Norfund

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Task force on Climate-related Financial Disclosures (TCFD) report 2023

This report describes Norfund's approach to climate related risks and opportunities. While TCFD has transitioned into the IFRS (International Financial Reporting Standards), Norfund still finds the structure of the TCFD reporting to be a useful tool and we are committed to continuously improve our approach to climate risks and opportunities, and how if affects Norfund and our portfolio companies.

Governance

As part of our strategy, Norfund observes certain cross-cutting issues in our investment activities. Norfund's work on cross-cutting issues is regularly reported to the board of directors, including an annual review on climate. Climate risk is also discussed in the "Risk and Audit Committee", a sub-committee of the board of directors designed e.g., to oversee risk management in Norfund.

At management level, Norfund's Net Zero strategy informs strategic investment planning and is embedded within portfolio management processes. Climate-related risks and opportunities are assessed as part of the investment process, as described in Norfund's Guidance Note on Climate Risk Assessment for New Investments. The responsibility for these assessments lies with the investment teams and ultimately with the head of each investment department.

Climate risk is included in Norfund's risk appetite statement. Climate risk is further integrated into Norfund's overall enterprise risk framework and risk catalogue with designated risk owners, which is reviewed twice a year.

Strategy

Norfund's investment strategy directs how we work to achieve our mission, which is to create jobs, improve lives, and support the transition to net zero. Climate-related risk is a threat to achieving our mission as both physical and transition risk may challenge the profitability and sustainability of our investees. On the other hand, climate-related opportunities can generate new investment and value creation opportunities for Norfund and our investees. Norfund's mandate suggests that we are willing to accept climate risk that is inherent to the markets we operate in. However, we seek to mitigate the climate risk at investment level by building capacity and supporting our investees to manage climate impacts, reduce financial risk and seize climate-related business opportunities where relevant.

Climate risk in our portfolio is driven by two main factors: the *physical location* of our investments and the *characteristics of the sectors* we are exposed to.

- **Geography:** Norfund targets countries where capital is scarce, and investments have high impact potential. One of Norfund's strategic KPIs is investing at least 33% of our portfolio in the Least Developed Countries (LDCs). As a result, Norfund is exposed to countries highly vulnerable to the impact of climate change. We estimate that 47% of Norfund's portfolio is in countries with extreme risk of impact from physical hazards (taking exposure, sensitivity, and adaptability into account) and additional 34% in countries with high risk[1]. The main transition risks are expected to come from political and legal factors in the markets we operate. For instance, we expect South Africa to escalate carbon taxation in the coming years.

- **Sectors:** Norfund is heavily invested in sectors that are exposed to physical risks. Around 51% of our portfolio (as of 31.12.2023) is in sectors that are particularly vulnerable to physical climate risks: physical infrastructure (such as power production, transmission, and manufacturing) and agriculture investments[2]. Key physical climate risks include damage to infrastructure and supply chain disruptions due to weather-related events, and reduced crop yields or productivity due to chronic or acute weather changes. We are less invested in sectors that are, all else equal, more exposed to transition risk due to our Fossil Fuel Standard and our strategy.

Generally, we are more exposed to climate risks in direct investments than indirect investments such as financial institutions and funds as the latter often have a more diversified portfolio. Moreover, we are generally more exposed to climate risk through equity investments than loans due to lower financial risk and greater rights as a lender, and our typical short time horizon of loans.

In the following tables, we have listed what we consider the main risks and opportunities related to the different investment areas. They are based on insights from investees and the investment teams following them, as well as external, public sources such as TCFD, ThinkHazard, sector reports etc.

[1] Calculated using the Climate Change Vulnerability Index in Maplecroft's GlobalRisk Dashboard.
[2] Represents direct investments in Scalable Enterprises, Green Infrastructure and Renewable Energy. Excludes indirect investments in the abovementioned sectors through funds and Financial Inclusion

Investment Area	Sub-sector	Main risks		Main opportunities
		Physical	Transition	
Renewable energy	Renewable energy	• Risk of HSE events related to weather events, especially affecting outdoor workers (e.g., heatwaves) • Risk of damage to infrastructure and/or disruption in operations due to weather-related events (e.g., storms and floods) • Risk of disruptions in the value chain (e.g., grid outages, supply chain shortages) due to weather-related events • Risk of lower production/ efficiency and/or higher O&M costs due to gradual changes in climate conditions (e.g., lower wind speeds)	• Risk of stranded assets due to rapid cost-down and technology development in the sector	• Increased demand for renewable energy and associated low-emission products (e.g. green hydrogen, large scale battery storage)
	Gas	• Similar to Renewable Energy	• Risk of regulation that disfavor gas (e.g., carbon tax) • Risk of decreased market demand for fossil based energy • Reputation risk	
	Transmission	• Similar to Renewable Energy	• Risk of customer preference for off-grid solutions to limit reliance on centralized and vulnerable transmission system	
Green infrastructure	Waste and water	• Similar to Renewable Energy for investments involving significant physical infrastructure.	• Risks related to uncertain regulatory landscape • Stranded asset risk for less mature technologies with high cost-down potential	• Increased demand for low carbon energy sources (e.g., W2E) • Increased demand for circular business models (e.g., recycling) • Increased need for water supply

