

# Executive Summary \*

Global climate change could be the biggest challenge for economy and society in the 21<sup>st</sup> century. Therefore, even the financial market cannot deny its influence. In the context of the project "Mainstreaming of climate risks and opportunities in the financial sector", a survey on the European financial sector was conducted in the first half of 2007.

Crucial questions of the survey had been:

- 1. How does the financial market perceive climate change?
- 2. Have opportunities and risks of climate change with regard to financial analyses and investment decisions adequately been taken into consideration?
- 3. Are there any trends concerning new methods or proceedings for an appropriate management of these risks / opportunities?

The following statements outline the main findings of the paper published in September 2007 "Is the financial market prepared for climate change? – Results of a survey among financial market experts" (in German).

This paper and further information are available at:

www.climate-mainstreaming.net

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<sup>\*</sup> Version, 2007-11-01



# 1. How does the financial market perceive climate change?

#### Highlights from the survey

- Although the majority of experts interviewed is generally aware of possible effects of climate change, most actors are inadequately informed about the significance of climate change for the financial sector in particular.
- There is a direct cause-effect-relationship between climate change and "value drivers" for the performance of companies. But so far this connection has only been considered in particular cases (especially emission trading) and some areas (especially Socially Responsible Investments).

#### **Results and Conclusions**

Financial analysts and investors claimed to have only inadequate information on the specific consequences of climate change on their sector.
 Thus, the substantial (popular) scientific publications and information on climate change will not only have to be edited for the financial sector, but will also have to be spread via the sector's corresponding media and channels of information.



### 2. Have opportunities and risks of climate change with regard to financial analysis and investment decisions adequately been taken into consideration?

#### Highlights from the survey

 Most experts claim that chances and risks of climate change are largely being taken into consideration (ref. figure 1). However, the results of the survey show that these risks and chances neither have a systematic influence on risk management, financial analysis or investment decisions, nor have they been incorporated by quantitative methods.

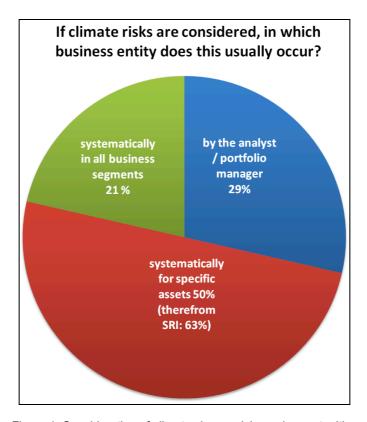


Figure 1: Consideration of climate change risks and opportunities

For analysing climate change risks and opportunities subjective heuristics are applied.

#### **Results and Conclusions**

• Although the financial market has recognized the relevance of climate change, consequences have not yet been drawn for day-to-day business, leading to a gap between awareness and realisation. Reducing this gap and coping with the challenges of climate change in the financial market, new or further developed procedures / methods are needed. This can be shown by the great demand for new solutions (ref. figure 2).



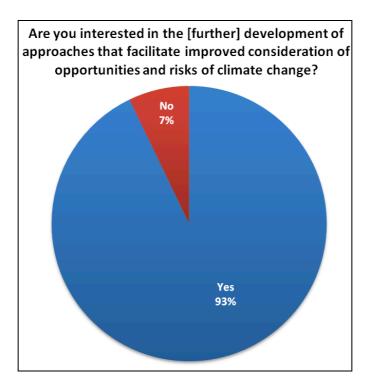


Figure 2: Interest of the development of approaches

• Financial analysis and Portfolio-Management are rather seen as "art" than as science. Attempts of evaluations and decisions based on scientific methods are exceptions. It does not seem as if "gut decisions" based on experiences are problematic for the parties involved or if objectifying is aspired. As a consequence, aspects of climate change may be integrated into the (individual) decision process in terms of an additional component. In order to avoid resistance of the parties involved the input resulting from these additional components (whether general information or specific risk measures) should only supplement the individual decision.



# 3. Are there any trends concerning new methods or proceedings for an appropriate management of these risks / opportunities noticeable?

#### Highlights from the survey

 There is a great demand in the financial market for the development of methods which allow a – preferably modular and feasible – systematic consideration of climate risk in risk management. Existing methods should be refined for this issue.

