DNB Asset Management

# 2018 Annual Report

## Responsible Investments

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# FACTS

## DNB Asset Management

DNB Asset Management (DNB AM) is part of Wealth Management & Insurance (WMI), a business area in the DNB Group

DNB AM employed 153 full-time employees across three locations in Europe at the end of 2018

DNB AM managed NOK 584 billion in fixed income, equities, hedge funds, and private equity – on behalf of institutional and retail clients

The DNB Group, as Norway's largest bank, aims to promote sustainable value creation by integrating ESG (Environmental, Social, Governance) aspects into all business operations

# 1.0 Report from the CEO

The global economy was strong in 2018, but political concerns like trade wars and Brexit put a damper on financial markets. As a result, returns in the global and Norwegian equity markets were slightly negative, when measured in NOK, making it a challenging year for saving in funds.

However, demand for funds incorporating responsible and sustainable investment continued to grow globally, particularly those which incorporate climate change risks and opportunities into their mandates and investment processes. This trend can be attributed to regulation, such as the European Union (EU) Action Plan for Sustainable Finance. The action plan's proposals require asset managers and asset owners to manage and disclose sustainability risks in their portfolios. Interestingly, the winner in the European commodity market was the carbon future price - tripling to approximately 25 Euro/tonne $CO_2$. The effect of this is that it increases the cost of polluting for carbon intensive companies, whilst providing new hope of making the carbon quota system an effective cornerstone of EU climate policy.

2018 was also the second year of the new «4 THE FUTURE» DNB group strategy, where corporate responsibility is one of four key elements and being responsible is one three key values. Amongst several new initiatives calling for climate-related financial disclosure, the Task Force on Climate-related Financial Disclosures (TCFD) has been an important focus area in 2018. The DNB Group participates in two global TCFD pilots, one on the banking side, and one through DNB Asset Management (DNB AM) on the financial effect of climate change on investments.

DNB AM has worked with Responsible Investments (RI) for many years, and its RI-team has been strengthened over the last three years, to four full-time employees at the end of 2018.

In our approach to responsible investment we have defined four main pillars of work: standard setting, active ownership, risk management, and Environment, Social and Governance (ESG)-integration.

The key for standard setting is to define clear expectations for corporate behaviour, which act as an important aid in active ownership. In 2018, new expectation documents on climate change, corruption, and tax were developed and published.

Active ownership encompasses both company dialogues and voting. Company dialogues can either take place directly with the company, or in collaboration with other investors. In total, 176 dialogues were conducted (directly or through our external service provider). To provide leverage to engagements, investor collaborations are important, especially regarding global companies where we are often smaller owners. In 2018 we collaborated through several United Nations Principles for Responsible Investments (UNPRI) led investor collaborations, the investor initiative Climate Action (CA) 100+, through our engagement consultant, and through TCFD-engagements with large listed Norwegian companies. Voting and related dialogue with Boards, Nomination Committees and Management are also essential parts of active ownership. DNB AM increased these efforts in 2018 including by voting at 170 meetings (on behalf of clients). This year we have seen positive results from our active ownership engagements, both dialogues and voting, which have contributed to more sustainable corporate behaviour.

To help guide the work of the RI-team and aid the active ownership process, three long-term focus areas have been defined: climate change, water, and human rights. In addition, in 2018, five shorter term thematic areas of engagements were prioritised: deforestation and land-use, emerging markets supply chains, methane, anti-corruption and responsible tax practices. An important element in working with some of these thematic engagements was the collaboration in different UNPRI working groups. To further the work with responsible and sustainable investments in 2019, three new thematic areas of engagement will be prioritised: oceans, product safety & quality, and gender equality & diversity.

The third pillar in DNB AM's RI-work is risk management, involving screening, exclusions, and risk monitoring. Through this process, DNB AM wants to avoid investing in the worst forms of corporate behaviour/unethical products as well as aid the search for sustainable investments. For example, in the drive to eliminate the dirtiest fossil fuels globally, the scope of exclusions was expanded in 2018 to include oil sands in addition to thermal coal. Furthermore, we also screen external suppliers of investment products, and contribute to the appropriate labelling of numerous external funds accessible on open platforms by DNB, such as share savings accounts.

The last pillar, ESG-integration, was a large focus area in 2018. Material ESG risks and opportunities should be considered in investment decision-making processes, and asset owners increasingly want to see ESG-factors systematically integrated into all portfolio managers' financial models and investment decisions, independent of whether a fund is labelled an ESG-product or not. To ensure ESG integration, the RI-team works closely with the portfolio managers providing screening, ESG-reporting, promoting informal interaction, and incorporating data in the portfolio management systems.

We continue to expand the range of sustainability-themed products. The family of low-carbon funds now encompasses three equity funds, and we plan to launch one fixed income fund in 2019. In addition, we offer a fund which invests globally in renewable energy and energy efficiency.

We expect 2019 to be a year with increased focus on regulation within sustainable investments.

Ola Melgård, CEO
DNB Asset Management

# 2.0 Highlights 2018

- **January**
- **February** ☆
- **March** — Joined the UNEP FI TCFD Investor Pilot Project *(See pg. 20)*
- **March–May** — Primary voting season *(See pg. 11)*
- **April** ☆
- **May**
- **June** ☆ — DNB AM hosted its first sustainability conference
- **July** — DNB AM is awarded an A+ for its strategy & governance from the UNPRI
- **August** — DNB AM is awarded the Eurosif Transparency Code for the period 01.08.2018-31.07.2019 *(See pg. 43)*
- **September** ☆ — The report "ESG Integration in Norwegian Fixed Income" is published. The report is co-authored by DNB AM (Karl Høgtun), Folketrygdfondet, and KLP. *(See pg. 10)*
- **September** — DNB's Committee for Responsible Investments approves the inclusion of an oil sands exclusion criterion in DNB Group Standard for Responsible Investments *(See pg. 8)*
- **October**
- **November** ☆ — New expectations documents on climate change, anti-corruption and responsible tax practices are published *(See pg. 10)*
- **November** — DNB Renewable Energy is awarded the FNG label with three stars *(See pg. 35)*
- **December**

☆ Committee for Responsible Investments meets

# 3.0 Our Responsible Investment Team

DNB AM's RI team has been strengthened over the last three years, with four full-time employees (and one on maternity leave) at the end of 2018. Together, the team has competency within broad-ESG, climate change, and has 40 years of experience within portfolio management.

Janicke Scheele,
Head of Responsible Investments
Janicke has worked in Norwegian and global capital markets since 1989. She has experience with analysis, portfolio management, and strategic and tactical asset allocation. Janicke has led the team since 2015.

Karl G. Høgtun,
Senior Analyst
Karl has worked in Norwegian and global capital markets since 1990. He has experience as an Analyst, Portfolio Manager, Head of Equities and Head of Nordic Equities. He started in the RI team in January 2016.

Hanne Rasch Rognmo,
Analyst (maternity leave until August 2019)
Hanne has an MA in International Environmental Policy from the Middlebury Institute of International Studies at Monterey, California. She has previous experience as an Environmental Consultant in Avinor and as a Group Trainee in DNB. She joined the RI team in 2016.

Laura McTavish,
Analyst
Laura has an MSc in Carbon Finance from the University of Edinburgh and previous experience as an Analyst at Trucost. She joined the RI team in March 2018.

Henry Repard,
Analyst
Henry has an MSc in Environmental and Sustainable Development from the University College London and has previous experience as an Analyst at CDP and KLP Asset Management. He joined the RI team in April 2018.

# 4.0 Guidelines and Strategies

The UNPRI initiative is an international network of investors working together to put the six principles into practice by incorporating responsible investment into investment decision making and ownership practices. DNB has been a signatory since 2006.

As a responsible investor, DNB AM aims to provide high, long-term returns, at an acceptable level of risk, whilst considering ESG factors. The DNB Group's Standard for Responsible Investments seeks to ensure that DNB does not contribute to human or labour rights violations, corruption, serious environmental harm and other actions which may be perceived to be unethical and/or unsustainable. It shall also ensure that assessments of risks and opportunities related to ESG factors are integrated into investment decision-making processes. We exercise our ownership rights in line with international norms and standards, including the UN Global Compact, the UN Guiding Principles on Business and Human Rights, the G20/OECD Principles of Corporate Governance, and the OECD Guidelines for Multinational Enterprises. The Standard covers all asset classes and financial investments throughout the Group, including companies established under DNB AM, a subsidiary of the DNB Group.

Based on the aforementioned conventions and norms, companies will be excluded from DNB AM's investment universe if they themselves or through the entities they control:

- Produce weapons which through normal use violate basic humanitarian principles (controversial weapons)
- Produce tobacco
- Produce pornography
- Derive 30% of more of their income from oil sands extraction (bitumen)
- Derive 30% or more of their income from thermal coal, or base 30% or more of their operations on thermal coal

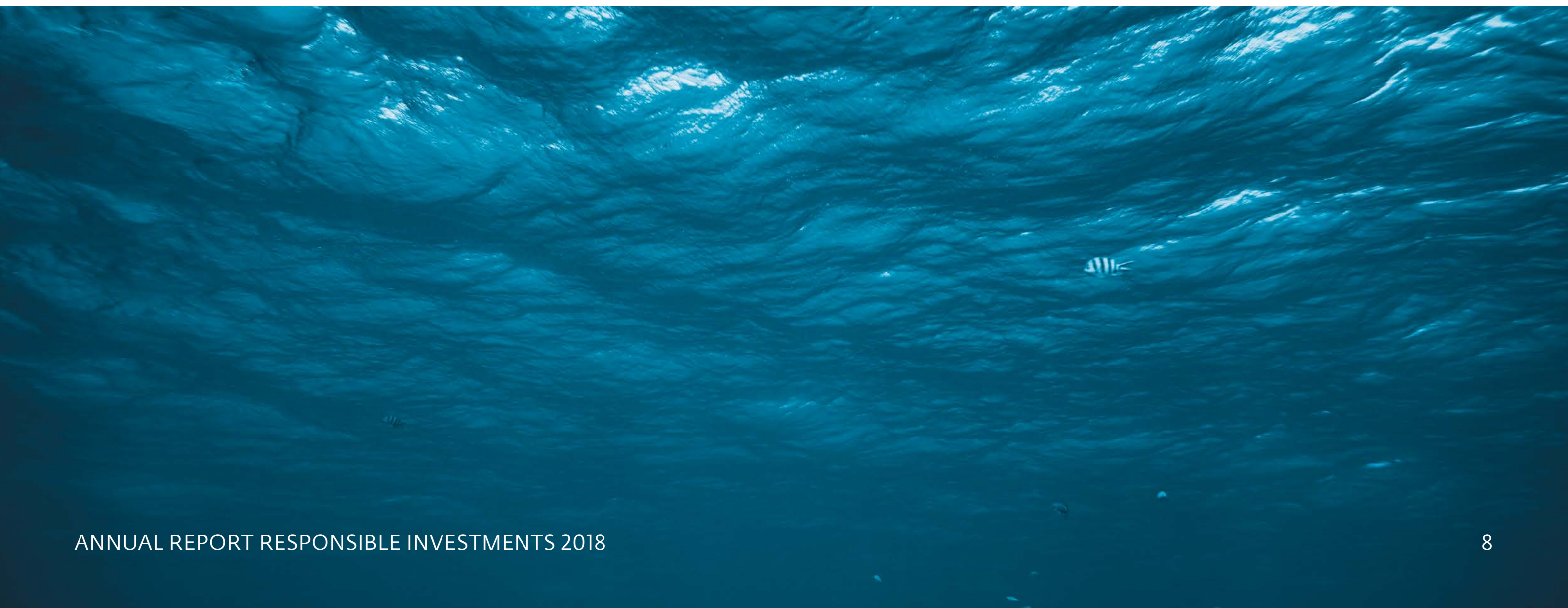
In regards to oil sands and thermal coal, emphasis is placed on forward-looking assessments of companies, including any plans to reduce the share of their income or operations derived from oil sands or thermal coal and/or increase the share of their income or operations derived from renewable energy sources.

Further, companies may be excluded from the investment universe if there is an unacceptable risk that a company contributes to or is responsible for:

- Serious or systematic violations of human rights, such as murder, torture, deprivation of liberty, forced labour, the worst forms of child labour, and other forms of exploitation of children
- Grave violations of individual rights in wars or conflict situations
- Serious violations of basic labour rights
- Grave harm to the environment
- Acts or omissions that on an aggregate company level lead to unacceptable greenhouse gas (GHG) emissions
- Serious corruption
- Other particularly critical violations of basic ethical norms

DNB will not invest in government/sovereign bonds from countries subject to sanctions imposed by the UN Security Council.

DNB's Committee for Responsible Investments implements and monitors the Standard and meets five times a year. If a company has been identified as being involved in any of the aforementioned businesses, all holdings will be sold and the company will be excluded as a possible investment. If companies are considered to violate other parts of the guidelines, we primarily try to influence companies by actively exercising ownership rights, but we also exclude companies on these grounds. In 2018, there have been no breaches of the Standard.



# 5.0 Regulations and Trends within Sustainable Investments

In 2018, we saw noteworthy movements on sustainability by financial regulators in Europe, with many increasingly recognising their role in promoting asset management that considers ESG risks and opportunities.

### *The European Union's (EU) Action Plan for Sustainable Finance*

In January 2018, the EU High-Level Expert Group on Sustainable Finance (HLEG) released its long-awaited final report, "Financing a Sustainable European Economy". The roadmap addresses both how to mobilise private capital towards sustainable investments and how to address sustainability risks in the financial system. EU's "Action Plan on Sustainable Finance", which followed in March, implements recommendations based on this report.

