

DNB Asset Management AS

A company in the DNB Group

DNB Renewable Energy 2022

Sustainable enablers of a better environment



DNB



**Sustainable
investment objective
(Article 9 SFDR)**

All companies/
product categories
assessed by **ISS-ESG**
demonstrate **PAE⁴⁾**

Engaged with
100%
of portfolio (by weight)
on science-based
net zero target
setting⁶⁾

60%
(up from **55%**)
of the portfolio has
committed to or set
a science-based
target²⁾

35%
(down from **38%**)
of the portfolio
has set a net-zero
target⁵⁾

**29 meetings on
75 topics** from
September 2022 –
September 2023⁷⁾

68%
EU Taxonomy
eligibility³⁾



1) All data as at 30.09.2023 unless otherwise specified
2) Source: MSCI ESG and DNB AM internal
3) Source: Bloomberg
4) Source: ISS-ESG
5) Source: MSCI ESG and DNB AM internal
6) Source: DNB AM
7) Source: DNB AM
8) Valid between 01.01.2023-31.12.2023 (currently in the process of reapplying for 2024)

Table of contents

1	Reflections from PMs	5
2	The time for action is now	9
3	Our investment universe	10
4	Our investment process	14
5	Close collaboration with our Responsible Investment team	17
6	Active ownership	31
7	Key findings of potential avoided emissions analysis	48
8	Appendix	65
8.1	Exclusion criteria	65
8.2	Disclaimers	66

1 Reflections from PMs



Photo: Stig B. Fiksdal

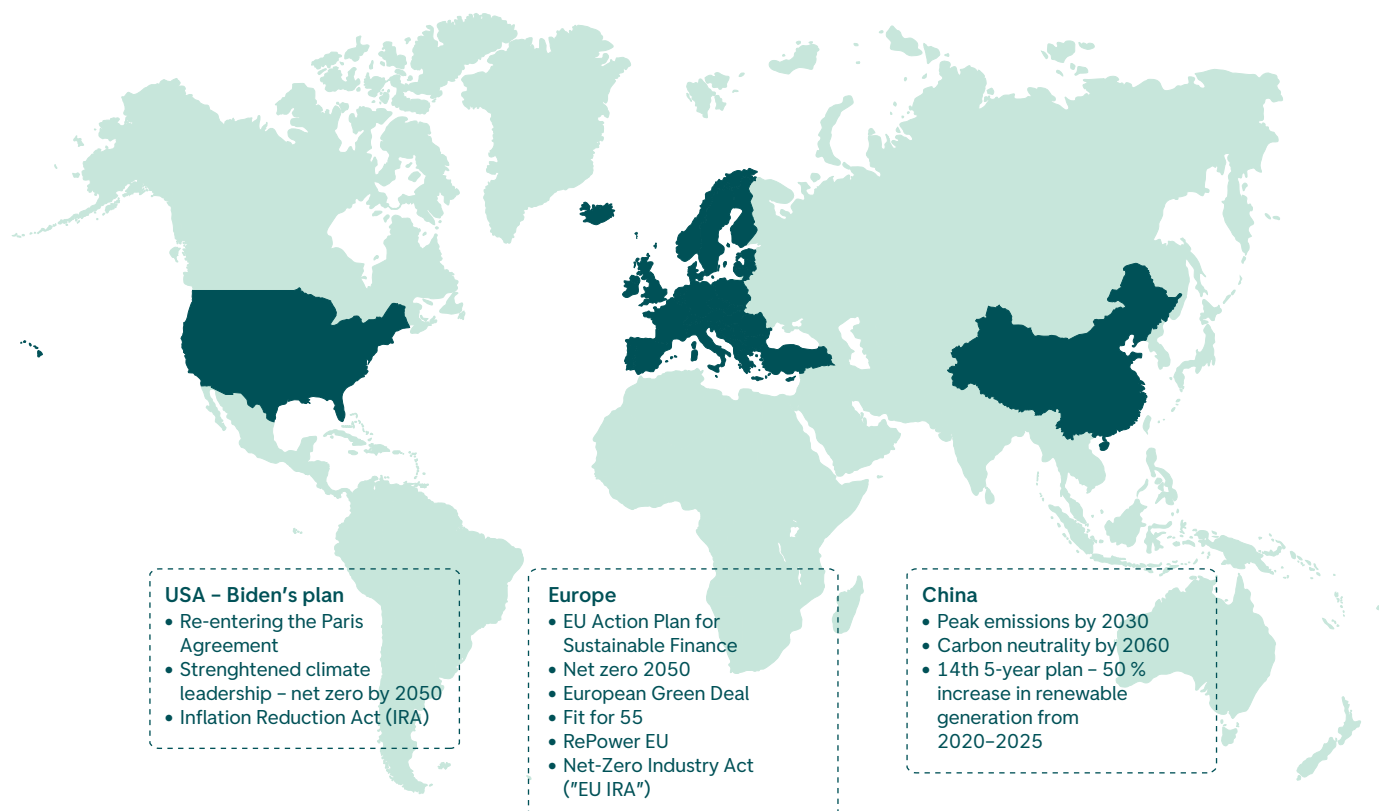
From left to right: Stian Ueland (Portfolio Manager), Laura McTavish (Analyst), Christian Rom (Portfolio Manager).

August this year marked the one-year anniversary of the Inflation Reduction Act (IRA). Among several pieces of environmental legislation in the recent past, the IRA is arguably the most important. Investments are currently accelerating in the US in areas such as the manufacturing of batteries and solar modules, and the production of green and blue hydrogen.

At the same time, 2023 has also produced setbacks for the cleantech sector. A large part of this has been driven by the higher interest rates, e.g. reducing the economic rationale for sectors like residential solar. The offshore wind sector has felt higher rates too, in addition to the challenges of developing an American supply chain and dealing with higher costs.

Investor sentiment has swung from peak euphoria in 2020 to a much more sober state in the fall of 2023. Has it swung too far and have we reached a bottom in equity valuations after nearly three years of sector underperformance against the broader market? One thing is for certain: the energy transition has not been derailed and conditions for cleantech to prosper are better than at any time in the past. The markets are larger and more diverse, the technology more mature and cost competitive, and legislative support is stronger than ever.

Climate change is high on the agenda



US and EU IRA estimated fiscal support of USD400bn respectively and to mobilise USD~6trn of capital in clean energy next ten years

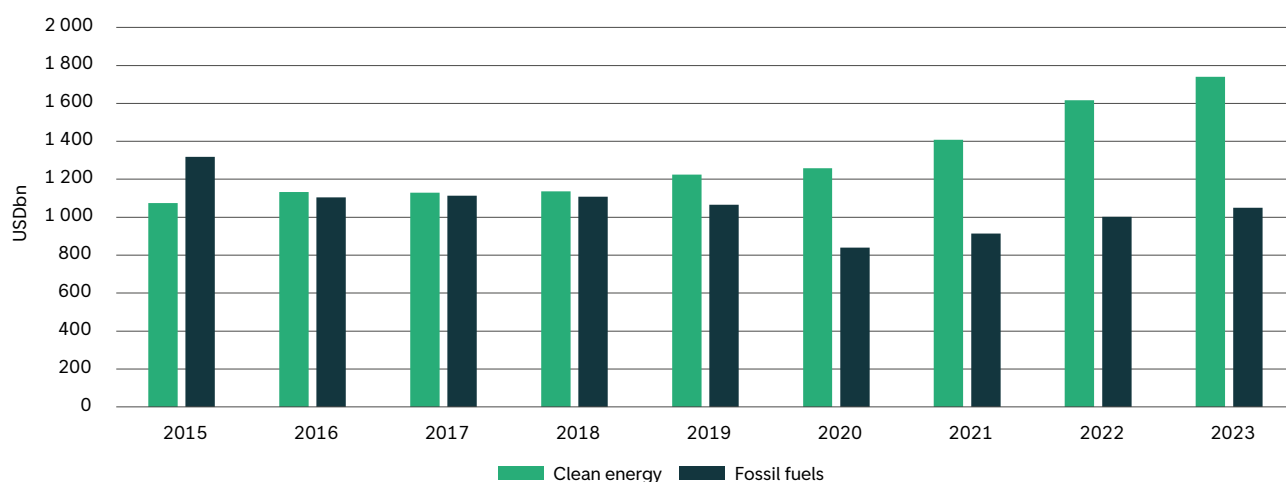
It is also important to keep in mind that higher interest rates are not happening in a vacuum. Energy commodities and utility rates are also higher, and corporates and governments are moving ahead with their decarbonisation targets. Learning curves for solar, wind and storage will also continue to drive down costs for these technologies over time as they continue to scale. The transition might be

slowed by the increasing cost of capital, but this will likely drive higher economic productivity losses due to climate change, the effects of which will be felt more acutely and thereby accelerating growth again. We are still in the early innings of the energy transition which is a theme we and multiple other stakeholders remain committed to.

Investments in clean energy are projected to reach a new record in 2023, comfortably ahead of those in fossil fuels. The energy industry, and within it the power sector, has become dependent on renewables which now constitute >60% of the industry spending (and >80% of the power sector spending). The power sector will continue to increase its share of total alternative energy investments

as we continue to electrify due to cost competitiveness and the economic value derived from energy efficiency and lower emissions. The clean energy sector will continue to take share as consumers, corporates and governments remain focused on the energy trilemma of 1) affordability; 2) sustainability and 3) energy security.

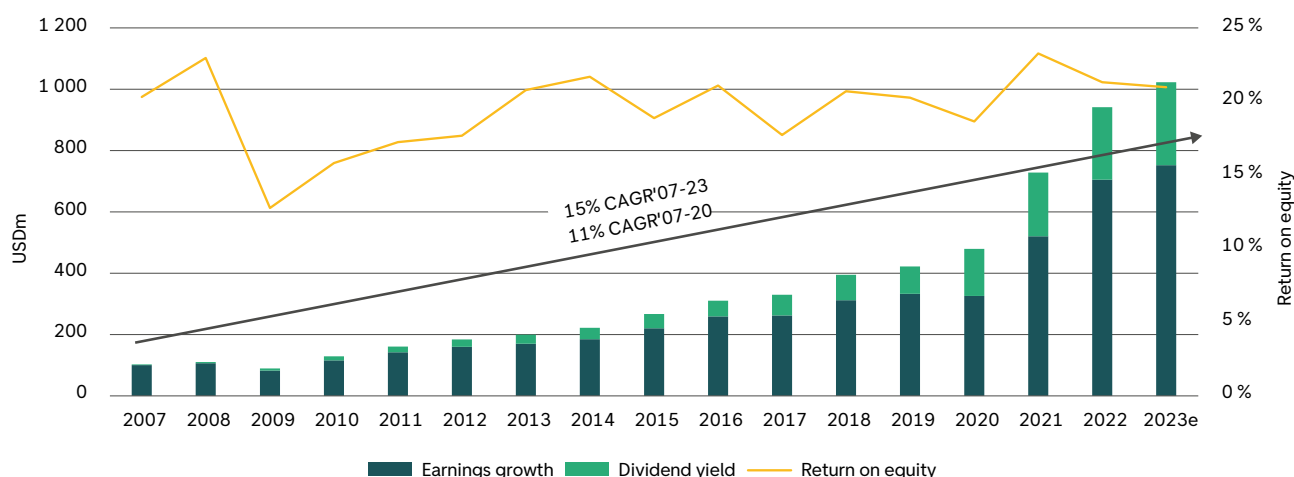
Figure 1. IEA World Energy Investments 2023



The Renewable Energy fund offers a broad exposure to the environmental theme, including renewable energy, electrification, and resource efficiency. The companies we own range from cleantech pure plays, such as Sunrun and Tesla, to more diversified businesses, such as Schneider Electric and Novozymes.

In the long run we believe that share prices are driven by earnings per share. We therefore spend most of our time trying to predict the earnings power of our portfolio holdings through our bottom-up, fundamental lens with emphasis on business model, competitive positioning, capital allocation, strategy, and culture.

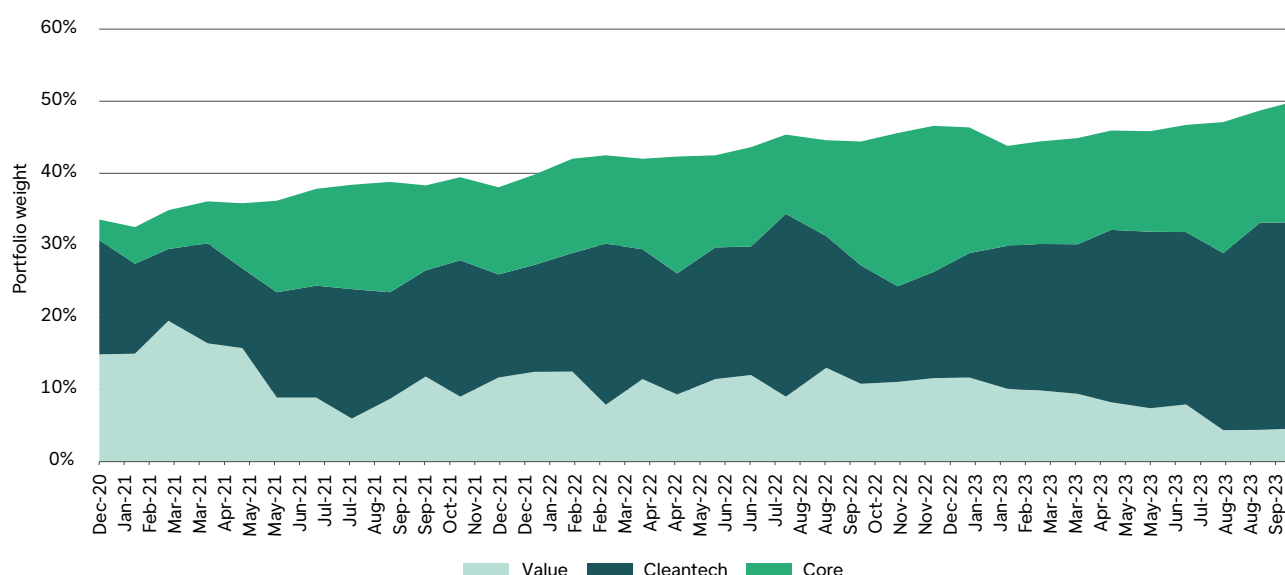
Figure 2. Historic development of earnings, dividends, and return on equity for a subset of the portfolio with quality attributes (covering roughly one third of the fund today)



A common theme of our top holdings is that they screen well when it comes their respective competitive moats and as such should be in strong positions to deliver strong earnings growth medium to long term and where relative valuations looks attractive from a historical point of view. This has given us the confidence to increase the concentration of our top ten holdings throughout the year. This has mostly been accomplished in companies we

define as cleantech as this is the area of the market where valuations have fallen the most. We define cleantech as companies where nearly the entire business is dedicated to advancing the energy transition, such as Vestas and Darling Ingredients. Companies defined as value and core in the graph below have positive tailwinds from the environmental theme, but have broader business portfolios, e.g. Amphenol and Hubbell.

