in our pricing for motor fleet insurance (see <http://fleetdirections.net/>).

2. *Encourage our customers to adapt to climate change and reduce their greenhouse gas emissions through insurance products and services.*

See **Support Climate Awareness Amongst Customers** – Point 1

3. *Increase the proportion of repairs that are carried out in a sustainable way through dialogue with suppliers and developers and manage waste material appropriately.*

Catlin has been engaged in the discussion of sustainable Claims with Lloyd's and ClimateWise to develop a framework that aims to increase the usage and deployment of sustainable materials in the event of a claim.

This remains work-in-progress and Catlin is actively engaged in this discussion phase with Lloyd's and ClimateWise. Catlin are also sponsoring a Claims Clinic in for the Insurance Times on July 5th (***The impact of climate change, natural catastrophes and disasters***) which will focus on the debate about driving adaptation and sustainability through the claims process. This will consist of a panel discussion which will comprise of Catlin's Head of Claims (Nick Sinfield) and 4 other leading market representatives. (see <http://www.insurancetimes.co.uk/section.asp?navcode=421>)

4. *Consider how we can use our expertise to assist the developing world to understand and respond to climate change*

Catlin does not have a significant physical presence or products offering in developing countries and therefore is not in a position to engage with and contribute expertise to developing countries.

Reduce the Environmental Impact of Our Business

1. *Encourage our suppliers to improve the sustainability of their products and services.*

Catlin has a limited number of suppliers as part of its day-to-day operations. Catlin has no influence on the sustainability of the building it operates from in London.

As part of the process of measuring the carbon footprint for Catlin's worldwide operations (see below) Catlin has begun to incorporate sustainability criteria in to all current and future decisions in regards to accommodation and suppliers.

2. *Measure and seek to reduce the environmental impact of the internal operations and physical assets under our control.*

Measurement

Catlin has calculated the carbon footprint for its UK operations from January 2008 to December 2008 in line with the GHG Protocol and the Carbon Trust (CT) guidance on calculating organisation footprints. The information was been collected and the carbon footprint calculated by Enviros Consulting Ltd, a company specialising in the collection and calculation of such data. Catlin is currently working with Enviros to calculate the carbon footprint for all its remaining worldwide (i.e. non-UK) operations.

The methodology used for the calculation of the UK Operations carbon footprint is in line with World Business Council for Sustainable Development (WBCSD) Greenhouse Gas (GHG) Protocol, the GHG Protocol and uses published emissions factors from the UK Government. Overall, the quality of data was rated by Enviros as 'good': 98% of the total company footprint emissions as 'good', 1% as 'fair' and the remaining 1% as 'estimate'.

Reduction

Catlin has entered into a contract with The Carbon Neutral Company, a leading carbon offset and climate consulting business, to offset the carbon dioxide emissions created by Catlin employees' business-related air travel relating to 2007, 2008 and subsequent years. The 'offset credits' purchased by Catlin will be used to finance alternative energy and other environmentally sound projects on a quarterly basis. For example, Catlin's offset credits in the first quarter of 2008 helped finance the Rhine-Rhur Waste Gas Power Project in Germany, which captures methane gas from three abandoned coal mines and uses it to generate electricity and heat.

The Group utilises video conferencing capabilities in the United Kingdom, Bermuda, France and the United States to encourage employees, where possible, to conduct both internal and external meetings via video conference rather than travel.

As part of its day-to-day business, Catlin attempts to make good environmental practice part of its everyday activities. For example, the Group operates a comprehensive document scanning system which enables employees worldwide to view documents electronically rather than on paper, minimising waste. In addition to Catlin's current reduction activities, Catlin is also currently finalising new proposals for the implementation of enhanced recycling and carbon reduction policies.

3. *Disclose our direct emissions of greenhouse gases using a globally recognised standard.*

Following Catlin's carbon footprint calculation (see **Reduce the Environmental Impact of Our Business – Point 2**) in the first quarter of 2009, this was not included in the Catlin Group Limited 2008 Annual Report & Accounts due to time constraints.

Catlin's Group Executive Committee has approved the disclosure of the company's carbon footprint in the 2009 Annual Report & Accounts which is planned to provide a carbon footprint disclosure of its worldwide operations.

Catlin has also signed up to the Carbon Disclosure Project (CDP) and provided information on the following 4 areas (see <http://www.cdproject.net/company-homepage.asp?id=2002>):

1. Management's views on the risks and opportunities that climate change presents to the business
 2. Greenhouse gas emissions accounting
 3. Management's strategy to reduce emissions / minimise risk and capitalise on opportunity
 4. Corporate governance with regard to climate change
4. *Engage our employees on our commitment to address climate change, helping them to play their role in meeting this commitment in the workplace and encouraging them to make climate-informed choices outside work.*

The Group also encourages employees wherever possible to recycle paper and other renewable products. The Group strives to minimise energy consumption through the use of automatic light controls that switch off lights when employees are not at their desks.