In May, the EU submitted its first legislative proposals which include proposed regulation on a common sustainable taxonomy, ESG disclosure requirements (investor duties) and new carbon-related benchmarks. Being outside the EU but part of the European Economic Area (EEA), Norway exercises its influence on the development of EU laws through alternative means, which includes supervisory bodies. DNB AM provided feedback on the proposals via the European Fund and Asset Management Association (EFAMA) through the Norwegian Fund and Asset Management Association (VFF).

To ensure consistency in the integration of sustainability across different financial industries, the EC requested the technical assistance of the European Insurance and Occupational Pensions Authority (EIOPA) and the European Securities and Markets Authority (ESMA). The mandate sought advice for supplementing the initial proposals with potential amendments to the European UCITS, Solvency II, AIFM, MIFID II, and IDD directives. EIOPA and ESMA requested comments on their proposed advice, and we provided feedback through VFF.

We are anticipating an agreement on some, but not all, of the legislative proposals by the European Parliament and Council before May 2019, and the adoption of the delegated acts over the coming years.

### *What has happened in Norway?*

In June, Finance Norway released its "Roadmap for Green Competitiveness to 2030". The roadmap provides seven broad recommendations for the finance sector on how to support Norway's transition to a low-carbon economy, much of which is built upon the TCFD recommendations and the EU's Action Plan for Sustainable Finance. Specific recommendations are also provided for banks, insurers and investors. We have been an active part in the work leading to this roadmap and recommendations.

In late December, the Norwegian Government's Climate Risk Commission published its report on climate-related risks and their potential impact on the Norwegian economy. The report highlighted the importance of the financial sector's role in managing climate risk. This is because the sector makes investment decisions, where future business opportunities and challenges are considered, which is an important way for companies to assess climate risk and opportunities. The financial sector's assessment of how climate risk affects the profitability of investments in the private sector will therefore be an important contribution to a successful transition to a low-carbon economy.

### *And Globally?*

The UN's annual climate meeting, Conference of Parties (COP), was held in Katowice in December and ended with countries agreeing on a regulatory framework to operationalise the Paris agreement. The 'rulebook' includes consensus from almost 200 parties on a range of issues, including the ambitions related to climate finance and the measurement and reporting on emissions, and should help countries start to plan and begin to take action. While the agreement is positive in the effort on climate change, there are concerns as to whether the language used goes far enough to ensure action from countries. Additionally, some items remain undecided and will again be discussed at COP in 2019, including the rules for voluntary carbon markets, necessary to prevent double counting[1].

### *Responsible Investment Trends*

The UNPRI continues to see growth in membership year-on-year, with a 16% increase to a total of 1,449 signatories reporting in the reporting framework in 2018 compared to 2017. The number of investment managers alone increased by 18% to 1,111 in 2018 compared to 2017. This reflects the growing need and interest from investors to be transparent about their work with responsible investments.

Trends in Sustainable and Responsible Investment (SRI) strategies reported by the European Sustainable Investment Forum (EUROSIF), continue to indicate sustainability is becoming an integral part of European fund management[2]. The report highlights a decreasing trend in investors utilising product exclusions and norms-based screening as SRI strategies, and increasing trends in impact investing, engagement and voting, ESG integration (27% CAGR), sustainability themed and best-in-class strategies[3]. While DNB AM also has an increased focused on practising active ownership and ESG integration, all funds remain subject to screening for product and norms-based criteria.

1) https://cop24.gov.pl/highlights/details/news/success-of-cop24-in-katowice-we-have-a-global-climate-agreement/
2) http://www.eurosif.org/2018sristudylaunch/
3) https://www.ipcc.ch/2018/10/08/summary-for-policymakers-of-ipcc-special-report-on-global-warming-of-1-5c-approved-by-governments/

# 6.0 Responsible Investment Approach: Four Pillars

We have several tools at our disposal as a responsible and sustainable investor with a long-term view. These include:

| Standard Setting | Active Ownership | Risk Management | ESG Integration |
|---|---|---|---|

## 6.1 Standard Setting

Developing and publishing expectations documents is an important part of our standard setting work, communicating our expectations to companies around best-practice and for use as a starting point for dialogues with companies on these topics both proactively as well as reactively. This year, we have developed and published expectations documents on climate change, anti-corruption and responsible tax practices in connection with our work in these areas. Expectations documents on human rights, serious environmental harm and voting in Norway were published in 2017. We will continue to develop and publish expectations documents in 2019.

Academic research is also important for standard setting. In September, a working committee of the Norwegian Sustainable Investment Forum (NORSIF) on ESG-integration released its report, "ESG Integration in Norwegian Fixed Income"[4]. The report is co-authored by our own Karl Høgtun. Recognising the unique characteristics of the Norwegian fixed income market, this research was undertaken to understand why and how fixed income investors approach ESG risks currently, and whether the academic literature can offer any evidence that investors can draw upon in continually refining their responsible investment strategies.

norsif
Norsk forum for ansvarlige og bærekraftige investeringer

## 6.2 Active Ownership

We practice active ownership through regular engagement with companies we invest in. Active ownership and engagement is undertaken to ensure that our entire investment universe is compliant with DNB's Standard for Responsible Investments. Proactive engagements are conducted with the aim of encouraging companies to mitigate ESG risks before they materialise, or to take advantage of ESG opportunities that are not being sufficiently addressed at present.

### *Company dialogues*

We engage with companies on specific ESG incidents, or to improve companies' general performance of sustainability-related processes, which may otherwise lead to underperformance.

Directly with companies

Collaboration with other investors

4) https://docs.wixstatic.com/ugd/c5ad34_00c4f3e8455f4d3f813774207c842be7.pdf

These engagements may either take place directly with companies, or in collaboration with other investors. See sections 7.0 – 10.0 for more detail on our engagement strategy and progress on thematic focus areas.

During 2018, we had 176 dialogues with companies, both directly and in collaboration with our external service provider, Global Engagement Services (GES), to discuss various ESG and sustainability issues.

| Topic | Number of companies |
|---|---|
| Climate change/greenhouse gas emissions | 22 |
| Water | 5 |
| Other environmental issues | 35 |
| Human rights, child labour and labour rights | 60 |
| Local communities/indigenous rights | 3 |
| Other social issues | 1 |
| Corruption | 19 |
| Board structure and independence | 14 |
| Remuneration | 11 |
| Other governance issues | 6 |
| **Total** | **176** |

In addition to the above we also sent letters in collaboration with other investors calling for companies to improve their ESG practices. One such letter was to energy companies calling for increased transparency around water disclosure and recommending the CDP Water Questionnaire as an appropriate reporting channel. Furthermore, after declining previous requests for dialogue to discuss data security and privacy issues, we co-signed a letter, with GES and other international investors, to Facebook asking the company to improve its practices and increase transparency. As a result of this letter, the company has agreed to a conference call in Q1 2019 to discuss investors' data security and privacy concerns.

Conducting dialogues with companies is resource intensive, but in our experience, and, according to research, it is effective[5,6] and will therefore continue to be a priority for DNB AM.

### *Voting*

Our voting guidelines for Norway state that we shall vote at all Norwegian general meetings for listed companies we have ownership in, and we have adopted a systematic approach to determining which global companies' meetings we will vote at. Voting will primarily happen by proxy, but we will physically attend shareholder meetings in certain cases. Our proxy voting service provider, ISS, facilitates the voting process by providing both standard and tailored voting analyses, which are an important input into our own assessments. The tailored voting analyses are based on our own voting guidelines. These resources are used to inform our voting decisions – the final decision is based on a joint decision between the RI team and our portfolio managers. Reoccurring themes include remuneration, issuance of shares, Board structure, double roles (between the Board, Management, and Nomination Committee) and capital structure (including authorisations). We are also increasingly seeing credible shareholder proposals related to ESG themes, specifically in regards to climate-related disclosure. Other ESG topics include reporting on political lobbying, gender pay disparity, and responsible tax practices. In 2019, we expect that we will vote for further shareholder resolutions on ESG issues.

We engage with Boards, Management and Nomination Committees prior and post general meetings and will explain our voting decisions to companies when we have voted against the company's recommendation, and the results of our proxy voting are made publicly available. Through informed proxy voting we endeavour to secure long-term shareholder value and ensure that companies act sustainably. We have experienced that the general meeting agenda was altered as a result of our pre engagement with the company.

We voted at 139 general meetings in Norway and 31 internationally in 2018. Of these, we voted against management's recommendations for 34 Norwegian companies and eight global companies. The justifications for our decision to vote against the company's recommendations are published on our website[7].

An example of how voting is used as an active ownership tool to influence companies in a positive direction was when we voted for a shareholder resolution at Anadarko Petroleum Corp's general meeting in May 2018. The shareholder resolution called for greater disclosure on climate scenario analysis. We reached out to the company to discuss the upcoming resolution and found that the company's public disclosure of its climate strategy was limited and did not provide detail about the methodology and assumptions used in scenario analysis. We therefore voted for the resolution, with the intention of influencing the company to become increasingly transparent in this area. With more than half of shareholders voting in favour of the resolution, Anadarko published a Climate Change Risk Assessment and Management Report in November. We met with the company again in December to discuss potential for further improvements to its climate change disclosure, specifically regarding climate scenarios and impact on strategy, as well as target setting, particularly related to methane emissions. We have also encouraged the company to link executive compensation to climate issues, as is considered best practice. We will continue our dialogue with the company in 2019.

## 6.3 Risk Management

Risk management remains an important tool for DNB AM as a responsible investor. We utilise screening and exclusions in our risk management processes.

### *Screening*

We screen companies prior to inclusion in our investment universe, quarterly for benchmark rebalancing, and on a weekly and daily basis for changes to ESG ratings or alerts on potential and/or realised breaches in international norms and standards.

Both internal and externally managed funds are subject to screening. In 2018, we screened externally managed funds regularly and we engaged with several fund management companies to discuss their practices within responsible investments and certain portfolio holdings. Since the introduction of share savings accounts, we regularly screen more than 400 internal and external funds accessible on the open platform in DNB and label them based on the findings of the screening to show their level of alignment with our Standard.

5) https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3209072
6) https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2154724

7) https://www.dnb.no/privat/sparing-og-investering/fond/aktivt-eierskap.html

### *Exclusions*
In addition, in our Standard, we define which products we do not have tolerance for and which are excluded from our investment universe (see section 4.0 for more information).

Companies that are in breach of the Standard, and which show no willingness to change their practices, can be excluded from our investment universe. As at 31 December 2018, we had excluded 173 companies from our investment universe.

| Exclusion criterion | Number of dialogues |
|---|---|
| Cluster weapons | 5 |
| Nuclear weapons | 18 |
| Serious environmental harm | 22 |
| Labour rights | 5 |
| Human rights | 14 |
| Corruption | 2 |
| Pornography | 1 |
| Oil sands | 4 |
| Tobacco | 29 |
| Thermal coal | 73 |
| **Total** | **173** |

## 6.4 ESG Integration

We have a close dialogue with our portfolio managers on ESG and sustainability risks and opportunities.

Based on our screening and in-house research based on additional sources of information, we highlight potential ESG risks and opportunities to the portfolio managers in addition to alerts on controversial issues. Furthermore, we also provide input/recommendations about divesting or investing in securities.

ESG data is incorporated into DNB AM's portfolio management system and is available to all of our investment professionals. Our portfolio managers may use this data in their company risk assessments, financial modelling, and investment decision making. The availability of this data in the front office system also acts a flag for the portfolio managers, triggering further investigation and discussion with the RI team regarding potential risks and opportunities and the financial effect of this. These discussions may trigger actions such as further investigation, engagement in dialogue with the company, or impact on the investment decision.

We also have a database where ratings and company meeting information can be shared between the portfolio managers and RI Analysts, and we undertake frequent informal discussion between the RI team and portfolio managers on ESG issues. The process for ESG integration is constantly evolving, and we aim to further develop the systematic financial modelling utilising ESG factors.

## 6.5 Our External Resources

Throughout these processes, we utilise external ESG research and data providers:

- GES for norms based screening and engagement services
- MSCI ESG Research for ESG reports, scores, business involvement screening research, carbon metrics and controversies, amongst other data points
- ISS for proxy voting
- Sell-side research
- Media
- Industry reports
- Non-Governmental Organisation (NGO) reports and meetings

The above are important inputs to our own company assessments, however, we stress that we use this information as a basis for our own final conclusions.

# 7.0 Engagement Strategy

Active ownership and engagement shall ensure that our entire investment universe is in compliance with DNB's Group Standard for Responsible Investments. Our overarching aim is to influence companies to improve their practices, thereby securing long-term shareholder value and mitigating ESG risks in the best interest of our clients, as required as part of our fiduciary duty.

DNB AM does not necessarily have to be a current holder of the companies addressed in our engagements. All companies within an industry in a given index are potential holdings of DNB AM, and active portfolio managers often buy in and out of companies.

We measure progress and impact of our engagement work using milestones. The engagement process is considered successful if the following criteria are met:

- The violation has ceased
- The company has taken a responsible course of action
- The company has taken a proactive and precautionary approach to improve its policies, routines and practices in order to prevent future violations
- The company's action is verifiable

In general, thematic engagement processes should not exceed two years. If the desired outcome is not achieved, the engagement process will be evaluated and could be terminated if significant progress has not been made. Several points of action will be considered at such a point; amongst which is the renewal of the objectives for engagement or the exclusion of the relevant company/companies from our portfolios. For proactive engagements, the aim of our dialogue is continuous improvement and the engagement periods may therefore be more flexible and long-term.

Our engagement strategy is based on incident-based (reactive) and proactive engagements, as well as informed proxy voting (see section 6.2 for more information).

Incident-based (reactive) engagements are DNB AM's top priority to ensure that the companies we invest in adhere to our Group Standard. Reactive engagements take place in cases where companies are reported to be in breach of our Standard or of international norms and conventions. The incident in question should be deemed systematic in nature and/or as leading to severe, negative consequences. In order to prioritise which reactive incidents to engage on we assess the severity of the suspected breach, our ownership status in the company and the probability that our engagement will have a positive impact on the situation.

Proactive engagements are conducted with the aim of encouraging companies to mitigate ESG risks before they materialise, or to take advantage of ESG opportunities that are not being sufficiently addressed at present. Proactive engagement may also be conducted as part of a fact-finding exercise where the team may, for example, double check research/data with the engagement company. This means that companies we proactively engage with are not suspected to be in breach of our Standard. Companies that DNB AM has a large holding in, or which DNB AM may have a large holding in in the future, are typically targeted for this type of engagement. The dialogues may revolve around a specific issue or to raise the company's general level of awareness around sustainability issues. These are important inputs to the investment decision-making process.

Our engagement strategy centres on long-term and shorter-term, thematic engagements. Our long-term engagements do not change year-to-year. These are described in further detail in the following section. Thematic engagement, on the other hand, involves engagement with companies within defined areas of concern, identified mainly by way of relevant ESG risks and opportunities. One input to selecting thematic focus areas are the UN Sustainable Development Goals (SDGs). The SDGs were launched in 2015 and call on the private sector to solve some of the most urgent problems the world is facing. As asset managers, DNB AM must consider how we can contribute to the SDGs through our investment decisions, both from a risk and an opportunity perspective. We believe that considering these in a collective manner will help to increase the resilience of our portfolios. The SDGs are therefore a critical input to our standard setting and active ownership activities.

Our progress in 2018 within our defined thematic engagements is described in sections 8.0 and 9.0.

Table 1. Mapping the UN's SDGs to our Focus Areas

| SDG | Human rights | Climate change | Water | Anti-corruption | Emerging markets supply chains |
|---|---|---|---|---|---|
| 1 NO POVERTY | ✓ | | | | ✓ |
| 2 ZERO HUNGER | | | | | |
| 3 GOOD HEALTH AND WELL-BEING | | | | | |
| 4 QUALITY EDUCATION | ✓ | | | | |
| 5 GENDER EQUALITY | ✓ | | | | |
| 6 CLEAN WATER AND SANITATION | | | ✓ | | |
| 7 AFFORDABLE AND CLEAN ENERGY | | ✓ | | | |
| 8 DECENT WORK AND ECONOMIC GROWTH | ✓ | | | ✓ | ✓ |
| 9 INDUSTRY, INNOVATION AND INFRASTRUCTURE | | | | | |
| 10 REDUCED INEQUALITIES | | | | | ✓ |
| 11 SUSTAINABLE CITIES AND COMMUNITIES | | | | | |
| 12 RESPONSIBLE CONSUMPTION AND PRODUCTION | | | | | ✓ |
| 13 CLIMATE ACTION | | ✓ | | | ✓ |
| 14 LIFE BELOW WATER | | | | | |
| 15 LIFE ON LAND | | | | | ✓ |
| 16 PEACE, JUSTICE AND STRONG INSTITUTIONS | | | | ✓ | |
| 17 PARTNERSHIPS FOR THE GOALS | | | | | |

| Responsible tax practices | Deforestation & land-use | Methane | Gender equality & diversity | Oceans | Product safety & liability |
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# 8.0 Long-term Focus Areas

**Human rights**

**Climate Change**

**Water**

Engagement within our three, previously defined, long-term focus areas continued in 2018 and will continue also in 2019. All three focus areas have been identified as areas of concern within responsible investments in the coming years and are inherently connected to various other key ESG challenges.

| Focus Area | Achievements in 2018 | Goals for 2019 |
|---|---|---|
| Human rights | • Continued engagement with companies on human rights, labour rights and children's rights directly with companies and in collaboration with other investors | • Write and publish expectations document on gender equality and diversity (will overlap with the human rights theme)<br>• Continue engagement with companies on human rights, labour rights and children's rights directly with companies and in collaboration with other investors |
| Climate change | • Wrote and published an expectations document on climate change<br>• Continued engagement with companies on climate change directly with companies and in collaboration with other investors<br>• Joined the UN Environment Programme Finance Initiative's (UNEP FI) TCFD Investor Pilot Project, which is working to develop a tool for portfolio scenario analysis<br>• Joined a TCFD working group together with Norwegian investors targeting Norwegian companies within sectors that are highly exposed to climate-related risks and opportunities<br>• DNB Renewable Energy received the FNG label with three stars | • Continue TCFD work through UNEP FI TCFD investor pilot project and through TCFD working group with Norwegian investors<br>• Continue engagement with companies on climate change directly with companies and in collaboration with other investors<br>• Continue to enhance climate change strategy |
| Water | • Continued engagement with companies on water directly with companies and in collaboration with other investors | • Write and publish expectations document on water<br>• Continue engagement with companies on water directly with companies and in collaboration with other investors |

## 8.1 Human Rights

*"Human rights are rights inherent to all human beings, regardless of race, sex, nationality, ethnicity, language, religion, or any other status. Human rights include the right to life and liberty, freedom from slavery and torture, freedom of opinion and expression, the right to work and education, and many more. Everyone is entitled to these rights, without discrimination."*[8]

The legal obligation to protect the human rights of individuals or groups of people is governed by international law. Business enterprises have a responsibility to respect human rights in their businesses, including in their supply chain. International norms and standards including the UN Global Compact, the OECD Guidelines for Multinational Enterprises, and the UN Guiding Principles for Business and Human Rights provide a basis for what is expected from business enterprises when it comes to human rights. These responsibilities extend beyond companies' own employees to take into account stakeholders including contract workers, workers in supply chains, families, communities, customers, and other stakeholders. Companies should understand their responsibility and risks in connection with the social consequences of their business operations by carrying out human rights due diligence processes and integrating human rights considerations in their business strategies, policies, procurement and risk management, and by disclosing material information to investors. Without adequately accounting for the potential operational, legal, regulatory and reputational risks posed by human rights issues, the long-term credibility of sectors, markets and companies, and their supply chains, may be at risk.

In 2018, DNB AM had 60 meetings on issues related to human rights, child labour, and labour rights, and had three meetings on indigenous peoples' rights. 19 companies have been excluded from our investment universe due to breaches of human rights and labour rights, two of which were new exclusions in 2018.

An example of a human rights related company engagement we had in 2018 was our dialogue through our engagement consultant with Nestle on labour rights violations in its seafood supply chain in Thailand. This case was started in 2015, following reports that a company supplying fish to Thai Union Frozen Products, a supplier to Nestle SA, was abusing its workers. Issues included payment issues and forced overtime shifts, as well as involuntary detention and fatalities caused by improper working conditions. The case was resolved at the end of 2018 as the company had enhanced traceability of seafood ingredients throughout the supply chain to finished products, implemented a verification programme for fishing vessels, improved working and living conditions, and, through a new set of business requirements, increased supply chain control.

8) http://www.un.org/en/sections/issues-depth/human-rights/

## 8.2 Climate Change

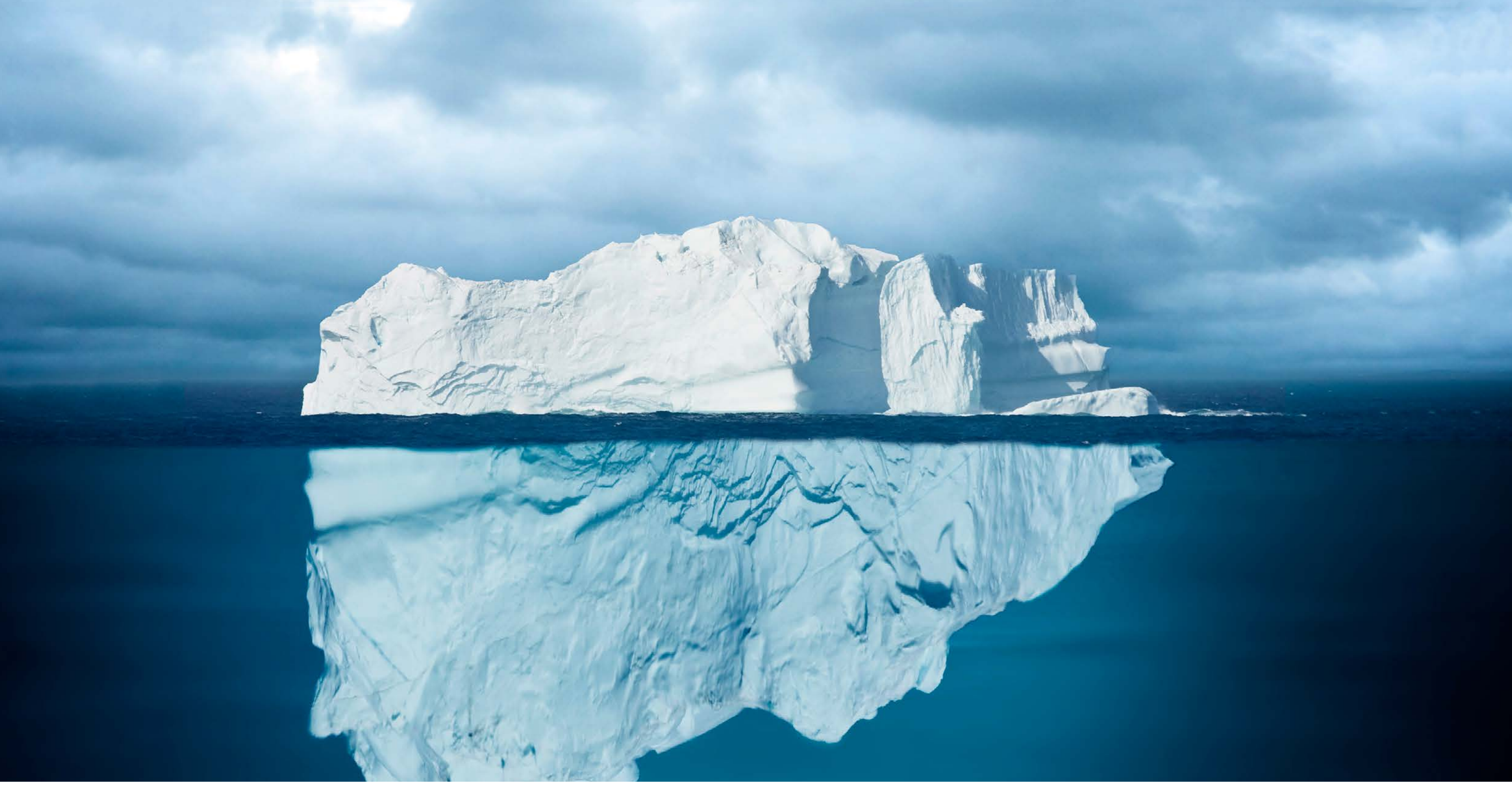
Climate change has been one of DNB AM's long-term focus areas for many years as we recognise that climate change can materially impact company values, both negatively and positively. DNB AM therefore strives to make a meaningful contribution towards the goals of the Paris Agreement by taking a long-term view and effectively managing the risks and opportunities associated with the transition towards a low-carbon economy. An important aspect of achieving this involves taking an integrated ESG approach to addressing climate change.

### *The Task Force on Climate-Related Financial Disclosures*

Figure 1. The TCFD Framework[9]


Recognising the need for "better, more comparable and complete information about climate change" in financial markets, the G20 asked the Financial Stability Board (FSB) to consider climate risk following Bank of England Governor Mark Carney's "Tragedy of the Horizon" speech[10].

9) TCFD, 2017. «Final Report: Recommendations of the Task For on Climate-related Financial Disclosures»: https://www.fsb-tcfd.org/publications/final-recommendations-report/
10) WBCSD (2017), "CEO Guide to Climate-related Financial Disclosures": https://www.wbcsd.org/Overview/Resources/General/CEO-Guide-to-climate-related-financial-disclosures



By December 2015, the FSB had launched the TCFD to develop recommendations on financial disclosures of climate-related risks and opportunities. The TCFD's final report was published in June 2017 and is a voluntary framework with recommendations for all types of organisations divided into four thematic areas:

- **Governance:** how climate-related risks and opportunities are governed within the organisation (by the Board and Senior Management)
- **Strategy:** the organisation's strategy concerning climate change and the transition to a low-carbon economy
- **Risk management:** a description of the organisation's climate-related risks and opportunities
- **Metrics and targets:** information about climate-related metrics and targets used by the organisation[11]

The recommendations have quickly gained widespread acceptance and are considered best-practice guidance for climate reporting.

Improving the availability and quality of data used in our investment decision making processes is central to delivering on our climate goals. We therefore welcome the TCFD recommendations as a framework for increasing the transparency and quality of climate-reporting which benefits investors' ability to accurately assess companies' exposure to climate-related risks and opportunities. Increased climate disclosure in company reporting will be the foundation for the effective transition towards a low-carbon economy and for minimising the impact of climate-related risks. The recommendations also provide a framework that we can use to frame, describe and communicate our own climate change efforts.

11) TCFD, 2017. «Final Report: Recommendations of the Task For on Climate-related Financial Disclosures»: https://www.fsb-tcfd.org/publications/final-recommendations-report/

### *Governance*

The DNB Group has a well-established governance structure that is led by the Board. Amongst its many responsibilities, the Board determines DNB's strategy. In 2017, a new Group strategy was launched – "4 the Future" – under which, corporate responsibility is one of four strategic priorities and being responsible is one of three core values. At senior management level, DNB's Head of Corporate Responsibility and Public Affairs, Kaj-Martin Georgsen, is responsible for TCFD-work at the Group-level as per today. An important part of DNB's work in this area is DNB's participation in the UNEP FI TCFD banking pilot.

As a signatory to the UNPRI, implementing the TCFD recommendations is also a high priority for DNB AM. DNB AM understands that integrating ESG issues and opportunities into our investment decision-making process is strategically important from a sustainability perspective and for long-term financial value creation. TCFD-alignment at DNB AM is addressed at Senior Management level through Ola Melgård (CEO), Janicke Scheele (Head of Responsible Investments), Knut Johan Hellandsvik (CIO Equities) and Svein Aage Aanes (CIO Fixed Income).

In addition, DNB's Committee for Responsible Investments[12] meets five times a year and reports to DNB's Executive Vice President of Communications. The Committee is chaired by Kaj-Martin Georgsen and representatives from DNB AM, Group Finance Investments M&A and DNB Life Insurance AS are also represented in the Committee. The Committee is responsible for implementing and monitoring DNB's Standard for Responsible Investments. DNB AM's RI team prepares material for discussion and/or decision ahead of meetings. This includes updates on ongoing/resolved climate-related engagements where challenges, progress through milestones, and any outstanding items before closing a case are presented. This information is gathered using

12) https://www.dnb.no/portalfront/nedlast/en/about-us/Responsible_Investment_Committee_-_mandate.pdf

data/research from external research providers, as well as internal research based on engagement with the company, and findings from media and/or industry reports from NGOs. In addition, any recommendations to exclude or re-include companies are presented to the Committee for discussion and recommendations. The final decisions are made by the CEOs in DNB Life Insurance, Group Finance Investments M&A and DNB AM. The Committee regularly revisits exclusions to determine whether the grounds for exclusion still apply and may, on the basis of new information, recommend re-inclusion. The Committee will also evaluate any new expectation documents.

### *Strategy*

Climate-related risks and opportunities, both transitional and physical, have already begun to affect companies globally and will likely have growing significance in the long-term.

Climate-related risks may have a financial impact for DNB AM if our investments are not adequately prepared for changing climate policies, technology, and consumer demand preferences, in addition to physical impacts. On the other hand, DNB AM could also benefit from investment opportunities that contribute to a low-carbon economy, such as renewable energy, energy efficiency, energy transmission and water management. Climate risks should therefore be assessed in the same way as other financial risks. This is particularly true for assessments with long-term investment horizons.

DNB AM believes that climate-related financial impacts may present themselves under the following time horizons:

- **Short-term (0-3 years):** due to the long-term nature of climate change, and as our portfolios are well diversified, we do not anticipate climate-related risks to materialise in the short-term, but rather in the medium- and long-term.
- **Medium-term (3-10 years):** policy and legal risk, technology risk, market risk and reputational risk.
- **Long-term (>10 years):** physical risks (acute and chronic) in addition to policy and legal risk, technology risk, market risk and reputational risk.

To address the risks posed by climate change, we have had 22 meetings with companies on issues related to climate change risks and opportunities. An example of a climate change related engagement we have had was with Equinor. We engaged with the company through CA100+ and through the TCFD working group with Norwegian investors. Equinor are clear industry leaders within TCFD reporting, particularly in regards to scenario analysis. The discussion focused on learning from the company's experiences. We will continue to engage with Equinor on this topic in 2019.

DNB AM has also been involved in several important investor collaborations:

**Climate Action (CA) 100+**

Our work through the investor initiative CA 100+ continues. This five-year initiative led by investors targets the world's largest 100 plus GHG emitters and other global companies and aims to improve governance on climate change, curb emissions and strengthen climate-related financial disclosures. As collaborating investors on Equinor and Maersk, we have had insightful meetings with these companies and are happy to see that Equinor continues to be world-leading in regards to its scenario analysis work and that Maersk has recently committed to become carbon neutral by 2050 (without offsetting carbon). A big breakthrough for the investor group has been Royal Dutch Shell's announcement that it will both establish carbon emissions targets and link these targets to executive remuneration, which happened on the back of CA100+ engagement with the company. The plan, as well as the first set of targets, is due to be presented at the company's 2020 AGM.

**TCFD Engagement with Norwegian Investors**

As part of a proactive engagement we are conducting together with other Norwegian investors on the implementation of the TCFD recommendations, we have met with/will be meeting selected Norwegian companies within sectors that are highly exposed to climate-related risks and opportunities: energy, materials, transport, food and beverages, seafood and banks (with a Nordic focus). Once we have completed the first round of meetings, the working group will discuss learnings and what we can expect in terms of company reporting. We will continue to follow-up companies on their TCFD-work, particularly around scenario analysis, after these initial meetings.

Through this work we seek to understand how/if companies are planning to implement the TCFD recommendations, what challenges they have faced thus far and how these may be overcome. In addition, we collectively strive to set a 'Norwegian standard' for TCFD disclosure by raising awareness of the significance of TCFD reporting and communicating the value of good disclosure for us as investors. Through better company disclosure we believe that we can conduct more reliable scenario analysis at portfolio level and, ultimately, support our portfolio managers to integrate this information into their investment decisions in a more systematic and structured way.

**UNEP FI TCFD Investor Pilot Project on Scenario Analysis**
We began our work on scenario analysis in 2018 by joining the UNEP FI TCFD Investor Pilot Project. This project enables us to take a more structured approach to analysing climate-related risks and opportunities and understanding what their impacts may be, thereby informing our strategic thinking. The initiative is a collaboration between 20 of the world's leading investors which are working to develop, together with the consultant Carbon Delta, guidelines towards a first set of climate-related investor disclosure in alignment with the TCFD recommendations.

The pilot will develop scenarios, models and metrics to enable scenario-based, forward-looking assessments of climate-related risks and opportunities for equities, corporate bonds and real estate[13]. Carbon Delta's proprietary Climate Value-at-Risk (VAR) model[14] quantifies security-level costs or revenues associated with climate-related risks and opportunities. The model considers transition and physical risks and opportunities linked with climate change. Specifically, transition risks and opportunities focus on regulatory and technology impacts, whereas physical risks and opportunities consider extreme weather events relating to temperature change (extreme heat and cold), extreme precipitation, extreme snow, wind patterns, tropical cyclones, wildfire and coastal flooding (from sea level rise).

The outputs and conclusions of this group will stimulate and ease TCFD adoption by the wider industry, including the 1,900 investor members of the UNPRI. Upon conclusion of the pilot project, the results will be made publicly available in an open-source format. The published scenarios, models and metrics will contribute to a harmonised industry-wide approach to the TCFD recommendations as investors worldwide will be able to adopt and build upon them. However, work on scenario analysis will become increasingly sophisticated in years to come. The TCFD Investor Pilot Project Report is due to be published in May 2019 and will include a case study from DNB AM.

See sections 9.4 and 9.5 on further climate-related investor engagements.

## *Risk Management*
Climate risk is primarily addressed through a focus on companies operating in carbon intensive sectors including: oil & gas, utilities, transport, automobiles, metals & mining, and cement. In addition, companies whose business activities involve significant clearing of forests are also prioritised as Agriculture, Forestry and Other Land-use (AFOLU) activities account for approximately 25% of global GHG emissions[15]. Climate opportunities are grasped by identifying and investing in companies offering climate solutions. When our screening and company analysis reveals that climate change risks are high and unmitigated and/or if climate change opportunities are not adequately addressed, we will engage with the company.

As previously mentioned, a criterion for oil sands was added to DNB's Standard for Responsible Investments (see section 4.0) in 2018. To date, we have worked to reducing our exposure to such unsustainable businesses through the exclusion of 73 companies related to coal and four companies related to oil sands[16].

13) DNB AM is not participating in the real estate sub-group
14) https://www.carbon-delta.com/solutions/methodology/

15) WWF (2017), "Deforestation and Social Risks in the UK's Commodity Supply Chains": https://www.wwf.org.uk/sites/default/files/2017-10/Risky%20Business%20-%20October%202017.pdf
16) DNB (2018), "Corporate Dialogue and Exclusions (as at 02.11.2018)": https://www.dnb.no/en/about-us/exclusions.html

*Metrics & Targets*

As part of efforts to reduce exposure to companies with high climate risk, in 2016, DNB started to measure the carbon footprint of all equity funds as a signatory to the Montreal Carbon Pledge. Carbon footprint, also called carbon intensity, is the measurement of a company's GHG emissions relative to a company's turnover, and is one of several factors that says something about a company's climate risk and impact. After identifying the carbon risk in the portfolios, there are several ways of reducing the risk.

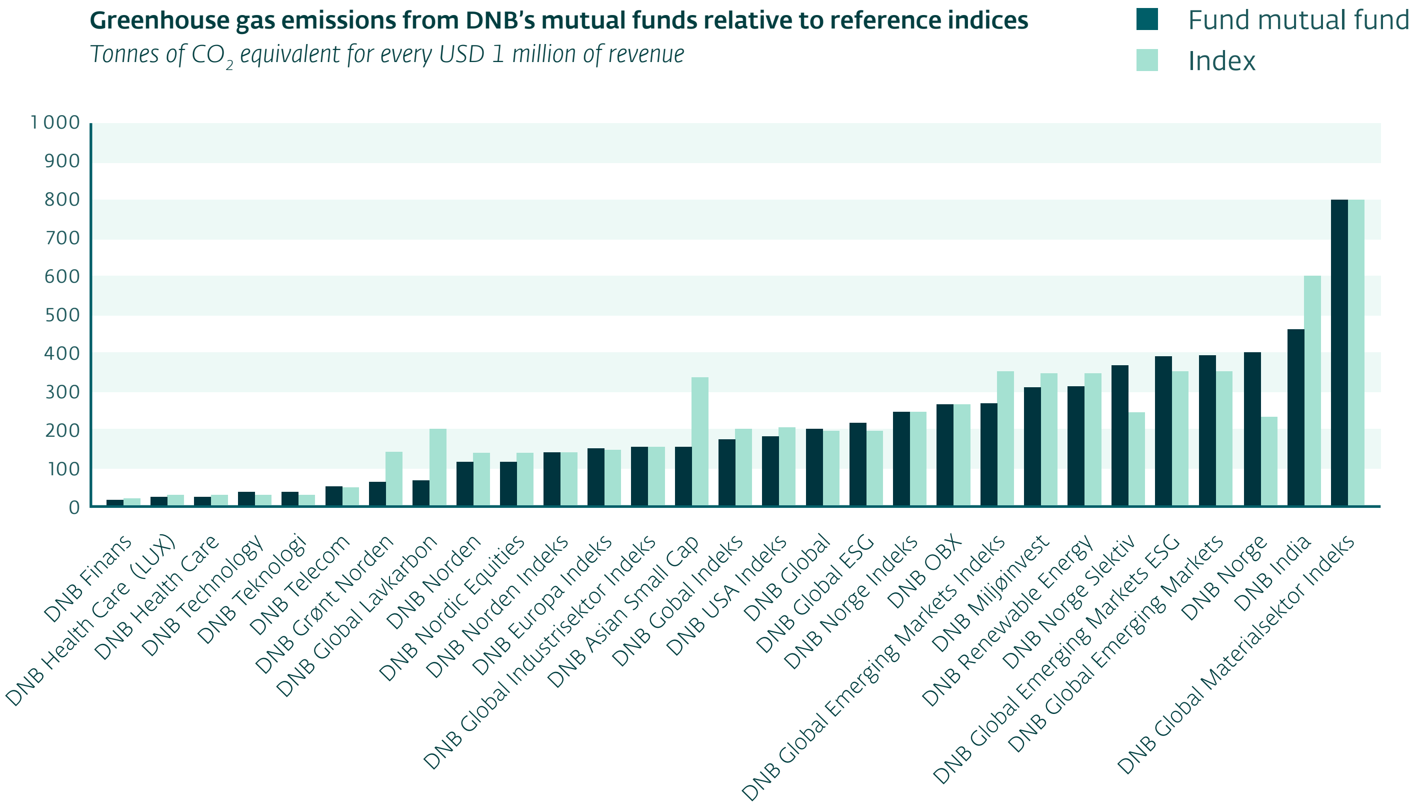
DNB uses information from MSCI ESG Research about companies' GHG emissions. The companies' carbon footprint is weighted by the respective holding in the portfolios and the same is done for the index. In the calculations, any cash in the portfolios is distributed proportionally between the other companies. For companies without emission data, an estimated figure for the company produced by MSCI ESG has been used in the calculation. DNB reports $CO_2$ equivalents that include Scope 1 and Scope 2 emissions, as defined by the Greenhouse Gas Protocol. Scope 1 includes direct emissions from sources that are owned or controlled by the organisation and Scope 2 includes indirect emissions associated with purchased energy. Indirect emissions associated with purchased goods and services that fall in under Scope 3 are not included due to lack of reported data from companies. For avoided emissions, which refer to emission reductions resulting from a specific product, methodological and data gaps have prevented the widespread inclusion as part of the carbon footprint process.

The method for reporting GHG emissions is under development and could be subject to change. The graph below shows 29 equity funds and their respective indices where data on GHG emissions for more than 75 per cent of the funds' investments are specified. These funds represent about 96 per cent of the total market value of DNB's equity funds. Some funds are not included due to the lack of emission data. The graph is a snapshot of the portfolio as at 31 December 2018 and shows that compared with the respective benchmarks, the majority of the funds had a lower or equal carbon footprint.