Figure 3. Sum top ten holdings



This report discusses our work on the potential avoided emissions of the portfolio. The companies covered potentially avoided more CO2 than they emitted. Importantly, the analysis only covers 77% of the portfolio, and there are two reasons for this. First, companies were omitted due to their complex product portfolios: we find it near impossible, especially as outsiders, to estimate the avoided emissions of companies with tens of thousands of different products sold across the world. Second, lack of disclosures and available data to make a reasonable estimate.

The fund has a sustainable investment objective and is therefore regulated by Article 9 of the Sustainable Finance Disclosure Regulation (SFDR). The work presented in this report aims to explain our approach towards attaining our sustainable investment objective. The asset management industry is facing an environment of changing regulations and increased scrutiny around sustainability claims. Indeed, when it comes to deciding between green and non-green investments, we feel to some extent that regulations are running ahead of the data. However, we also find that work performed towards this end improves our understanding of the portfolio companies and their impact on the environment. The goal of any process is to improve investment decisions, whether we live in certain or uncertain times.

2 The time for action is now

"Global temperatures are now more likely than not to breach 1.5C of warming within the next five years" (WMO, 2023)

"Reducing emissions of greenhouse gases through better transport, food and energy use choices can result in very large gains for health, particularly through reduced air pollution." (WHO, 2023)

"For global temperature, the years 2015–2022 were the eight warmest on record despite the cooling impact of a La Nina event for the last three years. Melting of glaciers and sea level rise – which again reached record levels in 2022 – will continue to up to thousands of years" (WMO, 2023)

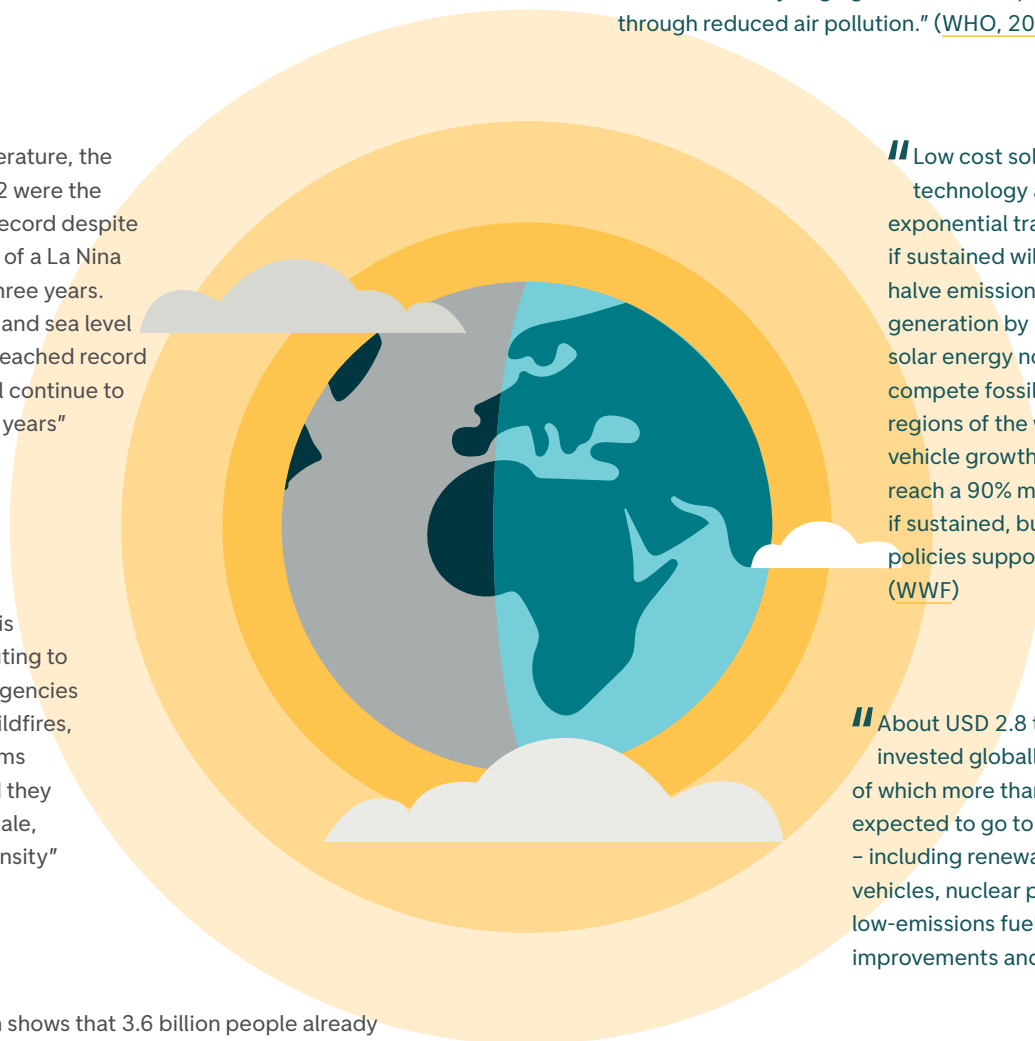
"Climate change is directly contributing to humanitarian emergencies from heatwaves, wildfires, flood, tropical storms and hurricanes and they are increasing in scale, frequency and intensity" (WHO, 2023)

"Research shows that 3.6 billion people already live in areas highly susceptible to climate change. Between 2030 and 2050, climate change is expected to cause approximately 250 000 additional deaths per year, from undernutrition, malaria, diarrhoea and heat stress alone." (WHO, 2023)

"Low cost solar, wind, and battery technology are on profitable, exponential trajectories that if sustained will be enough to halve emissions from electricity generation by 2030. Wind and solar energy now regularly out-compete fossil fuels in most regions of the world. Electric vehicle growth has the potential to reach a 90% market share by 2030 if sustained, but only if strong policies support this direction." (WWF)

"About USD 2.8 trillion is set to be invested globally in energy in 2023, of which more than USD 1.7 trillion is expected to go to clean technologies – including renewables, electric vehicles, nuclear power, grids, storage, low-emissions fuels, efficiency improvements and heat pumps" (IEA)

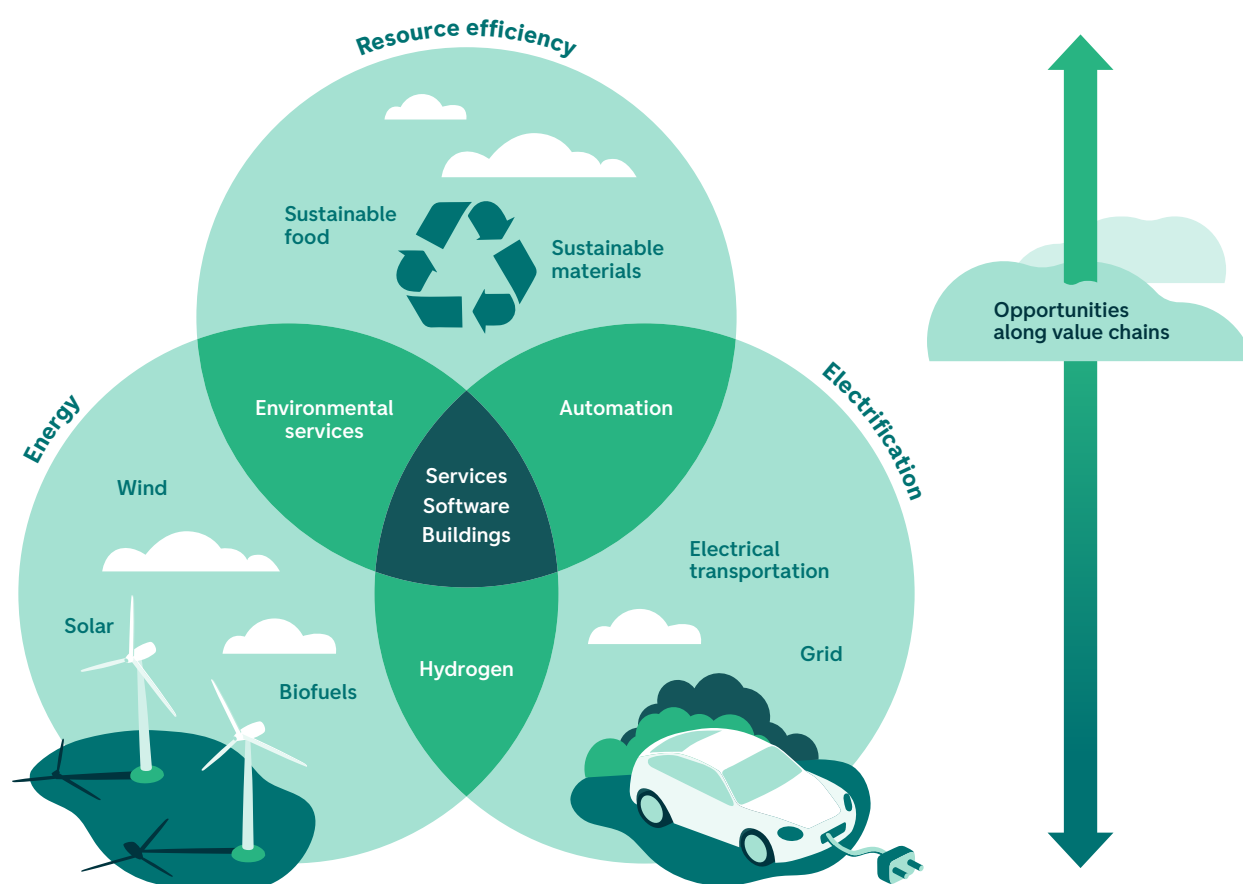
"For every dollar invested in fossil fuels, about 1.7 dollars are now going into clean energy. Five years ago, this ratio was one-to-one. One shining example is investment in solar, which is set to overtake the amount of investment going into oil production for the first time." (IEA)



3 Our investment universe

To avoid catastrophic, irreversible damage to our planet, the IPCC estimates that we need to halve global emissions by 2030 and reach net-zero by 2050. The next seven years will be critical to delivering an orderly transition in line with the goals of the Paris Agreement. We believe that the companies providing solutions, who understand the drivers behind net zero, and which are prepared for regulatory change, will be well positioned to benefit from the economic opportunities arising from the transition to the low carbon economy.

Figure 4. Our investment universe



A BROAD INTERPRETATION OF THE ENVIRONMENTAL THEME

Before conducting any financial fundamental evaluation of equities, we investigate the environmental angle of a company and seek to understand if the business is significantly driven by enabling a better environment or not. The result is a broad universe of companies with exposure to the environmental theme.

Clear environmental enablers are a natural part of the universe. These are the companies and sectors that contribute directly and positively to environmental challenges. An example is renewables – a large part of the decarbonisation story will come from renewables and technology that already exists today. In addition, nascent technology, such as hydrogen, carbon capture and storage, and recycling/circularity solutions still need to be developed and scaled and will also play a significant role. The availability of cheap renewable energy also drives electrification, which enables emissions reductions within hard-to-decarbonise sectors, such as steel production.

However, we also see opportunities within industries providing “less obvious” solutions. These are the companies that deliver products and services that enable emissions reductions along value chains. We believe that some of the most exciting opportunities exist within this category, as you can often find “hidden gems” with attractive business models and strong competitive advantage. The International Energy Agency (IEA) estimates that annual clean energy investment needs to more than triple by 2030 to around 4USDtrn to reach net zero by 2050.¹⁾ The companies providing or enabling solutions will therefore experience tailwinds in their financials as the world economy makes investments to decarbonise the global capital stock. They are also well-placed to benefit from structural drivers from policy, shifting focus from investors, and increased societal expectations on climate.

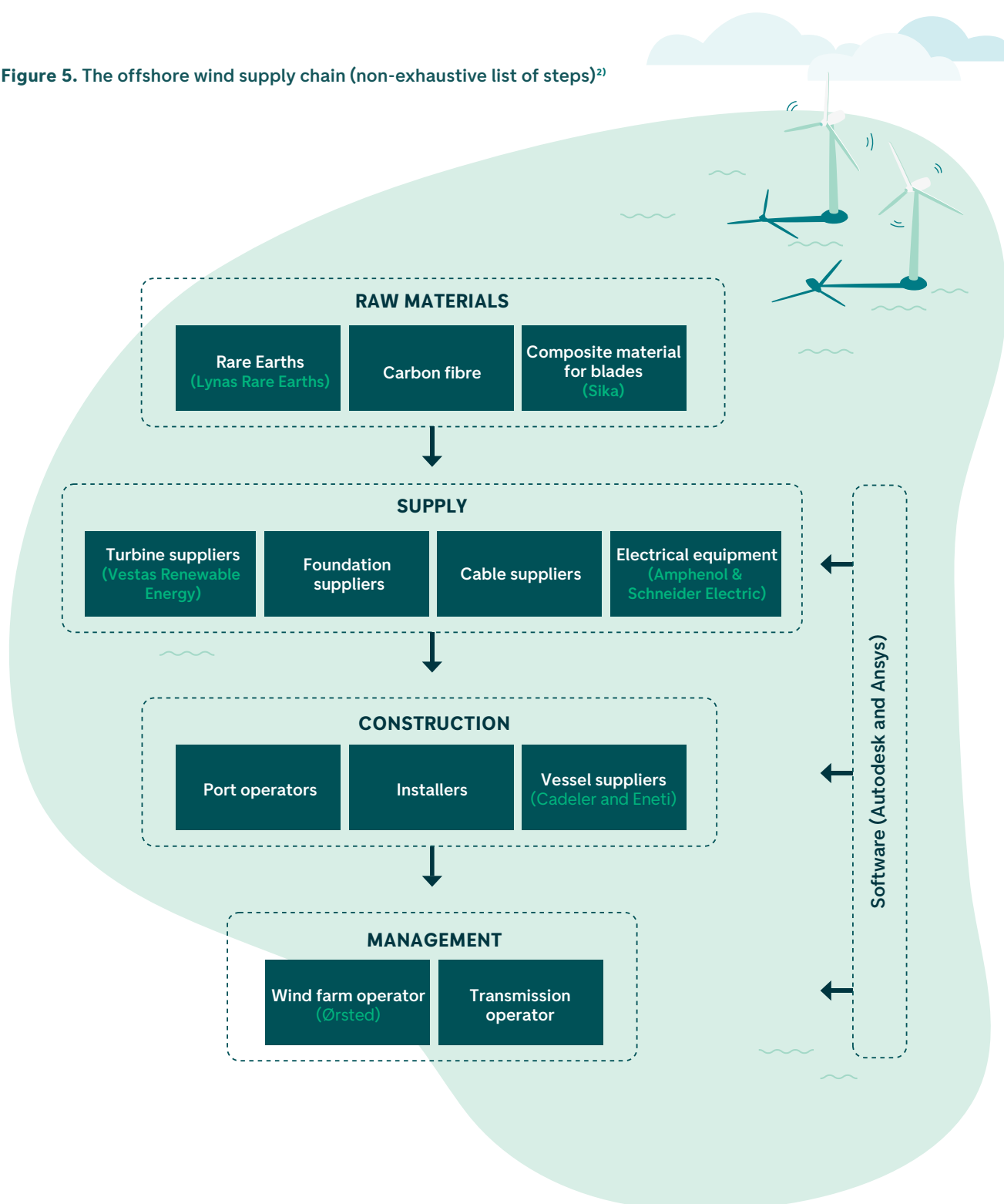
The role of “less obvious” solutions can be better understood by looking at an example. Figure 5 outlines examples of current portfolio holdings and which part of the offshore wind supply chain they feed into. Note that this is not an exhaustive list of all steps in the supply chain. In this example, the renewable energy that is generated is the part of the value chain which can be considered “obviously green”. However, the companies providing critical inputs that facilitate the renewable energy generation are also interesting to look at. Without these, it would not be possible to generate this renewable energy.

A DYNAMIC UNIVERSE

Our understanding of the environmental theme is not static – it will continue to evolve over time as expectations, policy and technology develop. Further, there are numerous ways to measure if a company is significantly driven by enabling a better environment. We can look at percentages of revenue, profits, assets, Research and Development (R&D), capital expenditure (Capex), and the sum-of-the-parts value which provides climate and environmental benefits. Data availability may also influence how our view progresses, as even though this information is potentially useful for any investment candidate, in practice, the data will not always be available. Data availability will also be somewhat dependent on which stage of the business lifecycle the company is in. For instance, in earlier phases, such as start-up and growth, R&D and Capex will be most relevant. For mature businesses, profits become more important. We also steer clear of businesses with controversial environmental angles, as we see repricing of climate risk as being negatively skewed for such companies and clients investing in environmental fund strategies typically do not want this exposure.

1) [Net Zero by 2050 – Analysis - IEA](#)

Figure 5. The offshore wind supply chain (non-exhaustive list of steps)²⁾



2) Adapted from: [The offshore-wind supply chain.](#) | Download Scientific Diagram (researchgate.net)



Case study:

Heat pumps³⁾

Global additions of renewable capacity are set to increase over time, enabling clean electricity generation. This cheap and green electricity can be used to replace technologies or processes that use fossil fuels, enabling energy efficiency and reducing energy demand, thereby also reducing emissions (IEA, 2023). The IEA's Net Zero Emissions by 2050 Scenario estimates that the majority of emissions reductions from electrification will come from the shift towards electric transportation and the installation of heat pumps (IEA, 2023). Heat pumps offer energy-efficient heating and cooling, with current models estimated to be 3–5x more energy efficient than gas boilers (IEA, 2023). The IEA estimates that heat pumps have the potential to reduce global CO₂ emissions by at least 500m tonnes in 2030, equivalent to the annual CO₂ emissions of all cars in Europe today. Heat pumps are considered a good opportunity to reduce emissions today – the solutions already exist, can be rolled out quickly, have a relatively low up-front cost, and a short payback period. Heat pumps account for ~10% of global heating demand in buildings today, but sales have been growing at double digits over the past few years on the back of increasing policy support and decarbonisation efforts (REPower EU, IRA, etc) (IEA, 2023).

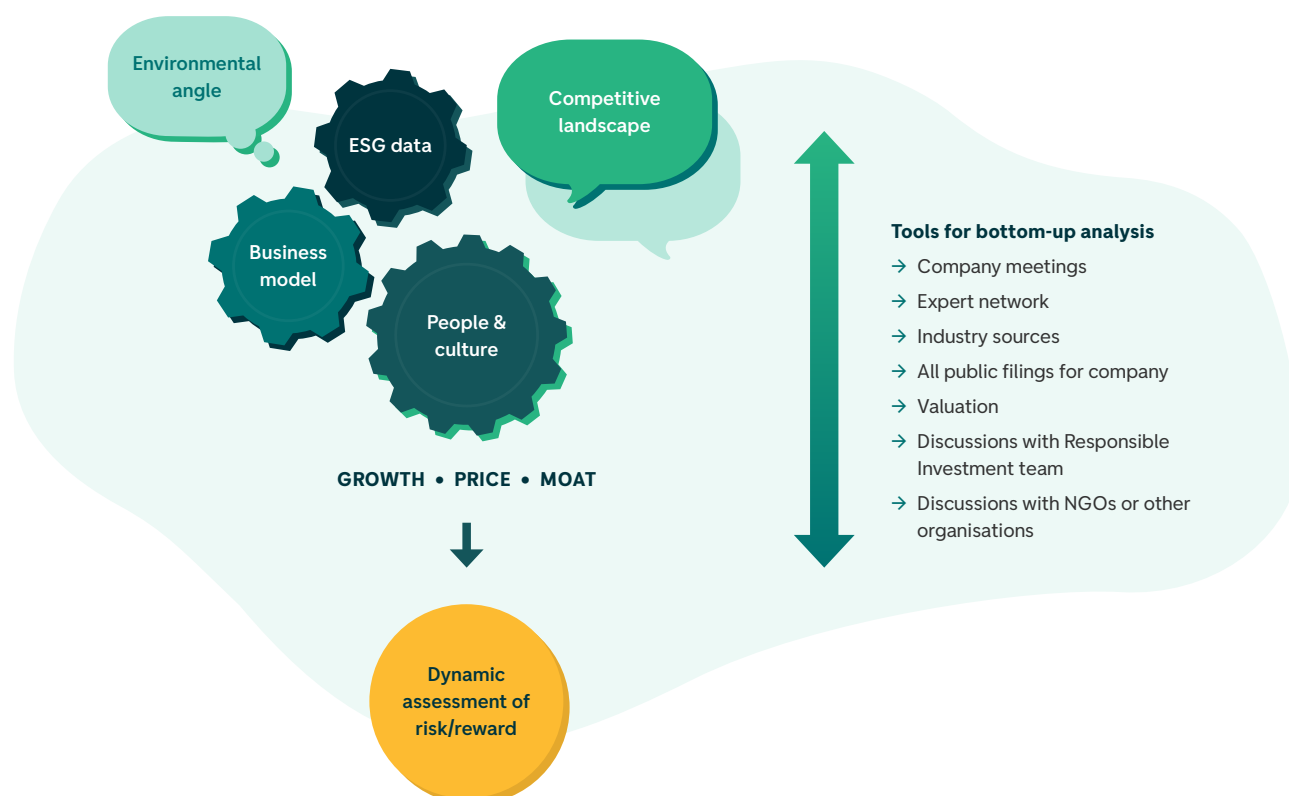
NIBE Industrier

Portfolio company NIBE Industrier is a leading global player in systems and component for climate solutions, including heat pumps (accounting for ~40% of sales). Political support in the form of subsidies to install heat pumps via REPower EU and the EU Industrial Act help to explain strong growth in recent years. However, the company has seen a re-rating this year, given concerns including retreating national-level support – subsidy levels have been reduced in Italy and Germany, with the latter reducing applications for heat pump support by 50% in 1H23. This has raised concerns in the market about weakened demand. Nonetheless, we expect strong government support for energy efficient indoor climate comfort to underpin double digit organic growth over the next decade. We believe that concerns around future availability/unreliability of natural gas supply to European countries will be an important driver behind continued regulatory support. Moreover, the company is characterised by a strong entrepreneurial culture (decentralised structure) and proven acquisition programme. It also has a strong position in key markets, such as Germany, the Nordics, and the US. Its strength in the US market has been built up after completing some acquisitions 5–10 years ago and provides an interesting exposure in a market that is under-penetrated and set to benefit from the IRA's proposed subsidies for heat pumps.

3) Sources:
[Electrification - Energy System - IEA](#)
[Heat Pumps - Energy System - IEA](#)

4 Our investment process

Figure 6. Our investment process



INVESTMENT PHILOSOPHY AND PROCESS

We believe investment returns are driven by a thorough assessment of competitive advantage, growth opportunities and intrinsic value relative to the share price. The investment process comprises a set of tools to evaluate and understand these most important aspects of the investment philosophy.

The process is bottom-up and driven by a curiosity for businesses models, and, more broadly, an appetite for understanding how the world works. In practice it includes a review of all public company filings and various industry sources. Beyond this we particularly enjoy expert networks and company meetings as they yield good chances of understanding corporate culture. Valuation is another part of the process worth highlighting. We enjoy building models, thinking through scenarios, and comparing our views with those prevailing in the market.

We believe in holding equities for the long term and are attracted to companies with proven value creating capabilities. Over time we believe such companies, properly identified, will continue to generate attractive returns. We also see opportunities with shorter time horizons, for example where investor psychology leads to outsized reactions in the share price. Lastly, we observe a diverse and dynamic investment universe, and we strive for a process that is flexible and adaptable to change.

ESG IS INTEGRATED INTO THE INVESTMENT PROCESS

Environment, Social and Governance (ESG) considerations permeate our investment process. It seems obvious to us that a proper assessment of an investment's risks and rewards must include these considerations.

Addressing climate challenges is at the core of our investment mandate. However, we also believe that other ESG elements are important drivers of value creation. Companies that have a sustainable approach to its employees, corporate culture, products and services, supply chain and corporate governance will attract talent over time, which will in turn develop the best products and services, which will attract customers, which in turn attracts investors. This continuous process results in a lasting competitive advantage for those that are best-in-class.

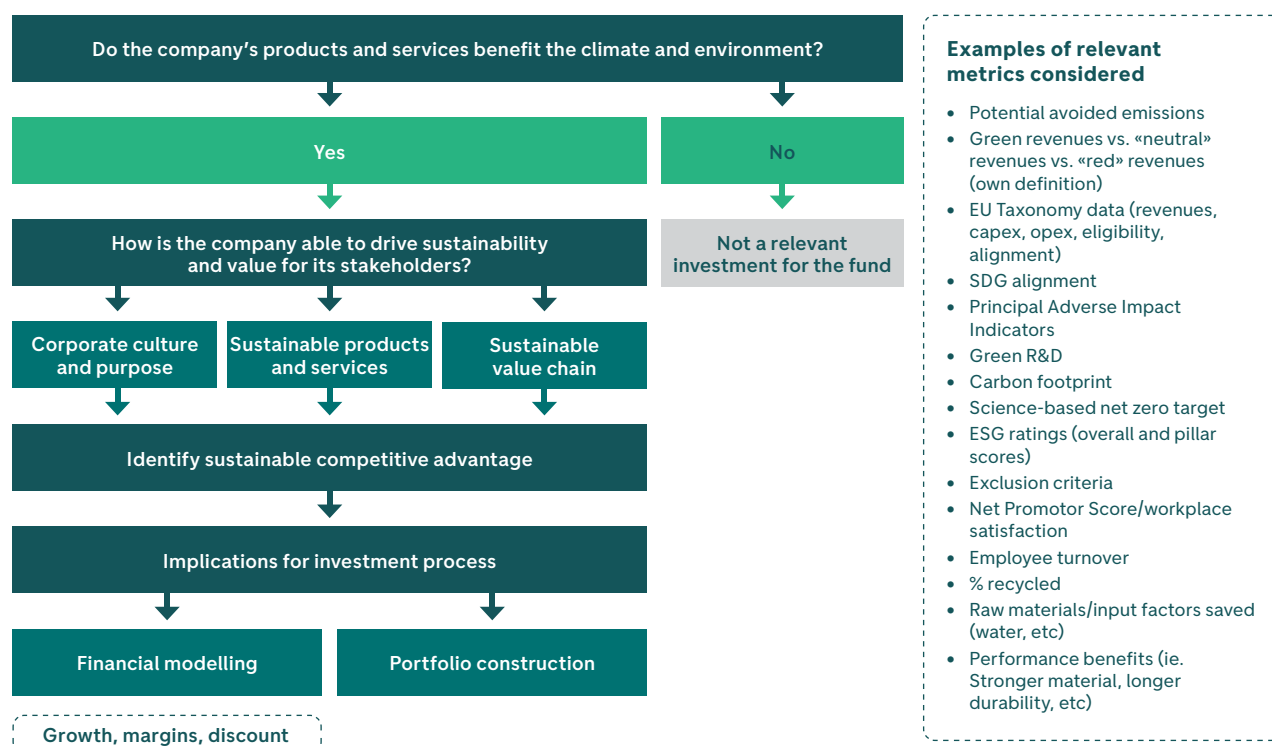
For example, we believe that businesses offering solutions to lower their customer's carbon footprint often face attractive growth prospects. Additionally, if their environmental innovation velocity is faster than competition, they are likely to grow their competitive

advantage in the future. Such findings guide our view on revenue growth and expectations for return on capital.

Culture is another source of competitive advantage. For example, we seek to understand whether the company's sustainability department serves mainly reporting requirements or whether they actively partake in the business' core activities. Do management set the right example by having a thorough understanding of the environmental drivers of the business' products and services? Are salespeople able to sell based on a wholistic value proposition that includes lower emissions or resource intensity?

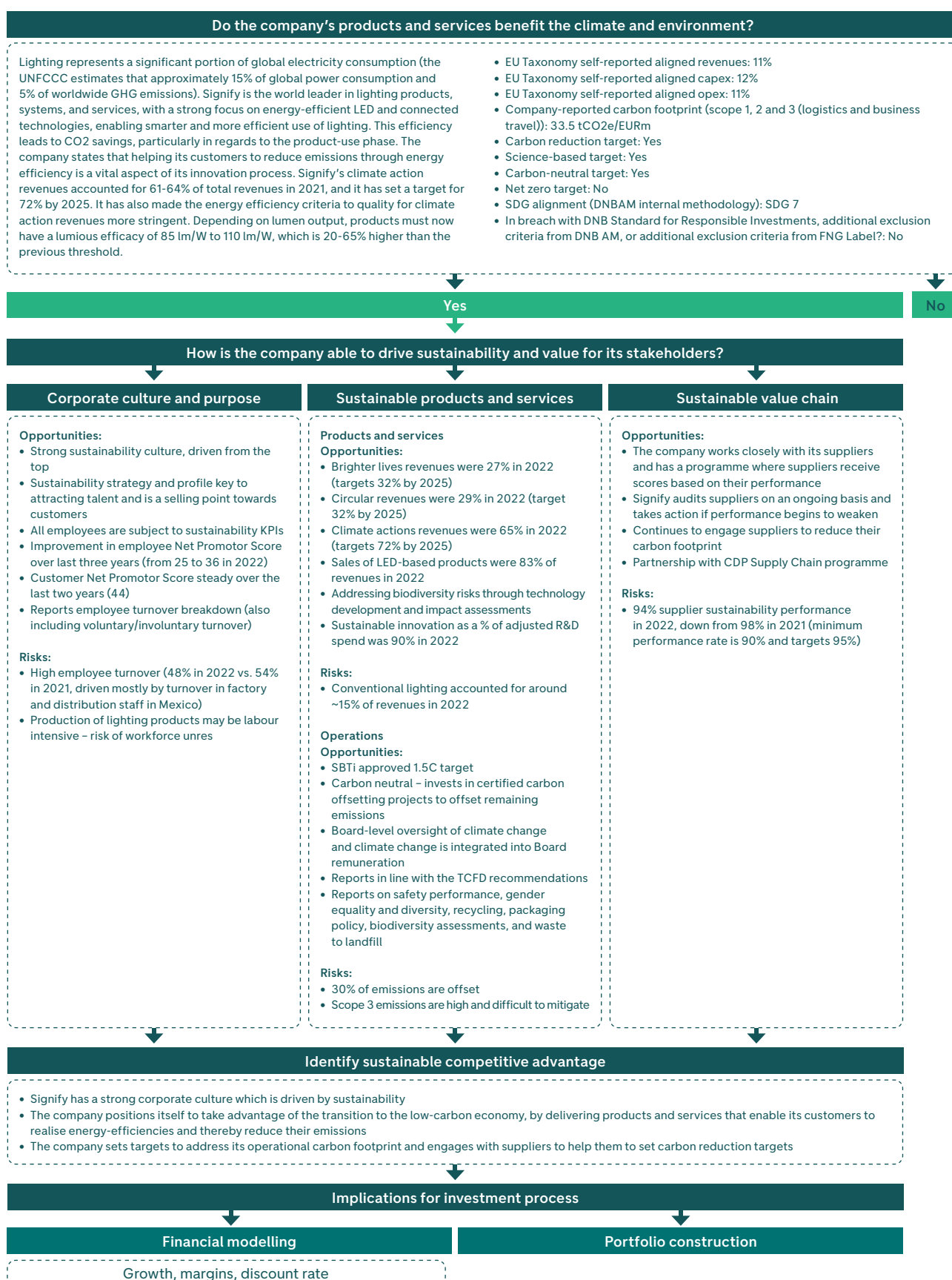
The flow chart below demonstrates the team's ESG integration process.