Investment Area	Sub-sector	Main risks		Main opportunities
		Physical	Transition	
Scalable enterprises	Food and agriculture	• Risk of HSE events related to weather events, especially affecting outdoor workers (e.g., heatwaves) • Risk of reduced crop yields or crop failure due to extreme weather events (e.g., floods) • Risk of disruption in the value chain (e.g., supply chain shortages, road blockages etc.) • Risk of reduced yields or productivity due to chronic changes in climate patterns, e.g., temperature increase, droughts, imbalances in ecosystems, increases in pathogens and pests etc.	• Risk of regulation e.g., land use and deforestation restrictions, GHG emissions pricing or taxes, trade policies restricting product exports/imports • Risk of changes in consumer preferences (e.g. red meat), purchaser and/or investor restrictions or sustainability requirements (e.g. NDPE1 or net zero targets) • Risk of new, green technologies out-competing traditional agricultural methods, e.g. lab-grown meat, regenerative agriculture	• Nearly all transition risks can be turned into opportunities, e.g., focusing on sustainable agricultural practices and products
	Manufacturing	• Risk of damage to physical infrastructure (e.g., production site) and/or disruption in operations due to weather-related events • Risk of supply chain disruptions to key operational inputs e.g. water or electricity access • Risk of HSE events related to weather events	• Risk of regulation, e.g., GHG emissions pricing or taxes, product bans, trade policies restricting product exports/imports etc. • Risk of changes in consumer preferences toward green products, purchaser and/or investor restrictions or sustainability requirements (e.g. net zero targets) • Risk in fluctuations in market prices of relevant inputs (e.g. oil, gas, electricity) • Risk of new, green technologies out-competing traditional manufacturing methods, e.g. zero-emission cement, carbon capture and storage, increased circularity • Risk of reputational backlash from emission-intense manufacturing industry	• Nearly all transition risks can be turned into opportunities, e.g., focusing on sustainable manufacturing practices and products

Investment Area	Sub-sector	Main risks		Main opportunities
		Physical	Transition	
Financial inclusion	Commercial banks and insurance	• Risk on balance sheet from underlying assets, especially involving agriculture or physical infrastructure	• Risk on balance sheet from underlying assets, especially involving high emission sectors, e.g., O&G or industry	• Potential higher returns and reduced risk from capital allocation towards green technology and sustainable practices • Potential reputational and regulatory benefits, and market opportunities, from green bonds
	Microfinance	• Similar to commercial banks, but likely more exposed due to targeting the poor who are more vulnerable to physical climate risks	• Limited transition risk	• Potential market opportunity from lending to businesses providing climate solutions and sustainable practices
Funds		• Risk on balance sheet from underlying assets, and depending on the sectorial and geographical focus. Primary risk related to agriculture or physical infrastrucutre	• Risk on balance sheet from underlying assets, and depending on the sectorial and geographical focus. Primary risk related to higher-emitting sectors	• Potential higher returns and reduced risk from investing in green technology and sustainable practices

Norfund has committed to and taken several important steps that reduce climate-related risk and ensure that we can systematically capture climate related opportunities. We are currently enhancing internal tools and procedures to strengthen our work on climate risk, opportunities, and Paris alignment. Additionally, the ambitions set in the Net Zero strategy and our commitments by being a signatory to EDFI's Statement on Climate and Energy Finance will contribute to limiting climate risk. Our Net Zero strategy outlines the following:

- Norfund has committed to aligning its portfolio with a 1.5-degree pathway to net zero by 2050.
- Norfund has committed to investing in climate solutions. E.g., Norfund has committed to an ambition that 64% of new investments shall be climate finance during the period 2024-2026[3].
- Norfund has committed to ensuring that all new financing is Paris-aligned over time, in accordance with EDFIs harmonized framework to assess Paris alignment.
- Norfund has adopted a Fossil Fuel Standard which excludes new coal and fuel oil financing, and limits other fossil fuel financing to Paris-aligned projects until generally excluding them by 2030 at the latest. This is an addition to EDFI Harmonized Fossil Fuel Exclusion List.