There is significant uncertainty surrounding data on GHG emissions. This is due to both the regional variations in practices for reporting emissions, which have been shown to vary considerably between markets and companies of different size, and from the use of estimated figures when companies do not report emissions. Despite these uncertainties, DNB is of the opinion that GHG emissions are an important factor to include in the analyses of companies' climate risk and impact.

In an effort to increase the quality and coverage of reported emissions, DNB is a supporter of CDP and the TCFD.

Figure 1. Portfolio Carbon Footprints for Equity Funds



## 8.3 Water

Identified by the World Economic Forum and the UN's 2030 SDGs, access to clean water and sanitation represents one of the top global challenges for the next decade. The World Resources Institute (WRI) estimate as many as 3.5 billion could experience water scarcity by 2025, up from estimates of 1 billion people in 2018, highlighting an increasingly worsening situation.

Water is an essential input factor in countless processes and operations globally, and industry has a direct role in the management of the earth's water systems. The impact of water on different sectors varies depending on the sector and industry, with some sector and geographic regions particularly vulnerable to changes in the water availability and water quality.

What makes water management by companies especially challenging is that it is a local and/or regional issue, often requiring site-specific approaches for the management of the resources. These issues increase complexity for the companies when considering water management, particularly for multinational companies when considering across direct operations and supply chains, in a range of international geographies. Additionally, when considering the multitude of factors impacting the quantity and quality of water available, including human, industry, and policy, the complexity of the issues are evident.

We expect to see an increase in incorporated water management into business strategies, risk management and measuring and valuing water impact. This is to ensure companies have awareness of, and are managing water risks within their operations and supply chain, and within their operating basin. It is the ambition of DNB AM for all companies within the investment universe to become water stewards. That is, to not only improve the water efficiency and water management practices within their operations, but to positively contribute to the sustainable management of shared resources.

We seek to broaden our knowledge about water management within relevant sectors and markets. Our focus in regards to water centres on reporting of water management and how to integrate important factors into our ESG analysis.

In 2018, DNB AM had five meetings on issues related to water risks and opportunities. An example of a water-related company engagement we had in 2018 is our dialogue with Norsk Hydro ASA. We have had ongoing dialogue with Norsk Hydro ASA both in 2017 before the incident and since February 2018 regarding allegations of water and environmental pollution at its Alunorte alumina refinery in Barcarena, Brazil following heavy rainfall. Concerns regarding the company's exposure to potential risks related to corruption, water, and waste handling in Brazil were first raised in the Committee of Responsible Investments' meeting in September 2017. Our three engagement objectives are that Hydro: 1) upgrades the plant such that it is more robust and capable of storing tailings, also in a climate change scenario with more severe rainfall patterns; 2) takes greater responsibility for the local community; and 3) conducts an independent audit of the situation and its processes with a highly trustworthy external party. The company has come far in terms of engagement goals 2 and 3. We will continue to follow this case in 2019.

Investor collaborations are also important channels for addressing water-related risks and opportunities. In 2018 we joined the Ceres Investor Water Hub, which aims to share information, data and learnings and develop more effective research methods to assess water risks and opportunities.

See sections 9.4 and 10.2 for further information on work and initiatives addressing water-related risks and opportunities.

# 9.0 Assessment of Progress on Thematic Focus Areas in 2018

**Anti-corruption**

**Methane**

**Emerging markets supply chains**

**Deforestation and land-use**

**Responsible tax practices**

In addition to the long-term focus areas, in 2018, our engagement strategy prioritised certain shorter-term thematic engagements: anti-corruption, emerging markets supply chains, responsible tax practices, deforestation and land-use, and methane emissions.

These are determined based on their significance, possibility to engage with companies on these topics, and potential to make a difference in terms of sustainability and returns.

| Focus Area | Achievements in 2018 | Goals for 2019 |
|---|---|---|
| Anti-corruption | • Wrote and published expectations document on anti-corruption<br>• Continued engaging with companies on corruption, both directly and in collaboration with other investors through our engagement service provider | • Continue engaging with companies on anti-corruption, both directly and in collaboration with other investors through our engagement service provider |
| Emerging markets supply chains | • Joined additional UNPRI working groups on deforestation and land-use (soy and cattle)<br>• Continued engagement with companies on deforestation and land-use directly or in collaboration with other investors | • Consider joining an additional UNPRI working group related to deforestation and land-use<br>• Continue engaging with companies on sustainable palm oil, soy and cattle through UNPRI working groups<br>• Continue engagement with companies on emerging markets supply chains directly or in collaboration with other investors |
| Responsible tax practices | • Wrote and published expectations document on responsible tax practices<br>• Developed and implemented systematic approach for engagement with companies on responsible tax practices either directly or collaboration with other investors | • Continue engaging with companies on responsible tax practices, both directly and in collaboration with other investors through our engagement service provider |
| Deforestation and land-use | • Joined additional UNPRI working groups on deforestation and land-use (soy and cattle)<br>• Continued engagement with companies on deforestation and land-use directly or in collaboration with other investors | • Consider joining an additional UNPRI working group related to deforestation and land-use<br>• Continue engaging with companies on sustainable palm oil, soy and cattle through UNPRI working groups<br>• Continue engagement with companies on deforestation and land-use directly or in collaboration with other investors |
| Methane emissions | • Wrote and published expectations document on climate change (which covered methane emissions)<br>• Continued engaging with companies on methane in collaboration with other investors through the UNPRI working group on methane<br>• Engaged with companies on methane through the TCFD collaboration with other Norwegian investors | • Continue engaging with companies on methane emissions, both directly and in collaboration with other investors through our engagement service provider and through the UNPRI working group on methane |

## 9.1 Anti-corruption

Corruption is widespread and it is costly for society as a whole, for individual companies and for shareholders. Ultimately, fighting corruption is an important enabler in reaching many of UNs 17 SDGs, and corruption is directly addressed in goal 16 (target 16.5): "Substantially reduce corruption and bribery in all their forms".

Corruption has been a focus area for the RI-team for several years, and we developed and published an expectation document in 2018. The purpose of the expectation document is to define DNB AM's criteria and expectations towards companies in terms of their obligation to be proactive in their anti-corruption work. The document is a basis for screening and possible engagements by DNB AM (the worst cases may be excluded from DNB's investment universe). In addition, the expectations call for a high level of transparency around how companies identify, assess and manage their anti-corruption practices such that this information can be utilised in DNB AM's company analysis as an input to investment decision-making.

There have been 19 engagement meetings regarding anti-corruption in 2018 by the RI-team and/or our external service providers, for example with Novartis AG, Petrobras, China Longyuan Power Group Corp Ltd, and JBS SA Ltd. In many cases, large corruption incidents serve as a catalyst for major reforms to a company's anti-corruption practices. We saw progress in several cases regarding better policies, practices and external quality assurance in this area. Using Novartis as an example (having been involved in incidents of corruption in several countries), the company is in the midst of a five year transformational process addressing both polices, practices and cultural challenges.

However, we also excluded JBS SA from DNB's investment universe due to an unacceptable risk that a company contributes to or is responsible for serious corruption. This exclusion was partly based on our assessment that the widespread bribery involving close to 1,900 politicians and JBS' controlling Batista family raised serious concerns about corporate governance at the company.

Anti-corruption will continue to be an important issue in engagement and ESG-integration going forward also.

## 9.2 Emerging Markets Supply Chains

Companies operating in emerging markets often experience higher ESG risks compared to companies operating in developed countries. These higher ESG risks may be the result of weaker regulations, reduced rule of law, and higher occurrences of corruption. Many important commodities used in a range of products are produced in emerging markets, with many global companies dependent on emerging market suppliers. Incidents or other disruptions experienced by these suppliers can have wide-ranging impacts, and for this reason we engaged with companies, either because of specific incidents or due to apparent weaknesses in their supply chain policies and practices. This is an important consideration for a range of industries, including the textile, agriculture, and technology industries.

In 2018, there was crossover with our other engagements in deforestation and land-use, through the engagement with companies about the sourcing of agricultural commodities linked to deforestation. We engaged in dialogue with Bunge and Wilmar, and are seeing progress and improvements in supply chain management policies and initiatives.

We continued our work with combatting child labour in cocoa supply chains, and with many viewing poverty as the underlying cause of child labour, this has formed a considerable focus of the efforts. We engaged in dialogue with Mondelez International Inc., Nestle, Barry Callebaut AG, Hershey, and Olam International in December to understand more about the companies' current policies and practices, and to convey our expectations in order to help improve practices. Our service provider released a follow up report rating companies' progress relative to 2017, with almost all companies experiencing improvement. While there are still challenges, especially with improving farmers' incomes, we believe there is positive momentum in the industry and we will continue to follow this issue closely.

## 9.3 Responsible Tax Practices

There is a growing consensus that the current international taxation framework is far from optimal and needs to be reformed. International tax rules were originally designed for "brick and mortar" businesses, and these rules are therefore less suited for the modern world with more "digital" business models. Tax erosion is increasingly seen as a challenge, eroding the sustainability of nations, including the welfare state.

In 2018, we published an expectation document for companies regarding responsible tax practices. The document is based on best practice, and is underpinned by internationally accepted standards relevant to taxation. The purpose of the expectation document is to define DNB AM's criteria and expectations towards companies regarding their obligation to adhere to responsible tax practices. The document serves as a basis for screening and possible engagements by DNB AM. In addition, the expectations call for a high level of transparency around how companies identify, assess and manage their responsible tax practices. In extreme cases, companies may be excluded from DNB's investment universe as a last resort if they do not adequately manage their tax obligations.

Based on a screening of the global investment universe, two early phase engagements on responsible tax practices were undertaken in 2018, including with Betsson AB. Here taxation was discussed together with responsible gaming and privacy & data security. The company is a leader in the gaming space, and the questions regarding potential gaps we had identified were addressed by the company. In all instances, it appeared to be mainly an issue of disclosure, rather than a lack of consideration on behalf of the company. Betsson will work on increasing transparency, through its website and annual reports, as well as dialogue with important ESG consultants.

## 9.4 Deforestation and Land-use

Our work on deforestation is centred on the agricultural commodities which are collectively responsible for 80% of deforestation (cattle products, palm oil, soy, and timber products).The Intergovernmental Panel on Climate Change estimates that approximately 25%[17] of global GHG emissions are due to agriculture, deforestation and land-use changes. Therefore, addressing this deforestation is central to meeting international ambitions to limit climate change, and for this reason it has been a key focus area in 2018.

We are part of three initiatives coordinated by the UNPRI and Ceres focused on cattle products, palm oil, and soy. The ambition of these initiatives is to prevent deforestation associated with the production of these commodities, by working with companies to improve transparency of disclosures, improve traceability throughout the supply chains, and to obtain a full commitment to no deforestation. Both the cattle products and soy initiatives were new in 2018, while the palm oil initiative has broadened its scope from growers, traders, and processors prior to 2018, to now include the banks financing these companies. Palm oil has been an important focus for us for many years, and we have seen significant changes in terms of policies and norms by the companies operating in the industry. We believe the natural next step is to work with those providing finance to the industry, and believe this initiative will contribute to the further progress on the topic.

Considering the significance that deforestation and land-use has in climate change, it will remain a key engagement topic in 2019.

## 9.5 Methane Emissions

Methane ($CH_4$) is a potent GHG, with a global warming potential 84 times greater than that of $CO_2$ over a 20-year horizon[18]. For example, some instances of methane leakage from the natural gas value chain may make the gas more damaging than coal for the climate. In the last few years, 16% of the global GHG emissions have come from methane[19].

As part of our standard setting work, methane is covered under the expectations documents on climate change published in 2018. Methane and climate issues are especially relevant for certain sectors/industries such as energy, utilities, and agriculture (including meat, dairy and rice production) .

DNB AM has joined forces with other global investors in the UNPRI methane engagement group; a collaborative engagement on methane risk started in 2017 (will be completed in 2019). The engagement has targeted 42 global energy and utility companies, focusing on two main topics:

- Adequate disclosure of the companies' methane emissions
- How they are managing methane risks

The engagement has already resulted in progress in methane disclosure across the majority of the 42 companies, with energy companies generally showing better progress than utilities. This also coincides with the trend of increased number of shareholder proposals at general meetings demanding better climate-related disclosure. However, there seems to still be a ways to go in terms of achieving meaningful reduction in the methane emissions for the companies the UNPRI group engages with. We look forward to finalising the important UNPRI-lead engagement in 2019.

17) IPCC, 2014: Climate Change 2014: Mitigation of Climate Change. Contribution of Working Group III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change

18) https://www.unece.org/energywelcome/areas-of-work/methane-management/the-challenge.html
19) https://www.ipcc.ch/report/ar5/syr/
https://www.ipcc.ch/site/assets/uploads/2018/02/ipcc_wg3_ar5_chapter11.pdf

# 10.0 Thematic Focus Areas 2019

**Gender Equality & Diversity**

**Oceans**

**Product Safety & Liability**

In 2019, we will continue our focus on deforestation and land-use and emerging markets supply chains, whilst introducing gender equality and diversity, oceans, and product safety and quality as new thematic focus areas.

| Focus Area | Goals for 2019 |
|---|---|
| Gender Equality & Diversity | • Write and publish expectations document on gender equality & diversity<br>• Write and publish voting guidelines for global companies, including expectations specifically related to gender equality and diversity<br>• Update tailored proxy voting guidelines with ISS to include gender equality and diversity aspects<br>• Determine systematic approach for engaging with companies on this topic (both directly and in collaboration with other investors) |
| Oceans | • Write and publish expectations document on water (this will overlap with the oceans theme)<br>• Determine systematic approach for engaging with companies on this topic (both directly and in collaboration with other investors) |
| Product Safety & Liability | • Systematically engage with companies on this topic (both directly and in collaboration with other investors) |

## 10.1 Gender Equality & Diversity

*"While some forms of discrimination against women and girls are diminishing, gender inequality continues to hold women back and deprive them of basic rights and opportunities."*[20]

Gender gaps still exist across numerous sectors and regions, disadvantaging women in regard to education, health, politics, or finance[21]. Though there are signs of improvement, progress remains slow and "according to the WRI, assuming a continuation of current trajectories, it will take 50 years for gender parity in parliamentary politics and 170 years before women earn the same as men"[21,22].

