

Climate Risk and Management for Finance

This factsheet, based on the report 'Climate science for the financial sector: Managing climate risk in Norway and Sweden' briefly explains the concept of climate risks, the most likely climate risks for Norway and Sweden, and how they impact the financial sector. It also presents disclosure of climate-related risks and preparedness as well as scenario analyses as useful tools to handle climate risk. Finally, it summarizes the main needs of the financial sector and offers guidance on climate risk management.

What is climate risk?

Climate risk refers to direct and indirect impacts of climate change and policies to reduce greenhouse gas emissions on society and nature.

Explaining climate risk

Physical risk is related to impacts from changes in precipitation, temperature and wind conditions.

Transition risk is related to stricter climate policies, such as a higher carbon price, and increased financial cost for fossil-related investments.

Liability risk is the risk from litigation cases directed at e.g. oil companies for damage due to physical impacts of climate change.

Risk exposure

The sectors and investments most exposed to transition risks in Norway and Sweden, listed according to highest risk:



1 Carbon-intensive, e.g. coal-based power production, coal mining, petroleum extraction.



2 Transportation, air travel, shipping.



3 Construction, metals, mining.



4 Norway and Sweden are exposed to crossborder climate change impacts through supply chains, trading and political/social instability.



Physical impacts of climate change in Norway and Sweden according to hazards

Extreme precipitation

- Damage to buildings and infrastructure in cities.
- Flooding in rural areas.
- Land-slides.
- Avalanches.

Drought

- Reduced crop production.
- Wildfires.

Biodiversity

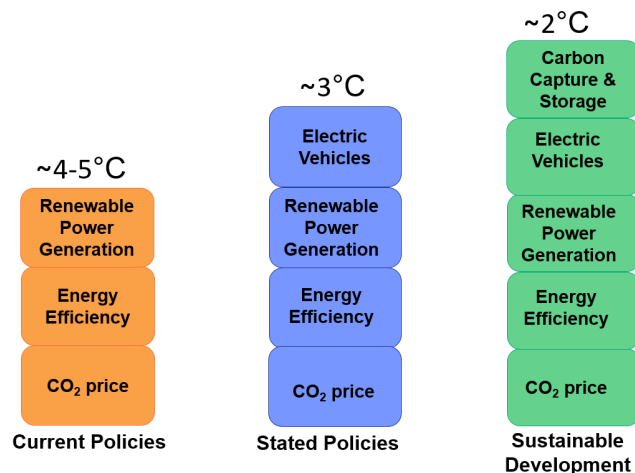
- Impacts on nature, vegetation and wildlife.

Sea level rise (long-term)

- Damage to buildings and infrastructure.

Scenario Analysis

- Scenario analysis is a useful tool to assess the preparedness of an institution to handle climate risk.
- A scenario is a picture of a possible future, building on assumptions that are uncertain but internally consistent, e.g. in terms of energy prices, economic growth and climate policies.
- Scenarios building on different and uncertain assumptions about the future are useful for climate 'stress-testing' of a company.
- Scenario construction requires enough data and a method/model to combine these.



The 'Current policies', 'Stated policies' and 'Sustainable Development' scenarios from World Energy Outlook, 2019.

What does the financial sector need?

(Based on interviews with representatives from Norwegian and Swedish financial institutions).

- Transparent and easily accessible information.
- Overview of expected climate change and impacts.
- Specific information relevant for each finance institution.
- More systematic management of climate risk.
- More standardization of data and tools.

How can financial institutions best handle climate risk?

- Build capacity on climate risk knowledge and management.
- Consider adjustments to organization, staff and procedures.
- Assess new business opportunities related to climate friendliness and robustness.
- 'Stress-test' the robustness of the institution on climate-related risks.

Disclosure of climate-related risk and preparedness

The Taskforce on Climate-Related Financial Disclosures (TCFD) was established by the Financial Stability Board in 2015. In 2017, the TCFD developed a set of recommendations to stream-line climate related financial risk disclosure. TCFD recommends disclosure for all financial actors and companies. The recommendations are divided into the following:

