

Ministry of Finance  
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Your ref.:  
Our ref.:

## Financial risk associated with climate change

Norges Bank refers to the Ministry of Finance's letter of 2 December 2014 asking the Bank to report on its work on integrating financial risk associated with climate change in the portfolio, and on the status of key international initiatives in this area that the Bank is involved in. The Ministry also asks Norges Bank to assess the possibilities for sponsoring scientific analyses of financial risk associated with climate change and how such an initiative could be designed in order to contribute relevant knowledge of this type of financial risk for a fund like the Government Pension Fund Global (GPFG). Finally, the Ministry asks the Bank to consider whether the Norwegian Finance Initiative (NFI) is an appropriate instrument in this context.

We have had climate change as a focus area in our management of the GPFG since 2006 and have worked over time on integrating financial risk associated with climate change in the fund's management. This is a work in progress. Our responsible investment activities currently include working with standard setters, interaction with companies and risk management, and are integrated in the investment process. We have also built up a knowledge of relevant climate issues through our management of environment-related investments, which include companies that supply technology and solutions for renewable energy, energy efficiency and emission reduction.

### **The management of the GPFG and financial risk associated with climate change**

Norges Bank's work on financial risk associated with climate change is based on its investment strategy and the fund's financial objective. Our work on climate issues in the fund's management is presented in more detail below and includes collaboration with selected international standard setters, expectations for how companies should address relevant climate issues in their operations and reporting, following up these expectations, interaction with companies, voting, mapping greenhouse gas emissions from companies in the portfolio, fundamental analysis, risk analysis and portfolio adjustments.

We have published expectations documents on climate change management, water



management and children's rights. These documents set out our expectations for how companies integrate these challenges in their business. In the expectations document on climate change management, Norges Bank has expressed a clear expectation that companies should integrate climate risk in the management of the business. We are particularly interested in companies' governance processes, reporting and transparency. The expectations document was first published in 2009 and was updated in 2012. We have begun the process of revising the document once again during the first quarter of 2015 and plan to obtain external input in this work.

Each year, we carry out sector risk assessments to map the degree to which companies in particularly high-risk sectors live up to our expectations. This work gives us a picture of companies' management of climate risk at a general level. The findings can be used in our dialogue with companies and can form a basis for further analysis of individual companies or sectors or more targeted ownership activities at company level.

Norges Bank aims to prioritise ownership activities that we expect will have the greatest positive effects on the portfolio. Our dialogue with companies focuses mainly on large investments. Shareholder rights, board composition, carbon emissions/disclosure and transparency on sustainability were priority topics in our dialogue with companies on responsible investment in 2014. For example, we asked a number of oil & gas companies to improve their reporting on their work on climate change.

Norges Bank has gradually built up internal capacity for fundamental analysis of individual companies. Our investment decisions consider the prospects for different sectors and companies' future earnings. Besides sector-specific and company-specific factors, we look at general market conditions and the outlook for demand. These analyses also include assumptions about future climate changes, climate policies and possible regulatory changes. We may put questions to companies' boards about their business strategies or capital allocation. In 2015, we have sent out letters asking power companies about their plans for transitioning to less emission-intensive energy systems, and to mining companies requesting their views on a possible move in the industry towards hiving off their coal-mining operations.

We have begun work on mapping greenhouse gas emissions from the companies we invest in. This work and the initial results are presented in our Responsible Investment Report for 2014. One general challenge in this work is that there is no standard method for performing such calculations. Access to data also varies, and different data suppliers use different calculation methods. An additional challenge is that we have a very broad portfolio of investments, and companies' reporting on emissions varies.

We have been working with external suppliers to improve the measurement and reporting of emission data by companies in the portfolio. We have also worked to increase our understanding of the quality of the information available and the various models that the data suppliers use when calculating greenhouse gas emissions at company level. Information about greenhouse gas emissions can be used as an element in our risk management.



However, information about companies' greenhouse gas emissions does not paint a complete picture of potential climate risk at company or portfolio level. Nor is this information sufficient to be used directly for investment purposes. Risk and investment assessments need to take into account a broader set of parameters, such as companies' operations and plans, industrial structures and market conditions.

Our work has also resulted in portfolio adjustments where companies' climate strategies have been included in an assessment of their business models and long-term sustainability. In 2014, we divested from 22 companies involved in coal mining, oil sands, cement production and coal-fired power production on the basis of such assessments. Through our environment-related investment mandates, we invest extra in environmental technology. The Ministry of Finance decided in 2014 that these investments should be increased from 20-30 billion kroner to 30-50 billion kroner. These investments include companies in renewable energy, energy efficiency, water and waste management, and pollution control.

### **Investor initiatives, research and scientific analyses**

As discussed above, Norges Bank has been looking at climate issues for many years and has gradually developed its work in this area. We believe that this is also a work in progress at other investors. Besides dealing directly with companies and leading data suppliers, Norges Bank participates in international initiatives focusing on climate change. We are a member of CDP (formerly known as the Carbon Disclosure Project) in order to promote the standardisation of companies' reporting on climate risk. The information obtained through initiatives such as CDP is useful in our management of the fund.

In 2014, we submitted a consultation response to the Climate Disclosure Standards Board (CDSB), which is developing a reporting framework for climate-related risk. This framework, which also now includes risks relating to water and deforestation, aims to help companies integrate environmental information in their ordinary reporting. The development of the framework will impact on CDP's annual collection of data on climate, water and deforestation risks. In 2011, we signed the Global Investor Statement on Climate Change along with 285 other investors.

There are a variety of international climate initiatives targeting companies and investors. Norges Bank will continue to support those initiatives that we believe are particularly relevant to our activities. We will encourage companies to report on their greenhouse gas emissions, their dialogue with the authorities on climate issues, and their strategies to deal with climate challenges.

We will contribute to analysis and research on responsible investment in order to obtain more knowledge about factors relevant to the investment portfolio's long-term risks and returns. Norges Bank is positive about the possibilities for sponsoring academic studies of financial



risk for the fund associated with climate change, and plans to begin this work in 2015. Research is a particularly useful instrument in areas where there is considerable uncertainty and a need to shed light on problems both theoretically and empirically.

Climate risk takes in complex issues and a variety of fields. Norges Bank will limit its activities to areas that are of particular relevance to the fund's management. A range of instruments can be used in this work going forward – internal analysis, collaboration with data suppliers and international investor initiatives, and academic research are all relevant ways of shedding more light on climate issues.

The Norwegian Finance Initiative (NFI) aims to strengthen the scientific basis for Norges Bank Investment Management's management of the GPF. The NFI has set up a dedicated programme to incentivise academic research in areas of financial economics that are of particular interest for the long-term management of the fund. These areas include portfolio theory, market microstructure and corporate governance. The NFI is a relevant instrument for promoting scientific analyses of financial risk associated with climate change.

Norges Bank can also conduct research projects in-house. We have participated in the Harvard Institutional Investor Forum for several years. In 2014, we launched a research project with Columbia University and various other academic institutions looking at how sustainability and responsibility impact on mining companies' profitability. Research collaborations of this type with leading academic institutions may also be relevant in our work on exploring aspects of financial risk associated with climate change. We plan to work on research-oriented aspects of financial risk associated with climate change over a number of years, and will provide further information on the progress and results of our work in our annual reporting on the management of the GPF.

Yours faithfully

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