Figure 7. Our ESG integration process



The flow chart below demonstrates the process by way of a company example.

Figure 8. An assessment of Signify using our ESG integration framework⁴⁾



4) Sources: Signify, DNB AM internal analysis

5 Close collaboration with our Responsible Investment team

Successful and thorough integration of ESG into the investment process also requires a close collaboration with DNB Asset Management's (DNB AM) Responsible Investment team. DNB AM's Responsible Investment team is unique, with both broad ESG and climate change competency, as well as portfolio management experience. This experience provides a basis for interesting discussions between teams, and a mutual understanding of how ESG drives value creation.

Read more about how the Responsible Investment team works in our [2022 Annual Report on Responsible Investments](#).



Figure 9. DNB AM's Responsible Investment team



Lise Børresen

Head of Responsible Investments

Lise was hired as Head of RI fall 2022, after working as an Analyst in the team since 2021. Her main responsibilities have been related to the oceans, climate change and our work with the TCFD. Lise has also supported the integration of ESG into our fixed income portfolio.

Lise holds an MSc in Finance from the Norwegian School of Economics. She has previously worked as an Investment Analyst at the Gjensidige Foundation.



Karl G. Høgtun

Senior Analyst

Karl is a Senior Analyst at DNB Asset Management. He is an expert in active ownership and governance including proxy voting. He is also responsible for our work with biodiversity and sustainable oceans.

Karl holds an MBA and MA of International Management. He has worked with Norwegian and global capital markets since 1990 in several roles including previously being a Portfolio Manager and Head of the Nordic Equities team in DNB AM.



Henry Repard

Senior Analyst

Henry leads our work on climate (including TCFD and net zero 2050) and water.

Henry holds an MSc from University College London. He has experience as an Analyst from KLP Asset Management and Carbon Disclosure Project before joining the team in 2018.



Ingrid Aashildrød

Analyst

Ingrid works with human rights, value chains, health and food systems.

Ingrid holds a double master's degree from NHH and the University of Sydney Business School. She has previously worked as an Analyst at Nordea before joining the team in 2021.



Peder Heiberg Sverdrup

Analyst

Peder works with screening, analysis and reporting. He is also involved in our work on human rights.

He holds an MA (Hons) from the University of St Andrews. He has previously worked in Norfund before joining the team in the summer of 2022.



Olav Midtveit Bertelsen

Analyst

Olav works with ESG-data, regulatory framework and reporting. He also supports the work on water sustainability and the integration of ESG for fixed income.

Olav holds a MSc in Finance from Grenoble Ecole de Management. He has previous experience from economic research and fixed income investment strategy.

HOW HAS THE APPROACH TO ESG EVOLVED OVER TIME?

ESG integration has not always been central to how asset managers manage sustainability risks and opportunities. The understanding, practices and actors involved have changed and developed since DNB AM first started working with responsible investments in 1988. Previously, the focus has been on excluding "sin stocks", with tobacco, gambling, pornography, weapons, and alcohol considered unethical and consequently excluded from investment universes. ESG has since shed its activist image and is considered mainstream in investment management today. Reporting and integrating ESG risks and opportunities into investment decision making has also been incorporated into regulation, for example through the action points of the European Union's (EU) Action Plan on Sustainable Finance.

ESG METRICS

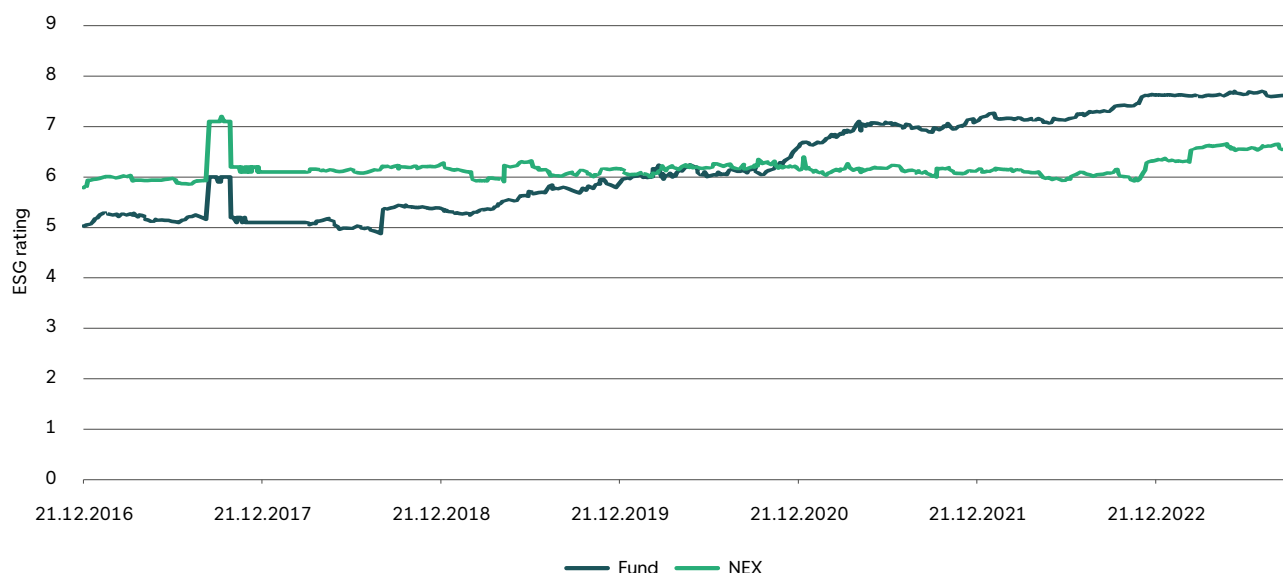
ESG score

ESG scores provide a measure of a company's performance with respect to ESG issues. Though some providers seek to include factors to capture opportunities, our opinion is that ESG scores are primarily an indicator of risk. We believe

that other metrics and frameworks are better suited to capture opportunities, such as potential avoided emissions.

The challenges associated with ESG scores are well known. Issues include large-cap bias, disclosure bias, backward-looking focus, and low correlation between data providers. DNB Renewable Energy does not target an ESG score higher than its benchmark. The portfolio management team is of the view that ESG scores should not be a hinderance for investing, especially in cases where the team has identified a strong environmental case for the company. Nonetheless, low ESG ratings are flagged in regular screening, and are a catalyst for dialogue where expectations on sustainability and reporting are communicated. We believe that this is a good tool for pushing companies in a positive direction and may provide an opportunity to benefit from an increased ESG rating over time. Since January 2021 we have experienced a consecutively higher ESG score in the fund compared to the benchmark and the broad MSCI World Index. We cannot promise that this will always be the case, but this recent trend is in line with our expectations given the team and fund strategy's direction of travel.

Figure 10. Development of the DNB Renewable Energy fund's weighted-average ESG rating over time (as at 30.09.2023)⁵⁾



5) Source: ©2023 MSCI ESG Research LLC. Reproduced by permission

Forward-looking metrics

In recent years, the metrics used to understand ESG-related risks and opportunities have become increasingly sophisticated. The conversation has turned from historical, backward-looking data, such as carbon footprint, to metrics that seek to tell us something about direction of travel.

Scenario analysis

An important recommendation from the Taskforce on Climate-related Financial Disclosures (TCFD) is to conduct scenario analysis. DNB AM's Responsible Investment team has been working on scenario analysis since 2018.

Scenario analysis is performed to better understand climate-related costs and opportunities utilising MSCI ESG's Climate Value-at-Risk (CVaR) model. CVaR is defined as "...a forward-looking, quantitative model that forecasts the present value of future costs and benefits under different potential climate scenarios. By expressing this present value of climate costs as a percentage of the current company valuation, the model provides a

"maximum drawdown" of the firm's current valuation due to climate change" (MSCI ESG, 2023).

To assess the portfolio's CVaR, we use data from MSCI ESG based on the Integrated Assessment Model (IAM) REMIND. This is a change compared to prior years, where we used AIM-CGE as it was previously the only IAM allowing for assessment under more than one warming scenario. The move to REMIND is based on the fact that most asset managers now utilise the Network on Greening the Finance System's (NGFS) scenarios to assess climate risks and opportunities. We also believe that the underlying carbon price assumptions are more realistic in this IAM.

MSCI ESG offers a range of scenarios and Shared Socioeconomic Pathways (SSP) to conduct CVaR assessments. SSPs are sets of standardised pathways representing different socio-economic challenges faced when balancing demands for climate mitigation and adaptation. The description of the IAMs and the warming scenario(s) under which they were assessed is outlined in the table below.

Figure 11. Description of Integrated Assessment Models (IAMs) covered by MSCI ESG

Integrated Assessment Model	Model description	Warming scenario assessed
AIM-CGE	"Computable general equilibrium model, which covers all economic goods while considering production factor interactions in a closed economy. The trade of goods and services is also considered". ⁶⁾	1.5°C, 2°C, 3°C
GCAM	"A dynamic-recursive model with technology-rich representations of the economy, energy sector, land use and water linked to a climate model that can be used to explore climate change mitigation policies including carbon taxes, carbon trading, regulations and accelerated deployment of energy technology."	2°C
IMAGE	"A comprehensive integrated modelling framework of interacting human and natural systems. The model identifies socio-economic pathways, and projects the implications for energy, land, water and other natural resources, subject to resource availability and quality." ⁷⁾	2°C
REMIND	"An energy-economy general equilibrium model linking a macro-economic growth model with a bottom-up engineering-based energy system model. It covers twelve world regions, differentiates various energy carriers and technologies and represents the dynamics of economic growth and international trade." ⁸⁾	1.5C, 2C, 3C

6) From: MSCI ESG Report, "Introduction to Climate Scenarios", August 2020.

7) Integrated Assessment Model Consortium Wiki, Accessed 15 January 2022

8) Integrated Assessment Model Consortium Wiki, Accessed 15 January 2022

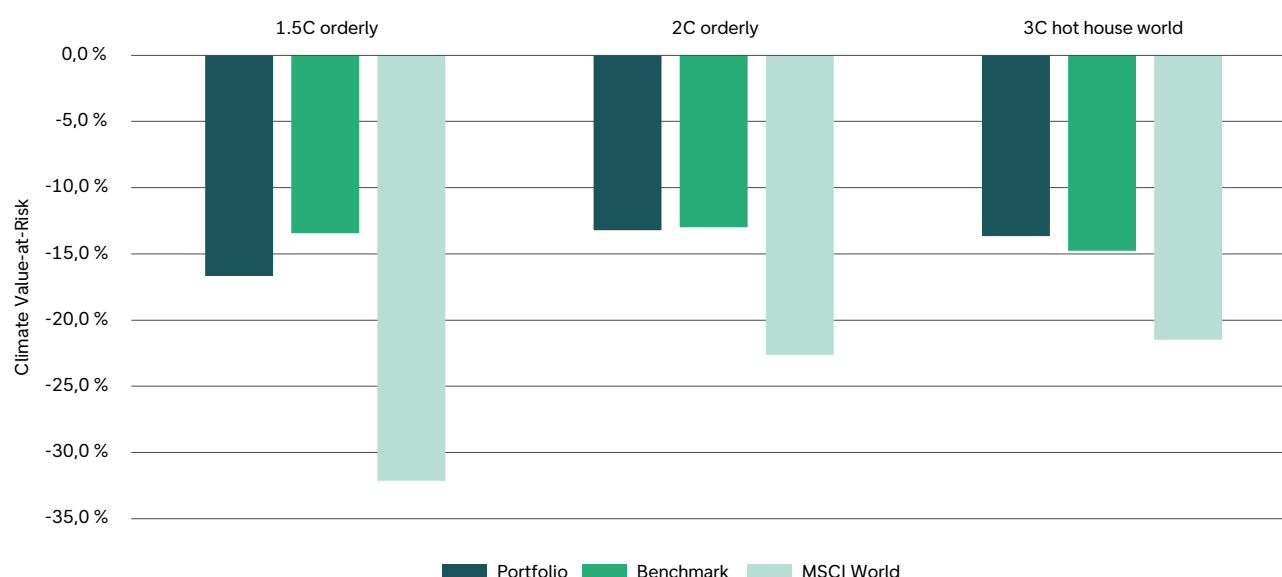
MSCI ESG's CVaR model allows for an assessment of both average and aggressive physical risk scenarios. The average scenario represents the most likely impact of climate change in the assessed period. The aggressive scenario, which is derived from the 95th percentile of the cost distribution of estimated extreme weather costs, is considered a worst-case scenario. Both scenarios utilise a Business-as-Usual (BAU) approach in modelling physical impacts due to lag within the climate system. The IAM selected does not impact the physical risks and opportunity results.

The CVaR assessment as at 30.09.2023 reveals the following results:

A positive CVaR implies that the overall portfolio-level impact will result in profits under the scenario, whereas a negative CVaR implies that there will be portfolio-level costs associated with the scenario. Figure 12 reveals negative CVaRs for the DNB Renewable Energy fund, its benchmark (the NEX index), and the MSCI World index in all scenarios analysed. However, both the fund and its benchmark show significantly less negative CVaR than the MSCI World across each warming scenario.