Integrating diversity, including gender and race, at the company and Board-level is an important characteristic of a company with sound corporate governance. Lack of gender equality and diversity may lead to companies having lower levels of social integration, poorer communication, and increased conflict – all of which may negatively impact performance and therefore long-term return for investors[22,23]. Empowering women and minority groups requires addressing structural issues such as unfair social norms and attitudes, as well as developing progressive legal frameworks promoting gender equality[24]. The McKinsey Global Institute estimates that achieving gender parity would add between 12 - 28USD trn to global growth by 2025[25].

## 10.2 Oceans

The ocean covers 71% of the planet's surface and is an essential part of the biosphere, regulating the global climate by mediating temperature and driving weather[26,27]. However, the ocean is disproportionately impacted by the increasing levels of GHGs in our atmosphere, leading to rising water temperatures, ocean acidification and deoxygenation[28].

The importance of the ocean is growing, as it provides critical ecosystem services including food, carbon storage and oxygen generation, and accommodates nature-based solutions to climate change adaptation as well as offshore renewable energy production[28].

Many companies' business models are dependent on the ocean and/or negatively impact the ocean. Depending on operational practices, geographical and/or sectoral exposure, companies may face physical risks arising from degraded or over-exploited resources, reduced access to markets following of changing consumer preferences, legal and regulatory risks as a result of increased attention to oceans issues, and reputational risks if they are perceived to have poor ocean stewardship[29]. Ocean sustainability is therefore central to companies' ability to generate long-term value for investors.

## 10.3 Product Safety & Liability

The effect that companies' products have on society is an important element of product stewardship. Companies must ensure that their products are safe, or risk legal action. DNB AM's interpretation of product safety and liability is that this encompasses a range of issues including cyber security and data protection, public health/nutrition and gambling, amongst others. Such issues have been widely discussed in the media and have, in some cases, led to extreme stock market reactions, harming returns, damaging company reputations, and attracting the attention of regulators globally. In determining a company's ability to ensure long-term value creation, we must therefore consider how companies manage the risk of such issues occurring, and how they respond to such issues if they occur.

20) https://unstats.un.org/sdgs/files/report/2018/TheSustainableDevelopment-GoalsReport2018-EN.pdf
21) https://ny.matrix.ms.com/eqr/article/webapp/2e-caa0de-e0e4-11e8-bbd0-a417260f63b0?ch=rpext&sch=sr&sr=1
22) https://www.unpri.org/listed-equity/incorporating-diversity/158.article
23) http://www.oecd.org/gov/pem/diversity-and-inclusion.htm
24) https://sustainabledevelopment.un.org/sdg5
25) https://www.mckinsey.com/featured-insights/employment-and-growth/how-advancing-womens-equality-can-add-12-trillion-to-global-growth
26) https://www.worldwildlife.org/stories/how-climate-change-relates-to-oceans
27) https://www.nbim.no/en/responsibility/risk-management/ocean-sustainability/
28) https://www.iucn.org/resources/issues-briefs/ocean-and-climate-change
29) https://www.nbim.no/en/responsibility/risk-management/ocean-sustainability/

# 11.0 Sustainability-themed Funds in Focus

All of our funds and investments follow our Standard for Responsible Investments. However, clients seeking funds with an enhanced ESG profile can opt for funds such as DNB Global ESG and/or DNB Global Emerging Markets. These funds exclude companies that are involved in the production of alcohol, conventional weapons and/or gambling. For clients interested in dedicated sustainability-themed funds, we offer DNB Global Lavkarbon, DNB Grønt Norden and DNB Barnefond. A fixed income equivalent to DNB Global Lavkarbon is expected in 2019. These funds exclude companies that are either exposed to fossil energy, have high carbon footprints (intensity) and/or large fossil fuel reserves. DNB Grønt Norden also utilises positive selection focusing on Nordic companies with a positive environmental profile. Furthermore, we offer DNB Miljøinvest/DNB Renewable Energy which are funds that invest in companies that have a positive environmental impact. These invest in companies that provide solutions to the challenges of climate change, such as renewable energy and/or energy efficiency.

Sections 11.1 – 11.3 describe some of the aforementioned funds and their ESG work in more detail.

## 11.1 DNB Miljøinvest and DNB Renewable Energy

Jon Sigurdsen,
Portfolio Manager

Christian Rom,
Portfolio Manager

*"We look at companies' climate impact from a lifecycle perspective and consider how companies' products and services contribute to reducing emissions for their customers and, in some cases, even further down their supply chains" – Rom & Sigurdsen*

### *About the Funds*

Size of funds: 2,478m NOK (DNB Miljøinvest and DNB Renewable Energy combined) as at 31.12.2018

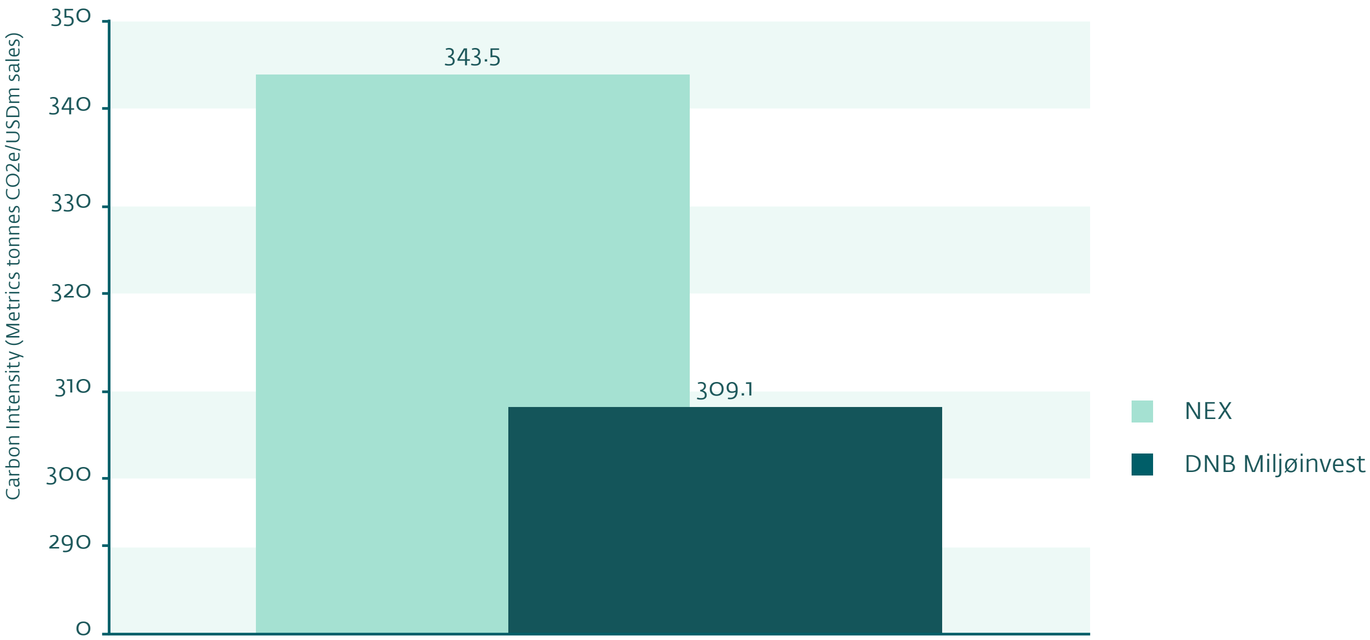
DNB Miljøinvest and DNB Renewable Energy are actively managed funds aiming at delivering an impact by investing in companies that provide solutions to the challenges of climate change, such as renewable energy and/or energy efficiency.

DNB Miljøinvest is domiciled in Norway and DNB Renewable Energy is its equivalent, domiciled in Luxembourg. Both funds are managed by Sigurdsen and Rom and have the same mandate and portfolio constituents.

Renewable energy has a positive environmental impact. In total, the portfolio holdings of DNB Miljøinvest and DNB Renewable Energy together produce 406,052MWh of clean energy. This is equivalent to approximately 4.5% of Oslo's yearly energy usage or to 60,964 passenger vehicles driven for one year[30].

Furthermore, as a signatory to the Montreal Carbon Pledge, we measure the fund's portfolio carbon intensity. As shown in Figure 2, the carbon intensity of the fund compared to its benchmark, WilderHill NewEnergy Global Innovation Index (NEX), is lower.

Figure 2. Carbon Intensity of DNB Miljøinvest as at 31.12.2018

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30) Calculated using the EPA Greenhouse Gas Equivalences Calculator: https://www.epa.gov/energy/greenhouse-gas-equivalencies-calculator (this is based on US data)

### Key Achievements

In November 2018, the German Sustainable Investment Forum (FNG awarded the DNB Renewable Energy Fund its FNG Label with the highest possible rating of three stars. This label will be valid for one year at a time.

The fund is awarded the label for its thematic investment in renewables, sustainable transportation and energy efficiency. Furthermore, established voting and formal engagement policies show active involvement with respect to ESG aspects. Extensive internal research and reporting were also positive contributors to the labelling.

In addition to adhering to DNB's Standard for Responsible Investments, the portfolio managers have signed a side letter requiring the fund to apply additional exclusion criteria, based on revenues, to ensure compliance with the label:

- >=5% nuclear energy
- >=5% coal mining*
- >=5% oil sands*
- >=5% fracking

* Stricter threshold than that defined in the DNB Group Standard for Responsible Investments.

### Active Ownership

Voting at companies' general meetings is an important part of exercising active ownership and as long-term investors. In 2018, we voted at 12 general meetings of 12 companies in the DNB Miljøinvest and DNB Renewable Energy portfolios. Of these, we voted against the company's recommendations in two cases. We publicly disclose our reason for voting against company recommendations on our website under Active Ownership through Voting[31].

We also engage in dialogues with companies to influence them in a positive direction. An example of one such engagement was our dialogue with Huntsman Corp. Together with the portfolio managers, the RI team had a call with the company to discuss governance issues related to the Board (roles of CEO and Chairman of the Board are not split), related-party transactions, and the disclosure of environmental metrics. We communicated to the company that the role of CEO/ Chairman of the Board must be split to ensure a fully independent Board. Also, greater transparency around environmental reporting is needed. The CDP was mentioned as an important reporting channel. We will continue to follow up with the company in 2019.

### ESG Integration

The RI team maintains a close dialogue with the portfolio managers, as described in section 6.4. In addition, the portfolio managers take a dynamic approach to integrating ESG risks and opportunities into their valuation model. This model is used to determine which companies are positive environmental contributors and to make investment decisions. For example, higher discount rates or higher upside to fair value are demanded for certain countries to account for country-level governance risks. However, these higher discount rates are not blindly applied to all companies within a certain market. As the portfolio managers' view of the company changes, these may be adjusted over time.

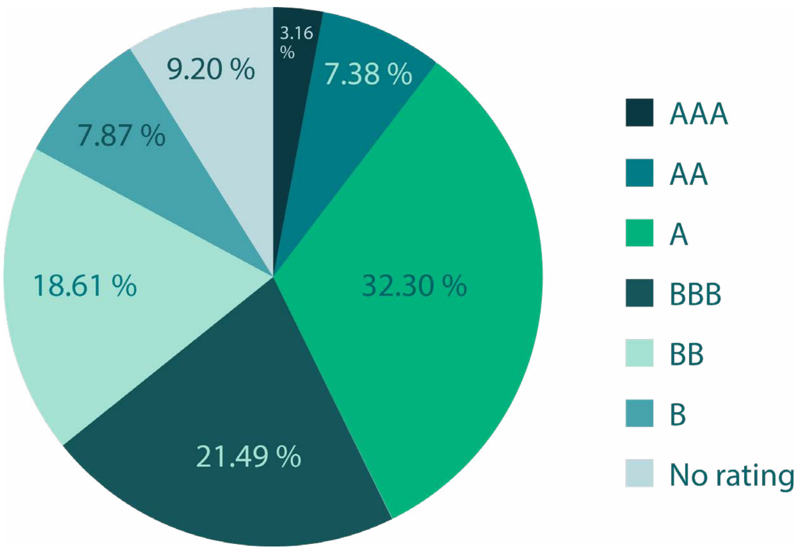
### Screening MSCI ESG Research

MSCI ESG data and research are an important input to the investment decision making process. Figure 3 shows the distribution of ESG ratings for the portfolio constituents in DNB Miljøinvest. This chart is for demonstrative purposes only, as the fund managers do not actively pursue a portfolio with high ESG ratings. This is not compared to the fund's benchmark, as a significant portion of fund's AUM is invested outside of the benchmark[33].

Though ESG ratings can be a signal of a company's sustainability profile, there are some factors that must be considered when looking at the ESG ratings for the portfolio holdings of DNB Miljøinvest. First, the fund invests in small- to mid-capitalisation companies. A common issue with ESG ratings is that they tend to favour large companies with significant reporting resources, resulting in a large-cap bias. In addition, positive impact is not currently well captured by ESG ratings, as no well-recognised methodology for this exists as of yet.