Sponsorship of the Catlin Arctic Survey (CAS) has also provided an opportunity to engage employees and raise general awareness about climate change. Regular updates have been posted on the Group Intranet highlighting the scientific nature of the survey and its relevance to global warming given the importance of the polar ice cap. Furthermore, a series of newsletters have been produced over the course of the survey period, detailing progress and these have been available both internally and sent out to brokers.

As a component of the CAS, Arctic Survey Education has been developed – an initiative to inspire and engage young people with facts about the Arctic and its role as a barometer of climate change. The material has been targeted to specific age groups and will have a wide appeal with modules aimed at 5 – 11 year olds; 12 – 14; 14 – 16 and 16+. A number of the modules have been developed with the University of Cambridge which include a complete, teaching-ready full resource toolkit that aims to educate and provide awareness of Climate change (see found at www.arcticsurveyeducation.com)

Report and Be Accountable

1. *Recognise at company Board level that climate risk has significant social and economic impacts and incorporate it into our business strategy and planning.*

Continual detailed climate change research is undertaken at Catlin, and its results are debated and recognised at the highest levels of the organisation in the context of their impact on business strategy and planning.

2. *Publish a statement as part of our annual reporting detailing the actions that have been taken on these principles.*

Catlin published a statement in its 2007 and 2008 annual report detailing its commitment and objectives as a member of ClimateWise. To ensure greater accessibility and transparency of Catlin's response to ClimateWise principles for shareholders and the general public, information has also been published on the Catlin website. (See http://www.catlin.com/cgl/ir/corporate_governance/climatewise)

Incorporate Climate Change Into Our Investment Strategies

1. *Consider the implications of climate change for company performance and shareholder value, and incorporate this information into our investment decision-making process.*

Climate Change Impact Research

As part of Catlin's initial research into the potential Climate Change impacts on Catlin, detailed research and consultation was undertaken to determine the potential impacts of Climate Change on Catlin's Investment Strategy and any associated assumptions. This included assessing the potential impacts of different extreme Climate Change events on each of Catlin's investment classes.

This assessment was reviewed and discussed by all members of the Asset Investment team. Catlin's investments are predominantly in cash instruments and fixed-interest securities. Catlin does not directly invest in individual

companies and its current approach is to invest in the funds of external investment managers with the skills to optimise performance.

Further Research

Catlin is currently undertaking additional detailed research in the following areas:

- 1. Workstream 1:** Are there opportunities to incorporate investment in Green Funds into Catlin's investment strategy?
 - 1.1** What is the number of Green Funds in the market (Current/Historical)?
 - 1.2** How are Green Funds segmented (Current/Historical):
 - 2.1.1** by investment Strategies?
 - 2.1.2** by size (AUM)?
 - 1.3** Profitability/Investment Returns for each key segments identified
 - 1.4** Assess the feasibility of future investments in Green Funds and alignment with Catlin's investment strategy
 - 1.5** What are the criteria used to define a Green Fund?
- 2. Workstream 2:** How are existing Catlin Fund Managers addressing the impact of Climate Change risk on their investment portfolios? Do these address Catlin's Climate Change views and priorities?
 - 2.1** Do existing Catlin Fund Managers have a formal strategy in place to address Climate Change risk?
 - 2.2** Are existing Catlin Fund Managers using their influence to encourage companies which they invest in to:
 - 2.1.3** address the potential implications of climate change?
 - 2.1.4** improve disclosure and reporting on climate risks and opportunities?
 - 2.1.5** encourage improvements in the energy-efficiency and climate resilience of investment property portfolios?
 - 3.1** Are existing Catlin Fund Managers actively considering and exploring the potential for investment in Green/Low Carbon companies/markets
 - 3.2** Are existing Catlin Fund Managers building their capacity to analyse the financial implications of climate policy and incorporating this information into their investment decision-making process.
 - 3.3** Are existing Catlin Fund Managers actively contributing to the public policy debate on climate change – individually or through a collaborative initiative?

- 2. Encourage appropriate disclosure on climate change from the companies in which we invest.*

See **Incorporate Climate Change Into Our Investment Strategies – Further Research (Workstream 2)**

- 3. Encourage improvements in the energy-efficiency and climate resilience of our investment property portfolio.*

See **Incorporate Climate Change Into Our Investment Strategies – Further Research (Workstream 1)**

- 4. Communicate our investment beliefs and strategy on climate change to our customers and shareholders.*

See **Incorporate Climate Change Into Our Investment Strategies – Further Research (Workstream 2)**

- 5. Share our assessment of the impacts of climate change with our pension fund trustees.*

Catlin outsources its pension management to Scottish Widows and therefore do not have a pension fund trustee.