The drivers of positive or negative CVaR can be investigated further by examining the pillars that underpin the result - transition risks and opportunities and physical risks and opportunities. Looking first at transition risks

Figure 12. CVaR under 1.5C, 2C and 3C scenarios using REMIND (aggressive)⁹⁾

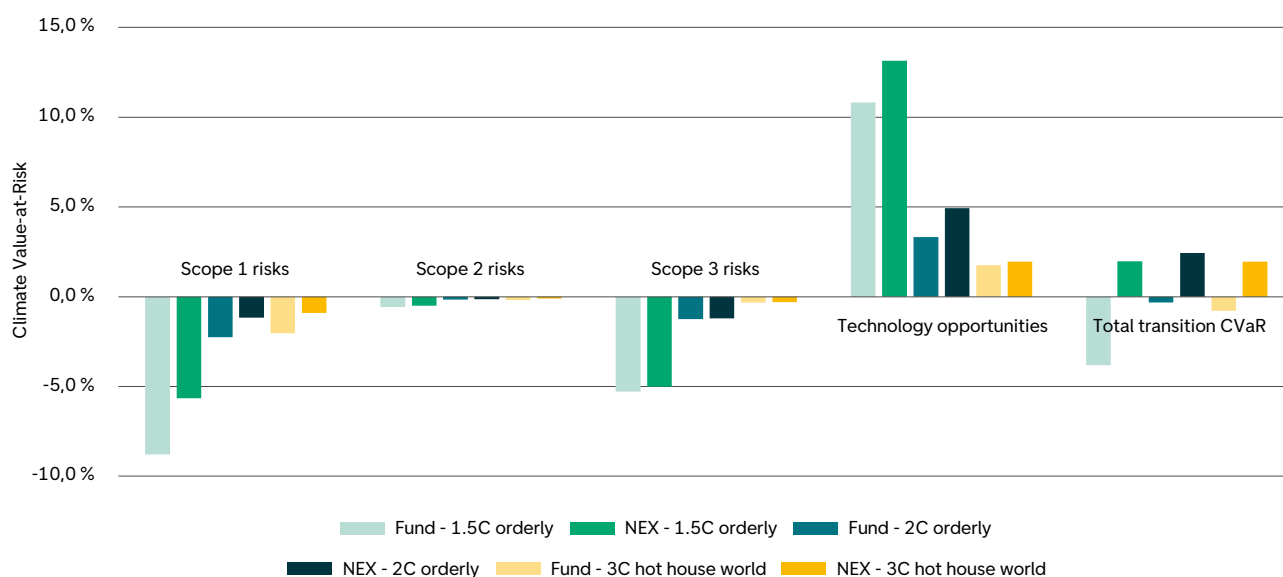


9) Source: ©2023 MSCI ESG Research LLC. Reproduced by permission

and opportunities – in Figure 13, we see that technology opportunities provide significant positive CVaR for both the fund and its benchmark. By comparison, the MSCI World shows a 2.8% CVaR contribution from technology opportunities versus the fund's 10.8% in the 1.5C scenario. This aligns with our expectations, as the fund specifically invests in sustainable enablers of a better environment. However, compared to its benchmark, technology opportunities are lower, and transition risks (from scope 1, 2 and 3 emissions) are higher. This leads to the benchmark receiving positive total transition CVaR in all scenarios, whereas the fund receives negative total transition CVaR in all scenarios. The relatively higher technology opportunities can be explained by the benchmark's greater exposure to "pureplay" sectors (see Figure 14), such as solar, storage/fuel cells and grid, while the fund is significantly overweight energy saving, where positive contributions to climate and the environment are perhaps more indirect and difficult to measure. MSCI ESG measures technology opportunities primarily by assessing companies' low carbon patents and linking these to future green revenue potential. This

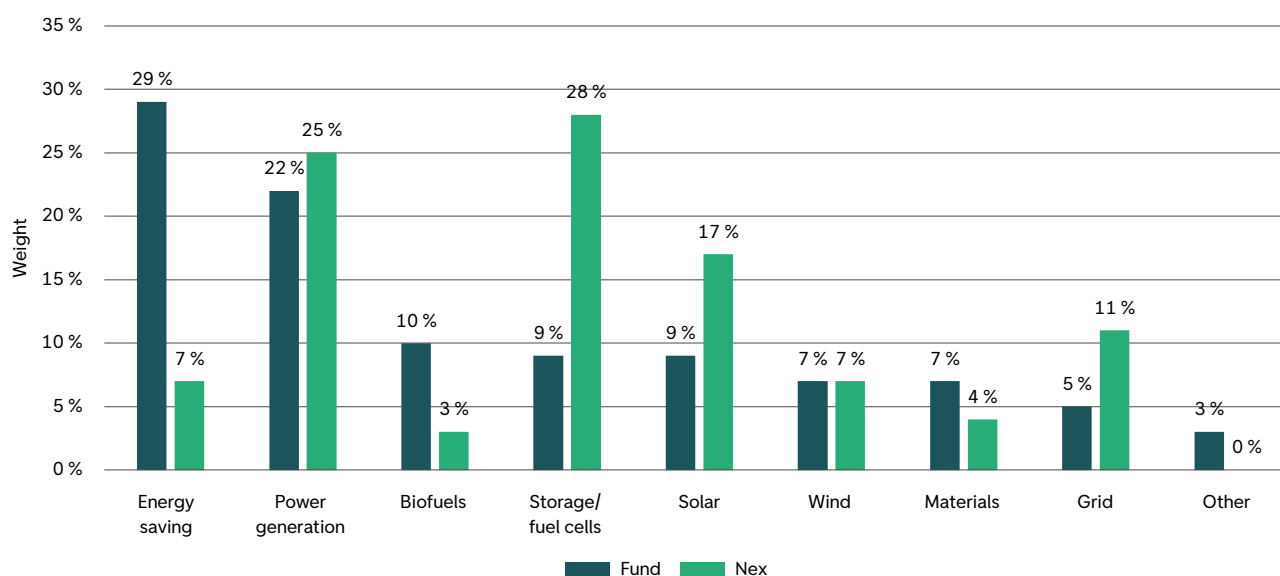
is likely easier to do for pureplay companies. In addition, the fund's relatively higher transition risks can again be explained by the differing sector exposures, which lead to the fund having a higher weighted average carbon footprint compared to its benchmark (see Figure 40). We are well aware of the risks associated with the fund's higher weighted average carbon footprint and this is the background for our work on assessing companies' net zero targets (see section on our *Commitment to engage on science-based net zero target setting*). At the same time, this is also the reason we place emphasis on avoided emissions – though carbon emissions can tell us something about transition risk, they cannot sufficiently inform us about the climate-related opportunities associated with companies' products and services. MSCI ESG's methodology does not consider avoided emissions specifically, and so these impacts are not reflected in this assessment. We believe our fund is well-placed to capitalise on these opportunities (see chapter on *Key findings of potential avoided emissions analysis for more information*).

Figure 13. CVaR transition risks and opportunities under 1.5C, 2C and 3C scenarios for the DNB Renewable Energy fund and the NEX index using REMIND (as at 30.09.2023)¹⁰⁾



10) Source: ©2023 MSCI ESG Research LLC. Reproduced by permission

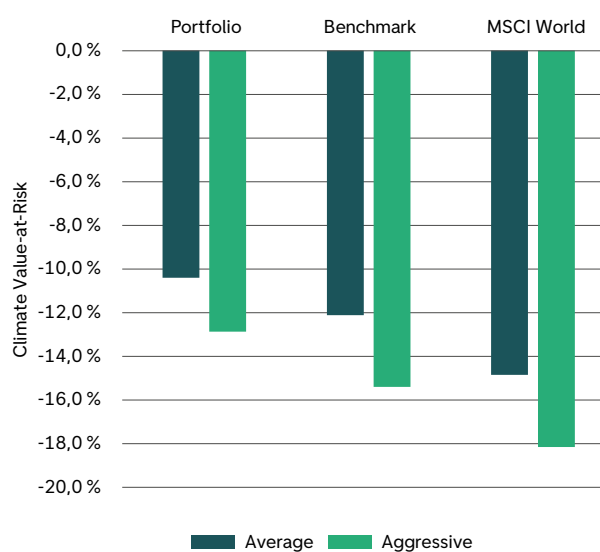
Figure 14. Sector allocation of the DNB Renewable Energy fund and the NEX index (as at 30.09.2023)¹¹⁾



11) Source: DNB AM

Next, we look more closely at the impact of physical risks and opportunities on portfolio CVaR. The physical risks resulting from climate change can be “event driven (acute) or longer-term (chronic) changes in climate patterns”. Examples of acute physical risks can include flooding, wildfires or severe storms, while chronic risks can include sea level rises and heat waves. As demonstrated in Figure 15, the aggregated physical risks and opportunities are negative for the fund, its benchmark and the MSCI World in both the average and the aggressive REMIND scenarios. Naturally, regional exposure at the asset-level is the main driver behind differences between portfolios. For DNB Renewable Energy, coastal flooding is the greatest contributor to physical climate risk in both scenarios, closely followed by extreme heat. On the other hand, extreme cold is estimated to have a small positive contribution in both scenarios. We see these results as interesting starting points for discussion with companies, to understand how they are managing these risks at asset level.

Figure 15. Physical risks and opportunities under average and aggressive scenarios (as at 30.09.2023)¹²⁾



12) Source: ©2023 MSCI ESG Research LLC. Reproduced by permission

There are a number of factors which may have influenced the findings observed in the analysis, such as company weights, sector weights, estimated data and assumptions, and impacts arising from methodological changes. Therefore, these scenario analyses are only one input into our company analysis regarding climate risk and opportunity. We continually look for products and tools which can provide insight into these risks and opportunities, to ensure we are implementing a best-in-class approach.

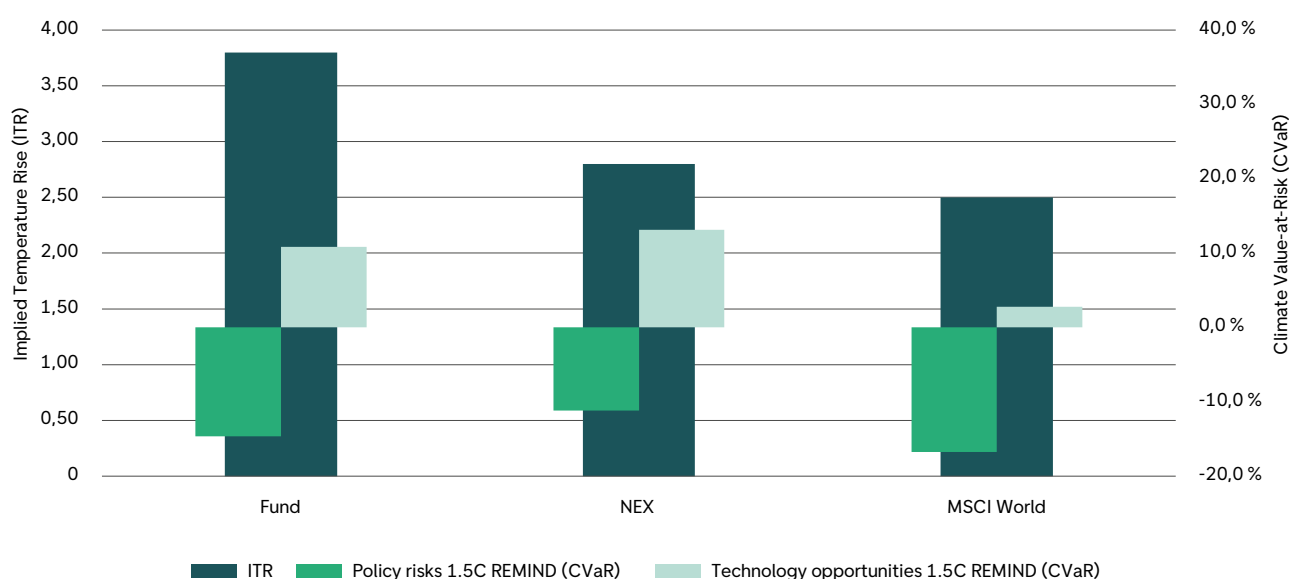
Implied Temperature Rise

MSCI ESG's Implied Temperature Rise (ITR) metric aims to provide an indication of how companies and investment portfolios align to global targets. In recent years, there has been increased interest in demonstrating the temperature trajectory of funds. At the same time, data providers have also been scrutinised for their methodologies. Critics

question the helpfulness of such scores, given their heavy reliance on assumptions and estimates, and the preciseness of the output. We believe the criticisms are relevant, given that some company-level results are often difficult to understand. However, the approach and underlying data continue to evolve, and we now see some positive changes in the data outputs. Last year we highlighted that some independent power producers which develop and own solar and wind, such as Scatec, were receiving ITR scores of almost 3C, which we found difficult to understand. With the current version of the methodology, we have seen this figure drop to 1.3C, more in line with our expectations.

If we combine some insights from the previous section (CVaR data on policy risks and opportunities) with ITR data, we see the following:

Figure 16. Implied Temperature Rise (ITR) and CVaR policy risks and technology opportunities for the DNB Renewable Energy fund, the NEX benchmark, and the MSCI World index (as at 30.09.2023)¹³⁾



13) Source: ©2023 MSCI ESG Research LLC. Reproduced by permission

With metrics relying heavily on underlying assumptions, we would typically expect results at company level that are more difficult to understand, whilst high-level results provide interesting signals which may be actionable. However, the results above are not necessarily intuitive. Why does the MSCI World yield a lower ITR than a fund specifically investing in companies providing solutions to the climate and environment?

To understand the drivers behind this result, we consider the building blocks of emissions projections in MSCI ESG's ITR methodology: 1) reported/estimated scope 1–3 emissions; 2) company's reported reduction targets and 3) emission growth rate. The MSCI World had a lower weighted average scope 1 & 2 carbon footprint (112.1tCO₂e/USDm versus the fund's 146.6tCO₂e/USDm and the NEX's 126.9tCO₂e/USDm as at 30.09.2023) and a higher weighted average share of companies with carbon reduction targets (83% versus 61% for the fund and 36% for the NEX as at 30.09.2023). Note that our quick assessment of companies with carbon reduction targets only considers whether or not a company has a reduction target, and not the quality or level of ambition associated with that target. These factors are likely the main explanation behind the MSCI World's lower ITR compared to the fund and its benchmark.

The ITR methodology does not appear to account for companies' emissions-avoiding capabilities the way it is structured today. Nonetheless, this metric is interesting to keep track of and monitor changes in over time. It may also help us to prioritise company engagements, should there be any noticeable outliers. We are also hopeful that companies' emissions-avoiding capabilities will be better captured in future iterations of the methodology as it develops over time.