31) Currently available in Norwegian only.
32) 91% of the total portfolio is covered by MSCI's ESG ratings as at 31.12.2018.
33) The percentage of AUM invested outside of the benchmark varies and there is no specific threshold defined for this.

Figure 3. ESG Ratings for Portfolio Constituents in DNB Miljøinvest [32]



## 11.2 DNB Global Lavkarbon

Ole Jakob Wold,
Portfolio Manager

*"ESG ratings are an important tool for measuring how responsible companies are. DNB Global Lavkarbon shall have a better average ESG score than its benchmark" - Wold*

### *About the Fund*

Size of fund: 1,035m NOK as at 31.12.2018

DNB Global Lavkarbon is an actively managed dynamic multifactor fund that invests in listed companies in developed countries. The fund has an environmental profile and invests in companies with low-carbon intensities, whilst maintaining an average industry-adjusted ESG score higher than its benchmark. Companies are screened out of the portfolio based on the following criteria:

- DNB's Standard for Responsible Investments
- DNB's list of fossil fuel related companies
- Additional exclusion criteria: companies with more than 5% of their revenue from business related to gambling, production of conventional weapons or alcohol production
- Large fossil fuel reserve owners
- Companies with carbon intensities exceeding 3,000 $CO_2$e metric tonnes/USDm sales

As a signatory to the Montreal Carbon Pledge, we measure the fund's portfolio carbon intensity. The fund has a specific mandate to achieve a portfolio carbon footprint under half of its benchmark, the MSCI World.

Figure 4 shows that the carbon intensity of the fund compared to its benchmark is significantly lower.

Figure 4. Carbon Intensity of DNB Global Lavkarbon as at 31.12.2018

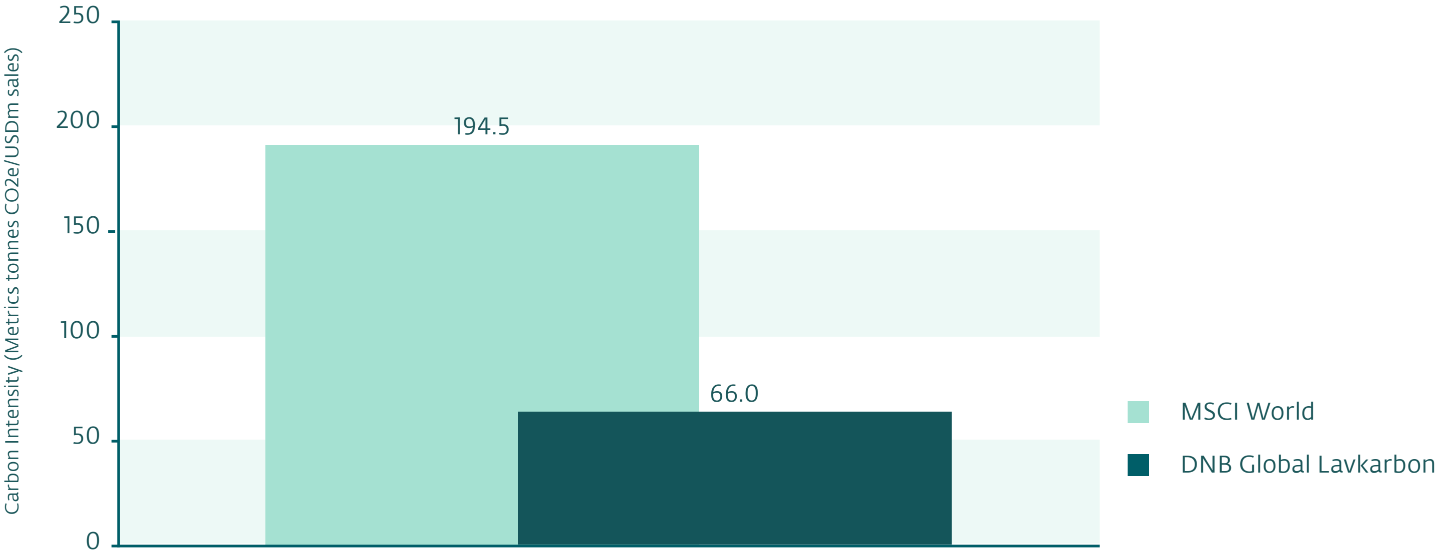
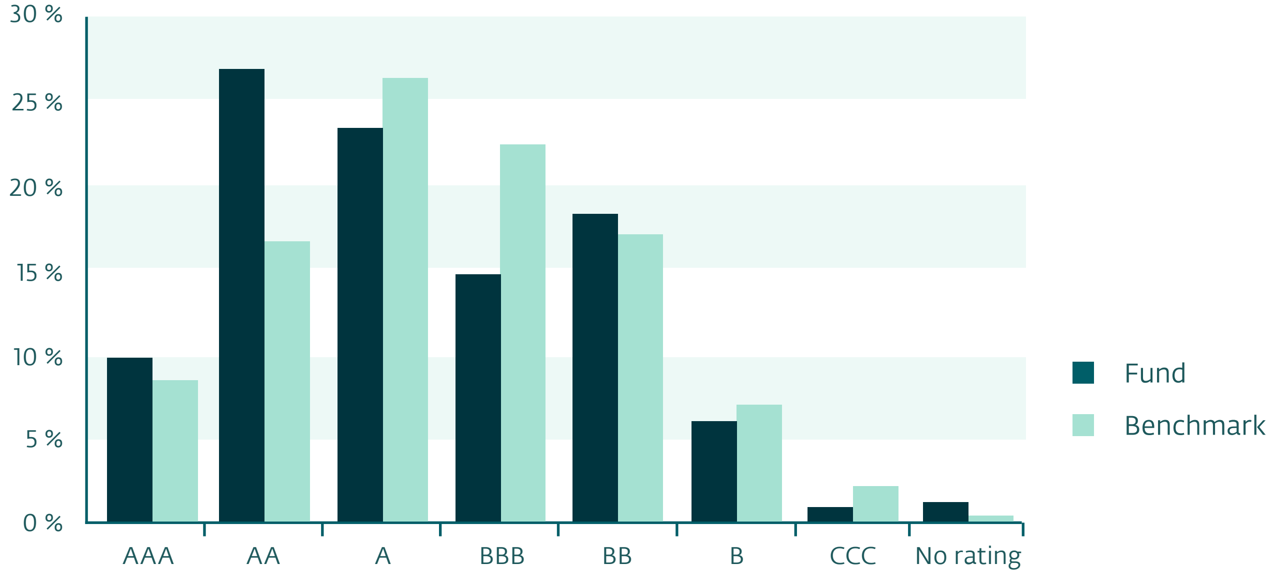


Figure 5. ESG Ratings for Portfolio Constituents in DNB Global Lavkarbon Compared to its Benchmark[35]






### *Active ownership*

Voting at companies' general meetings is an important part of exercising active ownership and as long-term investors. Decisions to vote at general meetings are determined based on the size of the holding and potential to make an impact. In 2018, we voted at general meetings of two companies at three meetings in the DNB Global Lavkarbon portfolio. Of these, we voted against the company's recommendations in one case. We publicly disclose our reason to vote against company recommendations on our website under Active Ownership through Voting[34]. Our voting guidelines state that we shall vote at all Norwegian general meetings for listed companies we have ownership in, and we have adopted a systematic approach to determining which global companies' meetings we will vote at.

We also engage in dialogues with companies to influence them in a positive direction. An example of one such engagement was with Orkla to discuss its plans around TCFD reporting. The engagement was conducted as part of our investor collaboration with other Norwegian investors on TCFD. It was identified that the company has focused thus far on how it impacts the environment, and will consider how climate change could impact the financial performance of the company, which is an important distinction. The next step for the company (beyond aligning with TCFD reporting) will be scenario analysis, which was strongly suggested by the group. Our dialogue with the company on this topic will continue in 2019, likely after it publishes its 2018 annual report.

### *ESG integration*

ESG risks and opportunities are inherently accounted for in this fund which applies specific ESG screening requirements. In addition, the fund is rebalanced on a monthly basis and all new companies are screened by the RI team before they can be included in the fund. The RI team also screens all new companies when the benchmark is rebalanced. ESG issues raised by the RI team that are not in breach with the screening criteria may impact the final investment decision and could lead to initiating a dialogue with the company.

### *Screening MSCI ESG Research*

The fund aims to have an average ESG rating higher than its benchmark. The graph above shows the distribution of MSCI ESG ratings for the fund and its benchmark. The average final industry-adjusted score for the fund is 6.2 (A) versus the benchmark's 5.9 (A).

34) Currently available in Norwegian only.
35) 99.56% of the total portfolio is covered by MSCI's ESG ratings as at 31.12.2018.

## 11.3 DNB Grønt Norden

Øyvind Fjell,
Portfolio Manager

*"The Nordic region generally leads in terms of sustainability and ESG ratings, and offers a good selection of global, leading companies. This fund has an environmental tilt, is low-carbon, and utilises both negative and positive screening" - Fjell*

*About the fund*
Size of fund: 657m NOK as at 31.12.2018

DNB Grønt Norden is an actively managed equity fund that invests in listed companies in the Nordic region. The fund has an environmental mandate and invests in companies with low-carbon intensities, whilst maintaining an average industry-adjusted ESG score higher than its benchmark. Companies are screened out of the portfolio based on the following criteria:

- DNB's Standard for Responsible Investments
- DNB's list of fossil fuel related companies
- Additional exclusion criteria: companies with more than 5% of their revenue from business related to gambling, production of conventional weapons or alcohol production
- Large fossil fuel reserve owners
- Companies with carbon intensities exceeding 3,000 $CO_2$e metric tonnes/USDm sales

In addition, the fund utilises positive screening to include companies that have a positive environmental impact in the fund. The following green themes have been defined:

- Climate change
- Water management
- Energy efficiency
- Waste management
- Water and air pollution
- Deforestation
- Biodiversity

Furthermore, as a signatory to the Montreal Carbon Pledge, we measure the fund's portfolio carbon intensity. The fund has a specific mandate to achieve a portfolio carbon footprint under half of its benchmark, the VINXBCAPNI.

Figure 6 shows that the carbon intensity of the fund compared to its benchmark is significantly lower.

Figure 6. Carbon Intensity of DNB Global Grønt Norden as at 31.12.2018

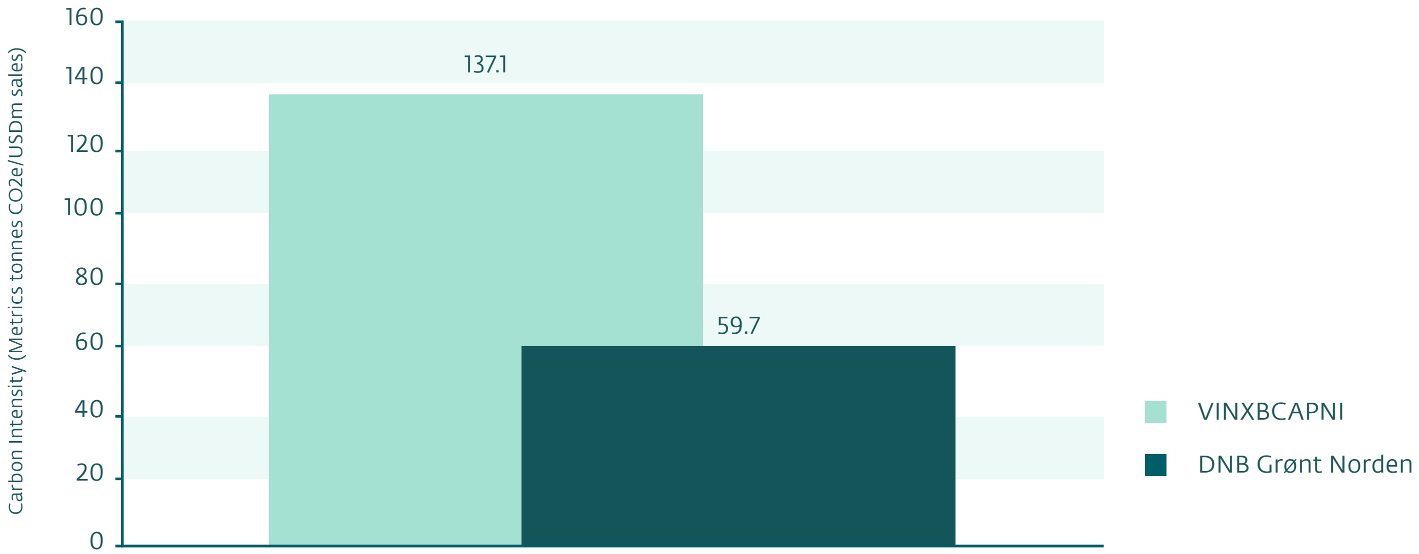
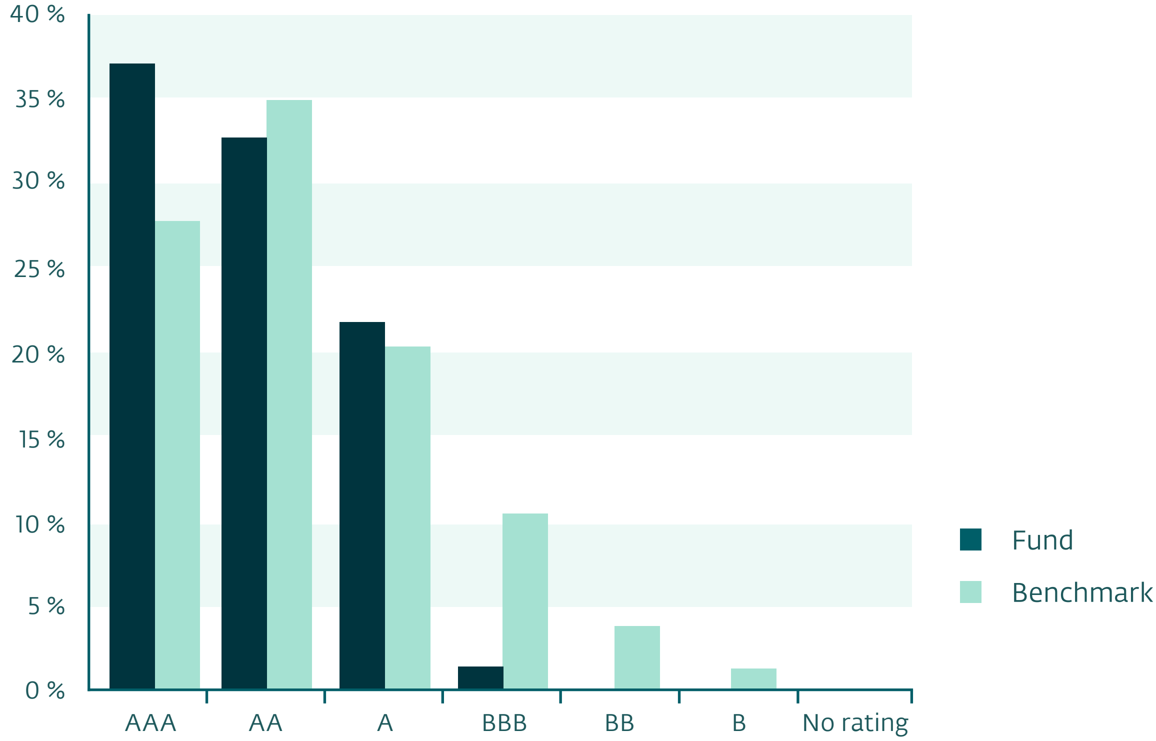