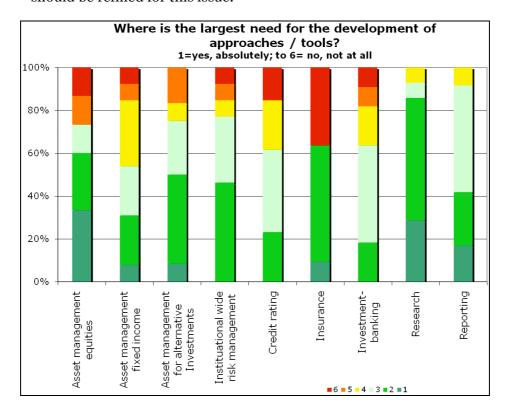


Figure 3: Need for the development of approaches / tools

- Respondents stated that integrating climate opportunities and risks is
  most significant for evaluating enterprises in equity research. Reasons
  given by the experts interviewed are openness and analytic expertise on
  this issue, as well as the demand for a micro-economic validation of climate change.
- Integrating climate risks and opportunities in the financial business ("mainstreaming") has been recommended and supported, as long as the methods are feasible and of use. There is a great demand for such methods in the financial sector.



#### **Results and Conclusions**

In the several business segments the willingness for changes an innovations differs quite significantly; in parts also due to the felt or formulated corporate identity of the company (ref. figure 4). In segments with low willingness towards changes particularly "Best-Practice" examples could be motivating; they can hardly be won as first-movers regarding new applications or methods. Therefore, it is reasonable to start with open-minded business segments (i.e. equity research). Step-by-step field-tested approaches can be transferred to a larger group. Furthermore it should be taken care that the approaches / tools can be used flexibly in terms of accessibility to different methods.

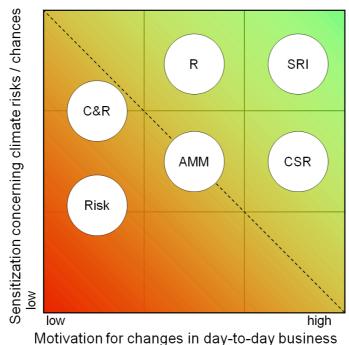


Figure 4: Business segments and their suitability for the mainstreaming

AMM: Asset management / fund management, SRI: Socially Responsible Investments, C&R: Credit & Risk, CSR: CSR & Corporate strategy, R: Research / Financial analysis, Risk: Risk controlling

• The financial sector has signalled a great demand for further development of methods / instruments in order to manage climate opportunities and risks. This means in reverse that the current systems and procedures are not or only inadequately appropriate for the management of climate opportunities and risks. As there is apparently no intra-sectoral development at the moment, science can play an important role in [further] developing, testing and transferring appropriate methods and instruments. The use of scientific know-how will accelerate the mainstreaming significantly.



## **Background information on the project:**

# >>Mainstreaming of climate risks and opportunities in the financial sector<<

Climate-related opportunities and risks in insurance, asset management and lending (with a focus on asset management)

Germanwatch; University of Potsdam; PIK Potsdam Institute for Climate Impact Research; DIW German Institute for Economic Research; Wuppertal Institute for Climate, Environment and Energy

Starting from precise requirements voiced by German financial service providers, the project elaborates proposals on how to adequately incorporate climate-related risks and opportunities in company ratings (analysis), risk quantification and control, as well as investment decisions/asset management.

The project aims at developing instruments, processes and methods which enable financial analysts, asset managers, underwriters and investors to integrate considerations on climate change and protection (adaptation and mitigation) in their decisions. Such an implementation-oriented, expert-based classification system will be designed along the lines of tools and methods used by sell-side analysts, portfolio managers and underwriters, and/or in such way that it can be integrated into these.

One of the main issues is the development of new approaches to risk management. General climatic and political frameworks are modified by climate change in such a way that statistical methods and a simple extrapolation of previous trends are no longer suitable for drawing reliable conclusions with regard to future developments. Thus, an increasing number of decisions is taken on an uncertain basis. A promising approach lies in methods of Bayesian risk management, which facilitate improved assessment of the impact of climate change, as well as climate policy and its financial implications. Hence, they mark a core element of the project. The results shall be achieved in cooperation with selected financial service providers, and shall be made available to financial market actors using them to set the course for improved adaptation and climate protection measures in economy.