Avoided emissions

Though we have viewed avoided emissions as a useful metric for some time, the metric has been out of favour in recent years. We believe that concerns (some of which overlap with those mentioned in the section *Shortcomings of potential avoided emissions analysis*) have included the following:

- **No recognised standard for calculating avoided emissions:** this makes it difficult to compare figures between companies and to verify data.
- **Figures are based on a number of assumptions:** calculations are heavily reliant on assumptions, and companies are not always transparent about what the underlying assumptions are, and these have the potential to heavily impact final figures.
- **Scalability:** avoided emissions calculations are often difficult to scale, given that avoided emissions potential may differ significantly by product. As a result, this data is often offered as a bespoke service at the product level, making it a more costly exercise to perform.
- **Additionality:** cannot guarantee that the products and services lead to additional emissions avoidance that would not otherwise have taken place.
- **Misuse of avoided emissions:** there have been cases where avoided emissions have been netted against scope 1, 2 & 3 emissions to demonstrate net zero emissions. We believe this is an incorrect interpretation of the insights that can be gained from calculating avoided emissions. We do calculate net PAE in the chapter on *Results of PAE analysis*, as it is interesting to consider the high-level signals provided by this exercise, but we do not claim that our avoided emissions can be used to offset the emissions associated with our portfolio holdings.

However, it seems that attitudes towards avoided emissions are changing. Earlier this year, an investor group spearheaded by Robeco and Mirova was launched with the goal of establishing the first global database of avoided emissions factors and associated company-level avoided emissions.¹⁴⁾ In addition, Norges Bank Investment Management (NBIM), which manages the Norwegian Sovereign Wealth Fund, re-launched its climate strategy, and indicated in its industry-specific expectations that it encourages companies to use lifecycle emissions and avoided emissions analysis.¹⁵⁾

We are also seeing an increasing focus from corporates. This is evidenced by more companies calculating and reporting avoided emissions (see Figure 17), and the fact that ISS-ESG's assessment of our portfolio increasingly

14) [About Interest in a global database of avoided emissions factors and associated company-level avoided emissions | PRI \(unpri.org\)](#)

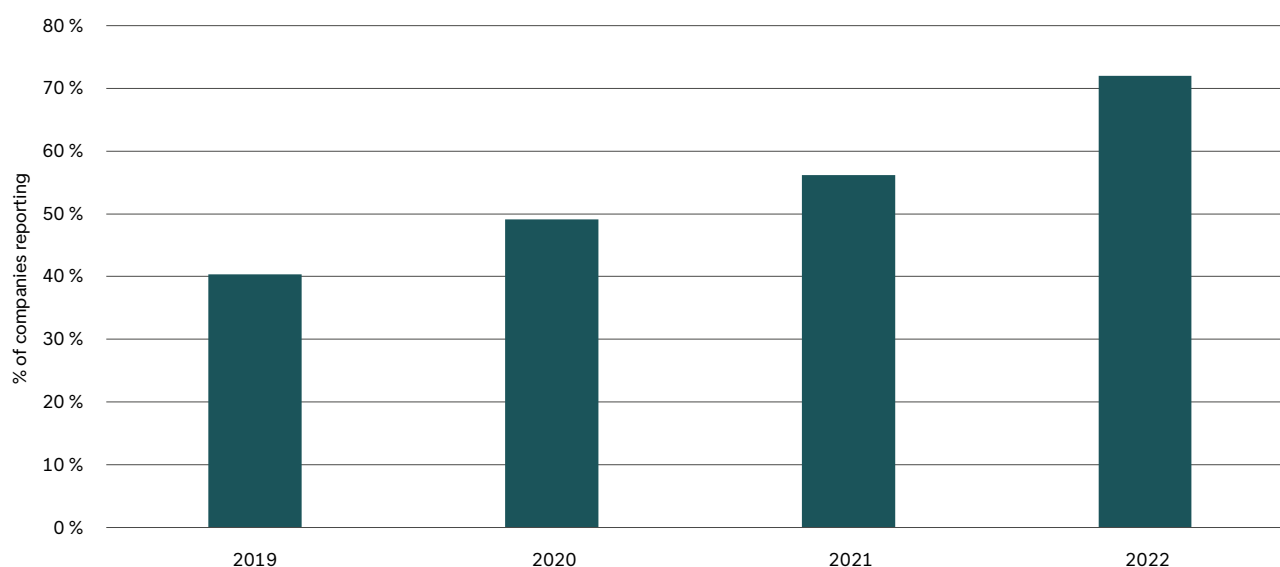
15) [Climate change | Norges Bank Investment Management \(nbim.no\)](#)

relies on self-reported avoided emissions figures. The latter indicates that ISS-ESG increasingly sees companies' self-reported avoided emissions figures as being credible, with robust methodologies and transparency on underlying assumptions. The share of self-reported avoided emissions

figures utilised by ISS-ESG in this year's assessment was 31%, up from 13% last year.

We will continue to follow developments in attitudes and approach to calculating avoided emissions.

Figure 17. Compared-reported avoided emissions^{16), 17)}



16) The basis of this assessment is all companies included in the PAE assessments between 2019–2022. CDP reporting and public reporting have been considered. Where CDP reporting is used for 2019 and 2020, responses to C4.5a on avoided emissions have been considered as indicative of reporting on avoided emissions.

17) Source: CDP, DNB AM internal assessment

REGULATION

ESG-related regulatory requirements have continued to develop quickly over the past year.

SFDR

As an Article 9 fund, we are required to demonstrate and report on sustainable investments. The regulation stipulates three steps to arrive at the conclusion that an investment is sustainable – the company must show positive contribution,

it must fulfil the Do No Significant Harm (DNSH) criteria (using the Principal Adverse Impact Indicators (PAII)), and it must follow good governance practices.¹⁸⁾ It is up to each asset manager to determine the framework/methodology for demonstrating sustainable investments.

The figure below demonstrates DNB AM's methodology for determining sustainable investments, and how this is applied for DNB Renewable Energy as an Article 9 fund.

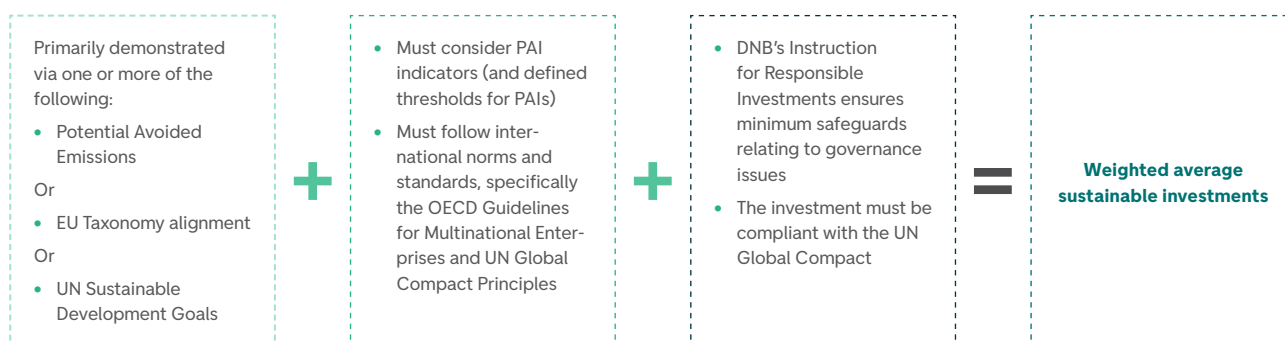
18) In line with the SFDR Article 2(17) (Sustainable Finance Disclosure Regulation)

Figure 18. Determining sustainable investments under the SFDR

SFDR regulation



DNBAM methodology



DNB Renewable Energy (as at 30.09.2023)



Note that the methodology outlined above will likely be subject to continuous improvement as data availability and quality increases. Additional clarifications from the EU Commission and the European Securities and Markets Authority (ESMA) regarding key concepts and legal definitions may also influence further development.

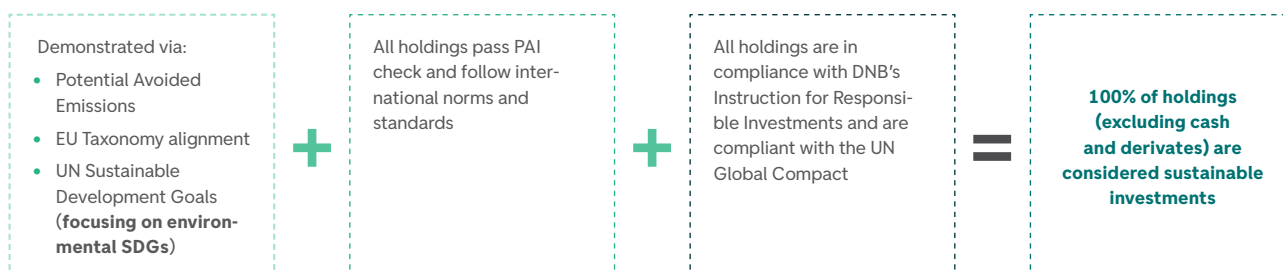
DNB AM was required to report in line with the SFDR starting January 2023, and has to date published one annual SFDR report. The data presented below is from this reporting, and as such is based on data as at the 31.12.2022.

Figure 19. Status of sustainable investments for the DNB Renewable Energy fund (as at 31.12.2022)

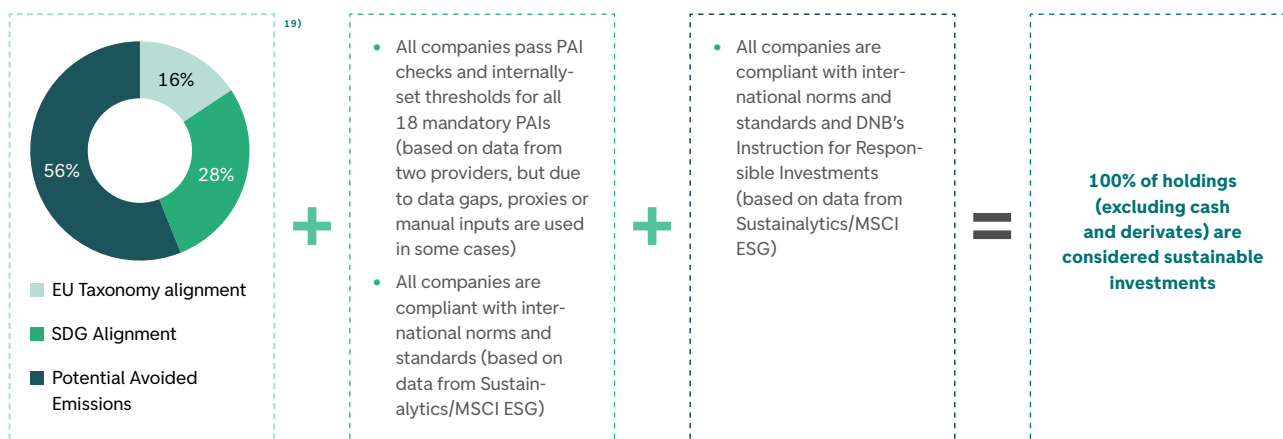
SFDR regulation



DNB Renewable Energy



Status 31.12.2022



19) Source: Bloomberg (EU Taxonomy alignment), S&P Trucost + DNB AM (SDG Alignment), Potential Avoided Emissions (ISS-ESG)

Positive contribution

- **Potential Avoided Emissions (PAE):** Most of the portfolio demonstrates positive contribution using PAE. We prioritise using this metric to demonstrate positive contribution, as we believe that PAE best illustrates our thinking around companies' positive contributions to the climate and environment. We believe that companies that demonstrate PAE are providing real climate change solutions and will be better placed to capitalise on the world's requirement to cut emissions.
- **EU Taxonomy alignment:** Five companies (constituting 16% of the portfolio by weight) demonstrated positive contribution using EU Taxonomy alignment as at the 31.12.2022.²⁰⁾

Company	Reported EU Taxonomy alignment	Estimated EU Taxonomy alignment
Enel	39.9%	N/A
First Solar	100.0%	N/A
Voltaia	N/A	47.9%
Tomra	N/A	71.3%
Vestas	N/A	100.0%*

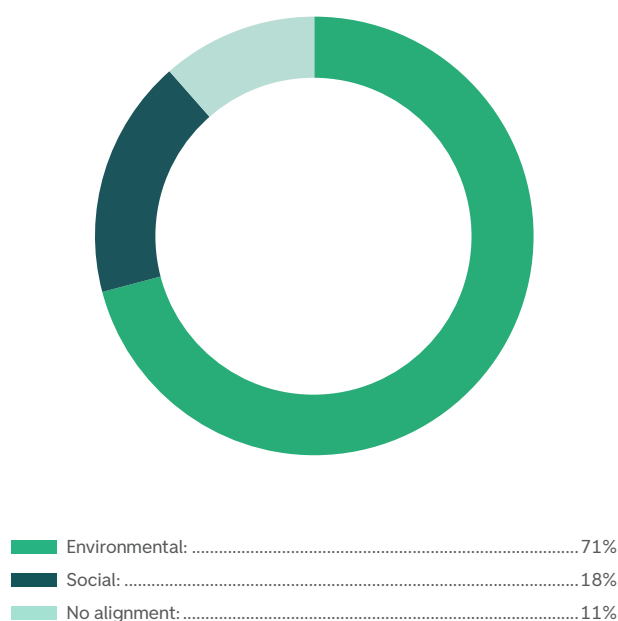
* Estimated by DNB AM

20) Source: Bloomberg as at 31.12.2022

- Though only a few companies demonstrated Taxonomy alignment at the end of 2022, many demonstrated eligibility. By the 30.09.2023, 68% of portfolio holdings were determined to be eligible using data from Bloomberg using data covering 99.9% of the portfolio. This is significantly higher than what is observed for the MSCI World at the same point in time – around 40% with data covering 100% of the portfolio. The gap between eligible and aligned companies may present several interesting opportunities moving forward: 1) companies with high eligibility may be able to increase their share of alignment moving forward; 2) companies with low revenue alignment but high capex alignment could be interesting to follow as potential transition companies; and 3) opex/capex alignment data may help to reinforce signals coming from revenue alignment.

- **SDG alignment:** 28% of the fund demonstrated positive contribution using SDG alignment. As a reminder, given DNB Renewable Energy's environmental mandate, SDG alignment only contributes toward positive contribution if alignment with environmental SDGs is shown. DNB AM defines SDG 2, 6, 7, 9, 11, 12, 13, 14, and 15 as environmental SDGs (either wholly or partially). A threshold for minimum revenue contribution from environmental SDGs is also specified internally. The below shows the split of SDG alignment to environmental and social SDGs within the 28%.

Figure 20. Fund alignment to Sustainable Development Goals (SDGs) where SDGs are used to demonstrate positive contribution (as at 31.12.2022)²¹⁾



21) Source: S&P Trucost + DNB AM

- SDG alignment is based on data from S&P Trucost, as well as overrides by DNB AM in cases where we disagree with the methodology, or a company is not covered. Any override is subject to a robust governance process, which cumulates in approval by a committee before implementation.

Do No Significant Harm

Each investment must pass checks against all 18 mandatory PAIs and be compliant with the UN Global Compact to satisfy the Do No Significant Harm Test. In regard to the PAI checks, DNB AM applies internally set thresholds for each mandatory PAI. In practice, data from two providers is utilised. However, as data is still patchy, some proxies and manual inputs have been utilised to fill data gaps. Our approach to assessing the PAIs is described in detail in the fund's annual SFDR report.