Norfund's management team has assessed the potential impacts of different climate scenarios on strategy and planning in a qualitative manner. Two scenarios were assessed:

[3] We follow the definition of climate finance in IDC/MDB's Common Principles for Climate Mitigation Finance Tracking, and The MDB's Joint Methodology for Tracking Climate Change Adaptation Finance;

1. Successful transition (2-degree or lower scenario) – characterized by high transition risk and rapid roll out of climate solutions[4]

2. Unsuccessful transition (greater than 2-degree scenario) – characterized by high physical risks driven by higher temperatures, sea level rise, extreme weather etc.[5]

Overall, Norfund's strategy was assessed to be robust in a range of climate scenarios, acknowledging that efforts related to adaptation and resilience will need to be strengthened regardless of scenario. Climate is an important part of Norfund's revised strategy for the period 2023-26, including adaptation and resilience specifically.

Risk management

At the investment level, Norfund includes climate risk and opportunities identification, assessment, and management into the investment process. The approach is described in Norfund's Investment Manual and supplemented by a separate practical guidance note on climate risk assessments. An internally developed Climate Tool supports investment teams in assessing risks and opportunities in the initial phase of the investment process and during due diligence. Additionally, we use risk indicators from Maplecroft GlobalRisk Dashboard and open-source information where necessary. Norfund sees climate risk not as a new stand-alone risk category, but as a supplementing factor for the categories already covered in our risk assessment (financial, E&S (Environmental & Social) and reputation).

The financial impacts of climate risk on an investment are driven by (1) the climate-related risks to which the investee is exposed, and (2) its planned response to manage those risks. We have therefore defined two lenses through which the climate risk associated with an investment can be assessed:

1. Assessing the investee's underlying climate risk exposure

2. Assessing the investee's capabilities in managing its climate risk exposure

Each investment should be assessed through both lenses before a potential commitment. The time spent on each lens will vary by investment department and the specific case at hand.

The climate-related indicators from Maplecroft's GlobalRisk Dashboard are part of Norfund's broader country risk tool that can be used to assess risk at portfolio level or country level. The portfolio-level risk is discussed with the Management Team in quarterly risk reviews.

Metrics and targets

The current metrics are primarily aimed at supporting mitigation of transition risk at portfolio level.

[4] Inspired by public scenarios – IEA Sustainable Development Scenario or IPCC RCP 1.9
[5] Inspired by public scenarios – IPCC RCP 4.5, 6.0 and 8.5 or IEA Stated Policies Scenario or Current Policies Scenario

There may be set additional targets or requirements at investee-level in relation to individual investment agreements.

The areas where we currently are measuring or developing methodologies are:

Metric	Target	Commentary
Exposure to fossil fuel companies and value chains through portfolio companies	In accordance with Norfund Fossil Fuel Standard: no new investments into fossil fuel value chains, except from clearly defined and necessary exceptions that support the energy transition in line with the Paris Agreement. This includes direct and indirect investments	Norfund's Fossil Fuel Standard is an addition to EDFI Harmonized Fossil Fuel Exclusion List
Share of new investments (% of investment volume) classified as *Climate Finance*[6]	• 2024-2026: 64% (8% outside of Renewable Energy) • 2027-2030: 66% (12% outside of Renewable Energy)	2023 level: 54% (6% outside of Renewable Energy).
Cumulative investments in portfolio classified as *Transition Finance*[7]	• 2026: 4 • 2030: 12	2023 level: 1
Annual avoided emissions[8] from renewable energy investments	14 million tonnes CO2e avoided annually (ex-ante) for the Climate Investment Fund, by 2026	Target only set for investments under the Climate Investment Fund
Renewable energy capacity helped financed by Norfund	15.5 GW by 2026, of which 9 GW under climate mandate and 6.5 GW under development mandate	
Share of new investments aligned to Paris Agreement ("Paris Aligned")	• 2024-2026: 85% • 2027-2030: 100%	Using methodology agreed among EDFIs. First focusing on methodology for direct investments, then moving to indirect investments (FIs and funds).
Norfund's absolute scope 1, 2 and 3 emissions (category 1-14)	Track	Estimations for 2023: • Scope 1: 0 tCO2e • Scope 2: 67 tCO2e • Scope 3: 931 tCO2e

[6] As defined in IDC/MDB's Common Principles for Climate Mitigation Finance Tracking, and The MDB's Joint Methodology for Tracking Climate Change Adaptation Finance

[7] As defined in Transition Finance for Africa

[8] Calculated using the harmonized IFI approach: «GHG Accounting for Grid Connected Renewable Energy projects» (2019).

		Based on Norfund's physical activity data (e.g., travel data) and publicly available emission factors
Scope 3, category 15: portfolio emissions	Track	Estimations for 2022 (due to differing reporting timelines for our investees for 2023): • Portfolio's scope 1: ~220.000 tCO2e (~3.500.000 tCO2e non-attributed) • Portfolio's scope 2: ~45.000 tCO2e (~620.000 tCO2e non-attributed) Estimations are based on the Joint Impact Model (aligned with PCAF and the EDFIs), and annual collection of data from investees. Read more in our Annual Report