Figure 7. ESG Ratings for Portfolio Constituents in DNB Grønt Norden Compared to its Benchmark[37]

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### *Active ownership*

Voting at companies' general meetings is an important part of exercising active ownership and as long-term investors. In 2018, we voted at general meetings of 18 companies at 20 meetings in the DNB Grønt Norden portfolio. Of these, we voted against the company's recommendations in three cases. We publicly disclose our reason to vote against company recommendations on our website under Active Ownership through Voting[36]. Our voting guidelines state that we shall vote at all Norwegian general meetings for listed companies we have ownership in, and we have adopted a systematic approach to determining which global companies' meetings we will vote at.

We also engage in dialogues with companies to influence them in a positive direction. An example of one such engagement was our dialogue with LM Ericsson to discuss its remuneration policy and guidelines ahead of its general meeting 2018. In the general meeting we voted against the proposal for variable Board remuneration, as we believe that this could negatively impact independence of the Board.

### *ESG integration*

The RI team maintains a close dialogue with the portfolio manager, as described in section 6.4. The RI team's ongoing dialogue also includes informal meetings. In addition, we utilise systematic approaches to screening. The RI team and the portfolio manager work collaboratively to screen companies for possible inclusion in the fund in line with the aforementioned green themes. Based on this list, the portfolio manager will choose stocks and determine the size of the bets. Also, weekly alerts on rating changes and potential/realised breaches in international norms and standards using data from MSCI ESG and GES respectively are sent to the portfolio manager. This has been identified as a way to also understand if there are any warning signs/indicators of potential future incidents to attempt to proactively address these.

### *Screening MSCI ESG Research*

The fund aims to have an average ESG rating higher than its benchmark. The graph above shows the distribution of MSCI ESG ratings for the fund and its benchmark. The average final industry-adjusted score for the fund is 8.1 (AA) versus the benchmark's 7.5(AA).

36) Currently available in Norwegian only.

37) 93% of the total portfolio is covered by MSCI's ESG ratings as at 31.12.2018.

# 12.0 Appendix

## 12.1 Climate-related Risk Management

Table 2. Adapted TCFD Table A1[38] with examples of climate-related risks

| Risk | | Time horizon | Description |
|---|---|---|---|
| Transition risks | Policy and legal | Medium-term (3-10 years) | • Increased pricing of GHG emissions<br>• Enhanced emissions-reporting obligations<br>• Mandates on and regulation of existing products and services<br>• Exposure to litigation |
| | Technology | | • Substitution of existing products and services with lower emissions options<br>• Unsuccessful investment in new technologies<br>• Costs for transition to lower emissions technology |
| | Markets | | • Changing consumer behaviour<br>• Uncertainty in market signals<br>• Increased cost of raw materials |
| | Reputation | | • Shifts in consumer preferences<br>• Stigmatisation of sector<br>• Increased stakeholder concern or negative stakeholder feedback<br>• Increased exposure to litigation |
| Physical risks | Acute | Long-term (>10 years) | • Increased severity of extreme weather events such as cyclones and floods |
| | Chronic | | • Changes in precipitation patterns and extreme variability in weather patterns<br>• Rising mean temperatures<br>• Rising sea levels |

38) https://www.fsb-tcfd.org/wp-content/uploads/2017/06/FINAL-TCFD-Report-062817.pdf

This table provides examples of risks that companies are to take into account and manage in their operations and investment analyses, and how the risks can be conceived to affect an investment in companies/ sectors/geographic markets. ESG factors are an integral part of the investment decision-making process and important to determining which companies are potentially at risk from the transition to the low-carbon economy and/or the physical impacts of climate change. An important part of our work to understand these impacts is our participation in UNEP FI's TCFD Investor Pilot Project, which will develop scenarios, models and metrics to enable scenario-based, forward looking assessments of climate-related risks and opportunities. Should companies not be prepared for these risks, it could harm shareholder value.

| Potential financial impact | Potential financial impact for DNB AM |
| --- | --- |
| • Increased operating costs (e.g. higher compliance costs, increased insurance premiums)<br>• Write-offs, asset impairment and early retirement of existing assets due to policy changes<br>• Increased costs and/or reduced demand for products and services resulting from fines and judgements | We recognise that climate-related regulation is likely to be higher/more demanding in the future. We are involved in several engagements (both directly with companies and in collaboration with other investors) to understand how companies are managing regulatory risks. If we are not satisfied that a company is adequately addressing this risk within a reasonable timeframe, the company be subject to exclusion from our investment universe.<br>We also offer low-carbon funds that exclude companies with high GHG emissions and reduce exposure to stranded assets (see section 11.0 to learn more about our low-carbon product offerings). |
| • Write-offs and early retirement of existing assets<br>• Reduced demand for products and services<br>• Research and development expenditures in new and alternative technologies<br>• Capital investments in technology development<br>• Costs to adopt/deploy new practices and processes | Technological change may impact consumption patterns. Thus, companies whose products are not in line with consumer preferences may be negatively impacted. Technological change may impact all asset classes, sectors, companies and securities. |
| • Reduced demand for goods and services due to shifts in consumer preferences<br>• Increased production costs due to changing input prices (e.g. energy, water) and output requirements (e.g. waste treatment)<br>• Abrupt and unexpected shifts in energy costs<br>• Changes in revenue mix and sources, resulting in decreased revenue<br>• Re-pricing of assets (e.g. fossil fuel reserves, land valuations, securities valuations) | The transition to a low-carbon economy may impact consumption and production patterns. Technological and market risks can be considered to be linked, as technological development is likely to play a role in driving these patterns. |
| • Reduced revenue from decreased demand for goods/services<br>• Reduced revenue from decreased production capacity (e.g. delaying planning approvals, supply chain interruptions)<br>• Reduced revenue from negative impacts on workforce management and planning (e.g. employee attraction and retention)<br>• Reduction in capital availability | We believe that no company can be successful and deliver high and stable returns without considering sustainability aspects at Board and Management level. Also, as stakeholders' expectations and attitudes develop, this may exasperate the potential reputational risks. |
| • Reduced revenue from decreased production capacity (e.g. transport difficulties, supply chain interruptions)<br>• Reduced revenue and higher costs from negative impacts on workforce (e.g. health, safety and absenteeism)<br>• Write-offs and early retirement of existing assets (e.g. damage to property and assets in high-risk locations)<br>• Increased operating costs (e.g. inadequate water supply for hydroelectric plants or to cool nuclear and fossil fuel plants)<br>• Increased capital costs (e.g. damage to facilities)<br>• Reduced revenues from lower sales/output<br>• Increased insurance premiums and potential for reduced availability of insurance on assets in 'high-risk locations' | Physical climate risks pertain to all asset classes and investments. Our work on scenario analysis through our participation in the UNEP FI TCFD Investor Pilot Project seeks to understand how physical climate risks may impact our holdings in the long-term. We are still deciding how the results of such analysis will impact our investment processes. |

The table below provides examples of opportunities that companies are to take into account in their operations. In our investment analyses, DNB AM takes into account how such opportunities are managed and how they can be conceived to affect an investment in companies/ sectors/geographic markets. ESG factors are an integral part of the investment decision-making process and important to determining which companies are potentially set to gain from the transition to the low-carbon economy and/or the physical impacts of climate change, which may increase shareholder value. An important part of our work to understand these impacts is our participation in UNEP FI's TCFD Investor Pilot Project, which will develop scenarios, models and metrics to enable scenario-based, forward looking assessments of climate-related risks and opportunities.

## Table 3. Adapted TCFD Table A2[39] with climate-related opportunities

| Opportunities | Description | Potential financial impact | Potential financial impact for DNB AM |
|---|---|---|---|
| Resource efficiency | • Use of more efficient modes of transport<br>• Use of more efficient production and distribution processes<br>• Use of recycling<br>• Move to more efficient buildings<br>• Reduced water usage and consumption | • Reduced operating costs (e.g. through efficiency gains and cost reduction)<br>• Increased production capacity, resulting in increased revenues<br>• Increased value of fixed assets (e.g. highly rated energy-efficient buildings)<br>• Benefits for workforce management and planning (e.g. improved health and safety, employee satisfaction) resulting in lower costs | We consider climate-related opportunities alongside risks and believe that companies taking advantage of these can increase shareholder value. ESG factors are an integral part of the investment decision-making process and important to determining which companies will contribute positively to transition towards a low-carbon economy.<br><br>See section 11.0 to learn more about our low-carbon product offerings. |
| Energy source | • Use of lower-emission sources of energy<br>• Use of supportive policy incentives<br>• Use of new technologies<br>• Participation in carbon markets<br>• Shift toward decentralised energy generation | • Reduced operational costs (e.g., through use of lowest cost abatement)<br>• Reduced exposure to future fossil fuel price increases<br>• Reduced exposure to GHG emissions and therefore less sensitivity to changes in cost of carbon<br>• Return on investments in low-emission technologies<br>• Increased capital availability (e.g., as more investors favour lower-emissions producers)<br>• Reputational benefits resulting in increased demand for goods and services | |
| Products and services | • Develop and/or expand low emission goods and services<br>• Development of climate adaptation and risk insurance solutions<br>• Development of new products or services through R&D and innovation<br>• Ability to diversify business activities<br>• Shift in consumer preferences | • Increased revenue through demand for lower emissions products and services<br>• Increased revenue through new solutions to adaptation needs (e.g., insurance risk transfer products and services)<br>• Better competitive position to reflect shifting consumer, resulting in increased revenues | |
| Markets | • Access to new markets<br>• Use of public-sector incentives<br>• Access to new assets and locations needing insurance coverage | • Increased revenues through access to new and emerging markets (e.g., partnerships with governments and development banks)<br>• Increased diversification of financial assets (e.g., green bonds and infrastructure) | |
| Resilience and ability to recover | • Participation in renewable energy programmes and adoption of energy efficiency measures<br>• Resource substitutes/diversification | • Increased market valuation through resilience planning (e.g., infrastructure, land, buildings)<br>• Increased reliability of supply chain and ability to operate under various conditions<br>• Increased revenue through new products and services related to ensuring resiliency | |

39) https://www.fsb-tcfd.org/wp-content/uploads/2017/06/FINAL-TCFD-Report-062817.pdf

## 12.2 Disclaimers

### *MSCI ESG*

Although DNB Asset Management's information providers, including without limitation, MSCI ESG Research LLC, and its affiliates (the "ESG Parties"), obtain information from sources they consider reliable, none of the ESG Parties warrants or guarantees the originality, accuracy and/or completeness of any data herein. None of the ESG Parties makes any express or implied warranties of any kind, and the ESG Parties hereby expressly disclaim all warranties of merchantability and fitness for a particular purpose, with respect to any data herein. None of the ESG Parties shall have any liability for any errors or omissions in connection with any data herein. Further, without limiting any of the foregoing, in no event shall any of the ESG Parties have any liability for any direct, indirect, special, punitive, consequential or any other damages (including lost profits) even if notified of the possibility of such damages.

### *European SRI Transparency Logo*

The European SRI Transparency logo signifies that DNB Asset Management commits to provide accurate, adequate and timely information to enable stakeholders, in particular consumers, to understand the Socially Responsible Investment (SRI) policies and practices relating to the fund. Detailed information about the European SRI Transparency Guidelines can be found on www.eurosif.org, and information of the SRI policies and practices of the DNB Asset Management can be found at: https://www.dnb.no/en/about-us/csr/sustainability-library.html. The Transparency Guidelines are managed by Eurosif, an independent organisation. The European SRI Transparency Logo reflects the fund manager's commitment as detailed above and should not be taken as an endorsement of any particular company, organisation or individual.

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We are here.
So you can
stay ahead.

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