Good governance

DNB's Instruction for Responsible Investments and compliance with the UN Global Compact ensures compliance with the good governance criteria. See pgs. 22-23 in the [Annual Report on Responsible Investments 2022](#) for more information.



6 Active ownership

In our view, the most important tools for implementing ESG are ESG integration and active ownership through engagement and voting. This said, exclusions remain important as a last resort – see appendix section on *Exclusion criteria* for more details. Chapter 4 on *Our investment process* describes how ESG is integrated into the investment process, and within this chapter we cover our active ownership approach.

VOTING

As an active owner, DNB AM exercises its voting rights as shareholders for all holdings in active portfolios and all Norwegian general meetings, as well as strategically important items and ESG-related topics. This is the case if the fund held the position at the time of the company meeting.

By the end of Q3 2023, we had voted at a total of 59 company general meetings, up from 56 meetings last year.

See the [proxy voting dashboard](#) for more detailed breakdowns and information about voting activity.

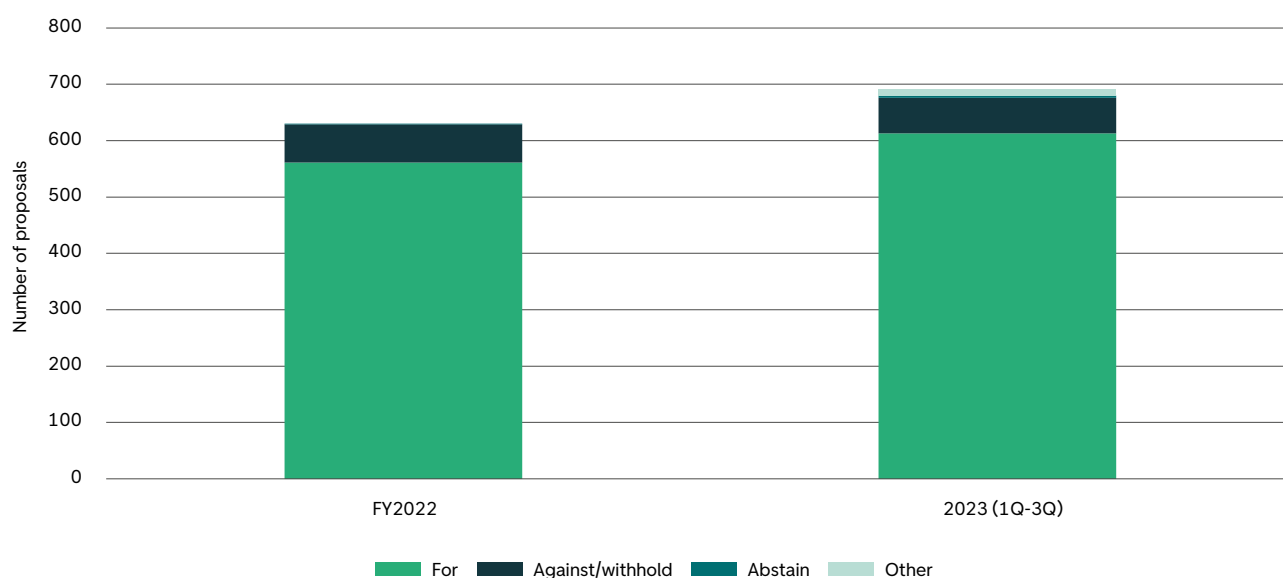
ENGAGEMENTS

Another key tool at our disposal as active owners is engagements with companies' management and sustainability teams. Our overarching goal 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.

Company engagements may be conducted for several reasons. It may be to understand how companies' sustainability work drives competitive advantage, and how this may impact future earnings potential. It may also be to investigate potential ESG weaknesses highlighted in ESG scores, or to address controversies. In the case of the latter, milestones for engagement are defined and followed-up over time by our Responsible Investments team.

Dedicated ESG dialogues are conducted as a collaborative effort between the Responsible Investment team and portfolio management team. However, ESG topics are also raised in company meetings conducted solely by

Figure 21. Number of proposals voted at during 2022 and 2023 (1Q-3Q)²²⁾

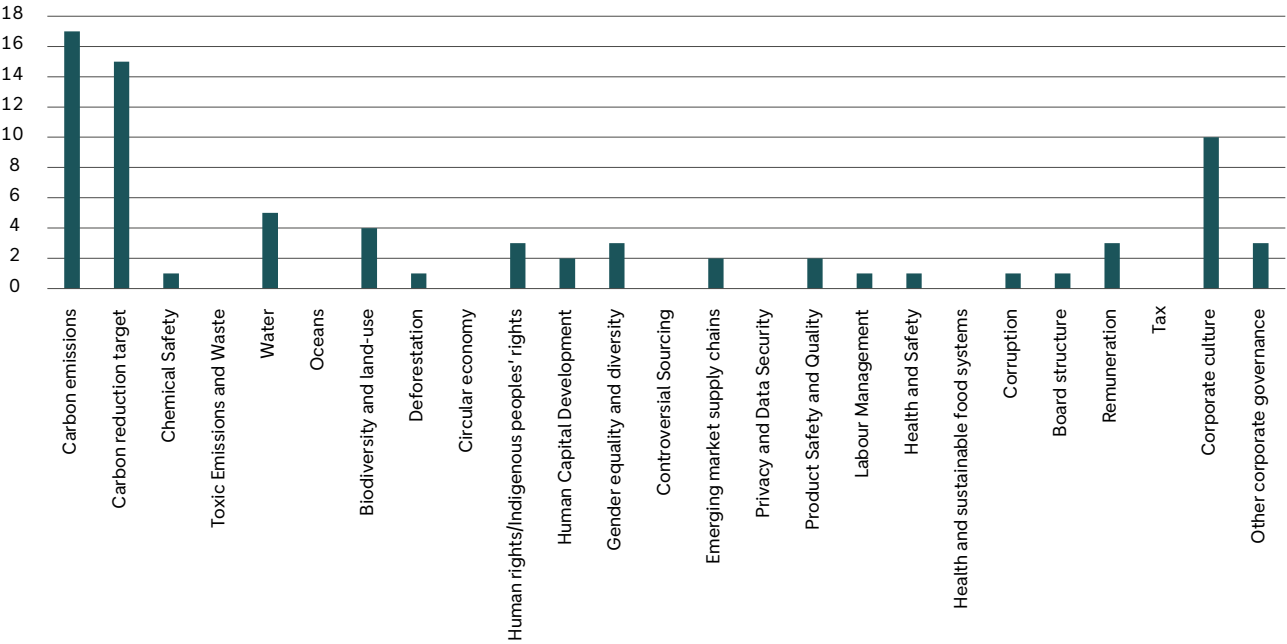


22) Source: DNB AM and ISS Proxy Voting

the portfolio management team, alongside discussions of strategy, earnings, etc. From September 2022 to September 2023, we had 29 ESG-related company engagements covering 75 topics. This is a reduction compared to the same period one year ago, then we had 38 meetings on 151 topics. The primary reason for the decline is the increased focus on the net zero frameworks (now covering 100% of the portfolio), as well as more “stable” portfolio holdings.

These figures only cover direct engagement that has happened in the form of meetings with companies where DNB AM has attended. In addition to the above, additional collaborative engagements are conducted together with Sustainalytics and through investor initiatives, such as Climate Action 100+, FAIRR, and the investor engagement on forced labour risks in the solar supply chain led by Share.

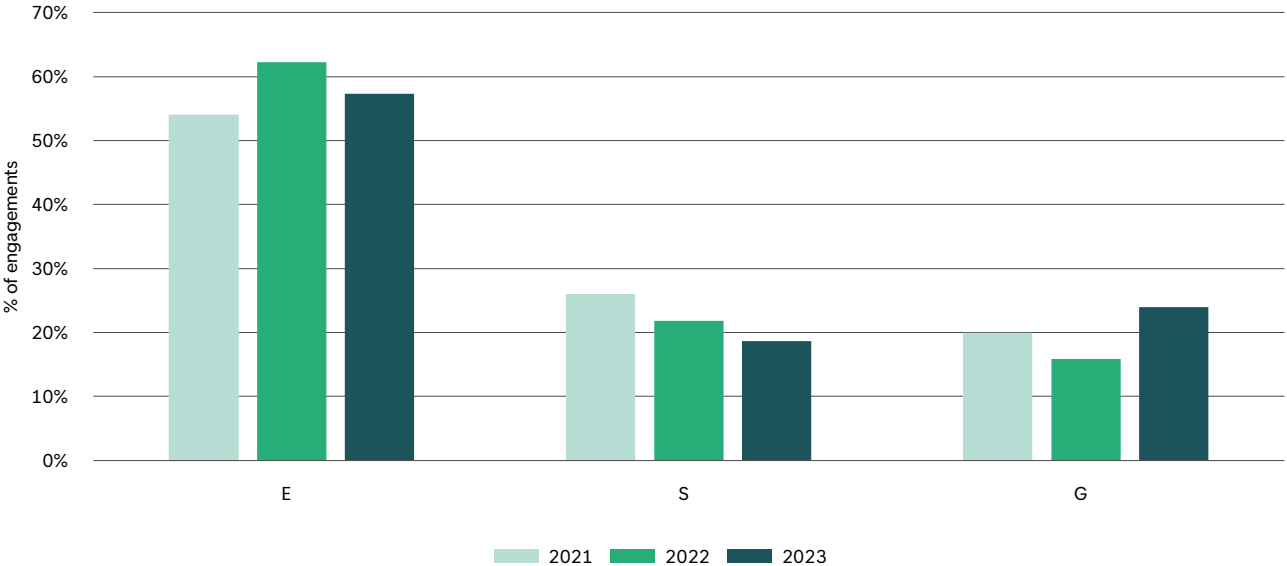
Figure 22. Number of dialogues per ESG topic between September 2022 - September 2023²³⁾



23) Source: DNB AM

Compared to last year, the focus of the meetings remains most heavily skewed towards environmental matters. However, there was an increase in focus on governance issues in 2023 compared to 2022. This is, in part, driven by targeted engagement with, for example, Sunrun on its remuneration policies (see case study for more details).

Figure 23. Split of E, S and G engagements between 2021–2023²⁴⁾



24) Source: DNB AM





Company engagement with Sunrun

Sunrun is a leading residential solar and battery provider in the US. The company invented the residential solar as a service business model, enabling households to go solar and reduce their electricity costs with zero investments. The company has a world-leading focus on customer value and company culture has cemented Sunrun as the leading US residential solar company. We believe there is attractive long-term potential from: 1) Cross selling and aggregating products like batteries, EV charging, heat-pumps, and "smart home" which also enables 2) selling balancing services for the grid (TSO/Utilities); 3) vertically expanding the business model toward retail electricity offering. This is a massive market opportunity as residential solar in the US has only reached ~4% penetration.

We have engaged with the company several times so far in 2023, discussing the following:

Remuneration - Based on investor feedback, the company has added ESG in executive remuneration and made changes in elements of remuneration metrics, particularly more PSUs. DNB AM nudged Sunrun about needs regarding executive remuneration (metrics, ambitions, transparency, fair total compensation). DNBAM said that FCF and TSR are important elements. The company agreed, has added more elements this year related to this. The company has received feedback from other investors (and us) about possible more change in the free cash flow elements - will bring that back to the board. The company does not disclose targets (would be guidance) but discloses performance post in the proxy statement. DAM nudged for more elements/indications related to targets and how ambitious they are. Fair total compensation: DAM emphasized that it must not be totally out of line (looking at geography, size, industry, performance). In 3Q23, we discussed changes to the company's executive incentive plan. The company has instated a one-off, unique award that incentivises remarkable performance (at the same time awarding zero for performance if no cash generated). The discussion focused on the necessity of having an additional incentive, focus on Performance Share Units (PSUs), and that incentives should be performance driven.

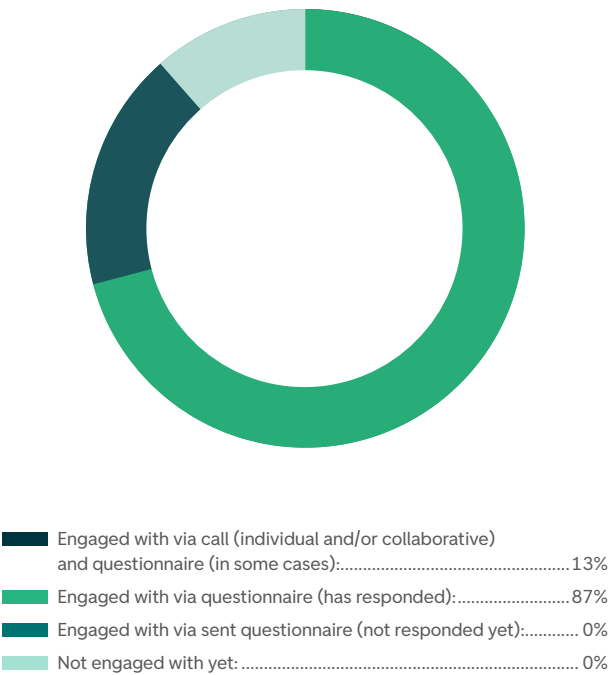
Corporate culture - Sunrun works to build community and culture amongst its sales team, many of which work alone on a daily basis. Paul is a driver of this culture, making the team feel part of a something, organising competitions and other incentives such as trips, etc. Sunrun will also work to make the customer feel part of the community, by revamping the crispness of customer communication, making engagement simple and fun, and improving its customer app. To implement her vision and operationalise strategy, the CEO believes clear and decisive action is needed. Weekly meetings that use data as a starting point help to set weekly plans and navigate macroeconomic uncertainties. This has also enabled faster decision making. The CEO has also targeted improvements in culture and customer experience. Building culture has been particularly important after covid to ensure that broader leadership and boots on the ground have a strong alignment for fulfilling the company's strategy and vision. Digitalisation also enables Sunrun to build culture and create engagement/interaction with its customers. This is reflected in increasing NPS reactions. Solar is a high touch point business, and Sunrun is working to connect these touch points with feelings and emotional connections and building a deeper emotional engagement with its customers. This also has benefits for sales, with 75% of referrals coming from high NPS customers. The focus on NPS is high with the CEO always asking about NPS and safety when visiting branches. Now the branches also have visual reports, and celebrate successes and ensure that across the enterprise, people get the same opportunity/attention/priority, and work collaboratively to deliver a good customer experience.

COMMITMENT TO ENGAGE ON SCIENCE-BASED NET ZERO TARGET SETTING

Though the portfolio specifically invests in companies that demonstrate a solid ability to reduce or avoid emissions for their customers or their customer's customers, we strongly believe that these companies should also be addressing their own operational and supply chain emissions. The Science-based Targets Initiative (SBTi) considers a model where "[sources] of emissions unabated for every volume of emissions avoided [are] not compatible with the global goal of reaching net-zero emissions at the global level". In the absence of a strong carbon mitigation strategy, companies' activities will continue to lead to increased level of GHG emissions in the atmosphere. Such companies therefore remain exposed to transition risk. We also believe that companies striving for leadership in this area will be able to tap into this as an additional source of competitive moat over time.

In 2021, we committed to engaging with 80% of the portfolio (by weight) on science-based net zero targets starting in 2022. This engagement has included both companies that have already set net-zero targets, and those which are yet to set a target. The need for this commitment came from a realisation that many companies are now setting net zero targets, but it is necessary to investigate how these are set in order to determine the quality and credibility of the target setting. We also saw a need to collect standardised data, to ease comparison between companies and over time. In 2023, we continue to deliver on our commitment to engage with at least 80% of the portfolio on science-based net zero target setting. By September 2023, we had engaged with 100% of the portfolio, and we will ensure that we remain well above our 80% commitment for the remainder of the year.

Figure 24. Status of engagement on net zero science-based target setting as at 30.09.2023²⁵⁾



25) Source: DNB AM

In association with this commitment, we worked closely with DNB AM's Responsible Investment team in 2022 to develop a framework (see Figure 25) for assessing the quality of net zero targets. The framework was developed based on Climate Action 100+'s (CA 100+) framework (to which DNB AM is a member), and inputs from other sources including the CDP, TCFD, and the SBTi. We see that our approach is also well-aligned with sell-side frameworks.

In October 2023, the DNB Group launched its transition plan. In this, DNB AM has set targets for share of Assets Under Management covered by science-based targets. As part of the approach DNB AM will engage the highest-emitting companies on their emission reduction targets.

For more information, see [pgs. 42–47 of the strategy](#). Our work on engaging with companies on net zero target setting was initiated before the strategy was set and aligns well with its goals.

Figure 25. Framework for understanding and tracking carbon reduction targets²⁶⁾

Targets	Strategy	Governance	Reporting
→ Long-term, medium-term, short-term → Unabated emissions → Carbon offsets → Nature-based solutions	→ Decarbonisation strategy → Green revenues → Avoided emissions → Capex → Alignment with Paris Agreement	→ Review of trade associations → Board oversight of climate change → Remuneration → Just transition	→ TCFD

26) Source: DNB AM

The framework places emphasis on momentum/progress, and the output is a heat map.

The heatmap is a reflection of the information that has been provided by companies directly through the questionnaire, and the assessment of this information by DNB AM. Compared to last year, coverage in terms of number of companies has increased from 25 to 52 companies. Engagements continue to be prioritised based on size of holding, carbon intensity, environmental pillar score and/or Portfolio Managers' view of a company's sustainability practices (see pgs. 35–36 of [last year's report](#) for more information on this process).

In this year's analysis, all companies were analysed prior to reaching out to the companies – this meant that all

companies received a pre-filled questionnaire and had the opportunity to get back to us to highlight any potential misunderstandings. Pre-filling questionnaires appeared to lower the threshold for companies to respond. All assessments have been quality checked for consistency in approach/treatment, and to ensure that claims are sufficiently evidenced. If there were any uncertainties, the company is either immediately flagged for follow-up, or flagged for future follow-up. Note that these results should not be taken at face value, as they should be considered together with information obtained through other active ownership activity, such as company engagements.

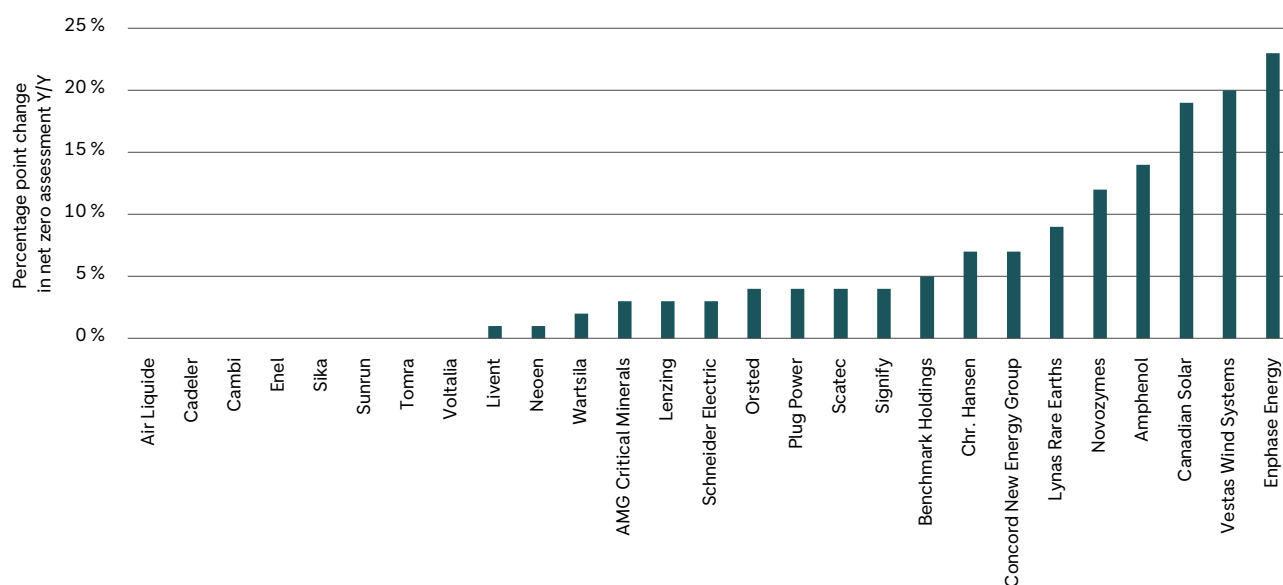
Given that we now have two years of data for a number of companies, this allowed us to do more interesting analysis this year.

Figure 26. Heatmap of status of net zero target setting²⁷⁾



27) Source: DNB AM

Figure 27. Companies with change in net zero assessment compared to last year²⁸⁾



28) Source: DNB AM

In the above, all companies except Amphenol and Benchmark were included in last year's heatmap. Amphenol and Benchmark were assessed after the report was published, but still include two years of data. As a reminder, the framework's output is not intended to be a score – our focus is on momentum. However, in colour-coding the heatmap, we assign number codes to the responses. These numbers can then be used to quantify momentum by showing percentages in terms of "completeness" against our framework from 0–100%, and to perform some analysis. In practice, this means that all questions are equally weighted when assessing momentum in the above. Furthermore, note that our approach has in some cases evolved over time and will continue to do so.

Several companies show no momentum – Air Liquide, Cadeler, Cambi, Enel, Sika, Sunrun, Tomra, and Voltaia. These should be monitored over time, as we expect continuous improvement and positive momentum for all companies. However, in the case of Tomra this result is slightly misleading, as the company published a new strategy towards the end of 2022, which was captured in a revised assessment for 2022 at the end of the year.

70% of the companies demonstrate some form of positive momentum. We discuss the three biggest improvers year-on-year in more detail below.

Enphase Energy

For Enphase Energy, its positive momentum was driven by the publication of an emission reduction target. The company has committed to reducing scope 1 and scope 2 economic emissions intensity by 30% by 2030. This commitment leads to positive momentum several places in the framework – in regards to target setting and having a decarbonisation plan. However, unfortunately, this is not a science-based target, and it does not intend to publish a science-based target in the next 1–2 years. This is a point we plan to engage with the company on.



Figure 28. Change in assessment of Enphase Energy's work with science-based net zero target setting²⁹⁾

	2022-10	2023-06
Targets		
Emission reduction target		
Reduction target in line with science		
Net zero target covering scope 1 & 2		
Net zero target covering material scope 3		
Long-term target (between 2036–2050)		
Long-term target aligned with science		
Medium-term target (between 2026 and 2035)		
Medium-term target aligned with science		
Short-term target (up to 2025)		
Short-term target aligned with science		
Unabated emissions		
Carbon offsets		
Nature-based solutions		
Strategy		
Decarbonisation strategy		
Commitment to green revenues		
Avoided emissions		
Decarbonisation of future capex		
Methodology for alignment future capex		
Public commitment to the goals		
Governance		
Review of its trade associations lobby		
Board oversight of climate change?		
Remuneration linked to climate		
Just transition		
Reporting		
TCFD reporting		
Climate-scenario testing		

29) Source: DNB AM

Vestas Wind Systems

Our analysis of Vestas Wind Systems' net zero commitment year-on-year showcases the impact of our conservative approach. In last year's assessment, we did not give credit for the company's net-zero commitment to the SBTi.

However, this year we gave the company credit, despite the company still not having a verified target by the SBTi, as more information about its net zero target has become available, giving increased confidence in the credibility of the target. In its 2021 reporting, net zero was only briefly mentioned, whereas in its 2022 reporting, specific actions were outlined, including information on its work with its supply chain and EU Taxonomy reporting (including information on aligned capex and opex).

An example of the potential "risks" associated with giving credit too early is that in some cases priorities change. Take, for example, AMG Critical Minerals. The company responded to our request for information on net zero target setting both last year and this year. However, AMG appears to have gone back on/down-prioritised its intention to set carbon targets. Last year it indicated that it planned to set targets in the next 1–2 years, whereas this year it reported it did not plan to set targets in the near future. This is interesting information to consider moving forward. However, this initial observation should be cross-checked with the company through a dialogue to understand whether this is an actual change in priority, or whether there has been a misunderstanding when responding to our request.



Figure 29. Change in assessment of Vestas Wind Systems' work with net zero science-based target setting³⁰⁾

	2022-08	2023-06
Targets		
Emission reduction target		
Reduction target in line with science		
Net zero target covering scope 1 & 2		
Net zero target covering material scope 3		
Long-term target (between 2036–2050)		
Long-term target aligned with science		
Medium-term target (between 2026 and 2035)		
Medium-term target aligned with science		
Short-term target (up to 2025)		
Short-term target aligned with science		
Unabated emissions		
Carbon offsets		
Nature-based solutions		
Strategy		
Decarbonisation strategy		
Commitment to green revenues		
Avoided emissions		
Decarbonisation of future capex		
Methodology for alignment future capex		
Public commitment to the goals		
Governance		
Review of its trade associations lobby		
Board oversight of climate change?		
Remuneration linked to climate		
Just transition		
Reporting		
TCFD reporting		
Climate-scenario testing		

30) Source: DNB AM

Canadian Solar

Canadian Solar also demonstrates progress. It committed to set a science-based net zero target with the SBTi in 2023. Additionally, it also set a new target to reduce its GHG emissions intensity by 28% in 2027 compared to 2022 levels. Previously, it only had a 5-year rolling emissions reduction target for all operations (including scope 1 and 2) but did not quantify by how much it would reduce emissions. Moreover, the company appears to have changed its position in regards to the use of carbon offsets. In this year's assessment, it indicated that it does not plan to use carbon offsets to deliver its targets. This change may be driven by the company's decision to commit to SBTi net zero, as the SBTi only considers offsets an option for companies wanting to finance additional emission reduction beyond their science-based or net zero target.³¹⁾



Figure 30 Change in assessment of Canadian Solar's work with science-based net zero target setting³²⁾

	2022-07	2023-09
Targets		
Emission reduction target		
Reduction target in line with science		
Net zero target covering scope 1 & 2		
Net zero target covering material scope 3		
Long-term target (between 2036-2050)		
Long-term target aligned with science		
Medium-term target (between 2026 and 2035)		
Medium-term target aligned with science		
Short-term target (up to 2025)		
Short-term target aligned with science		
Unabated emissions		
Carbon offsets		
Nature-based solutions		
Strategy		
Decarbonisation strategy		
Commitment to green revenues		
Avoided emissions		
Decarbonisation of future capex		
Methodology for alignment future capex		
Public commitment to the goals		
Governance		
Review of its trade associations lobby		
Board oversight of climate change?		
Remuneration linked to climate		
Just transition		
Reporting		
TCFD reporting		
Climate-scenario testing		

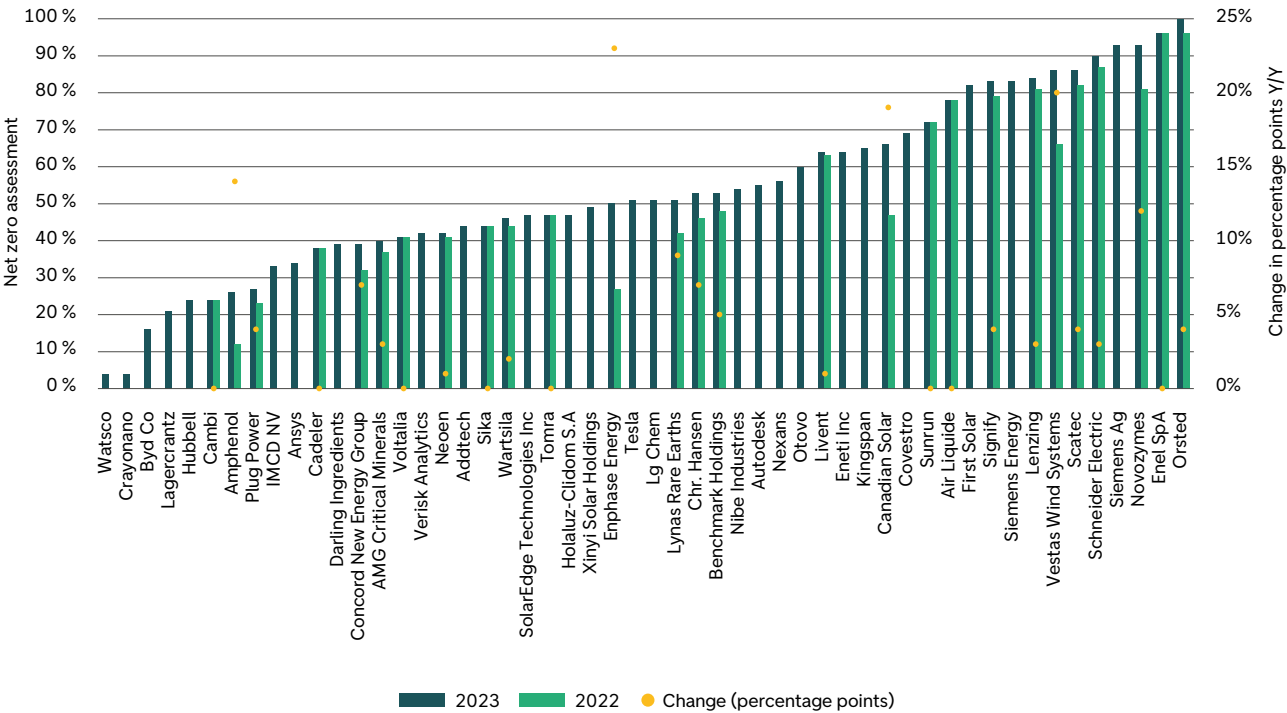
31) [FAQs - Science Based Targets](#)

32) Source: DNB AM

In the above, you will also notice that despite the company's commitment to the SBTi, we do not give credit for this yet. Rather, we note that the company plans to set a target in the next 1-2 years. Again, we have not given the company credit for this yet, as we understand things may change that may prevent this from happening.

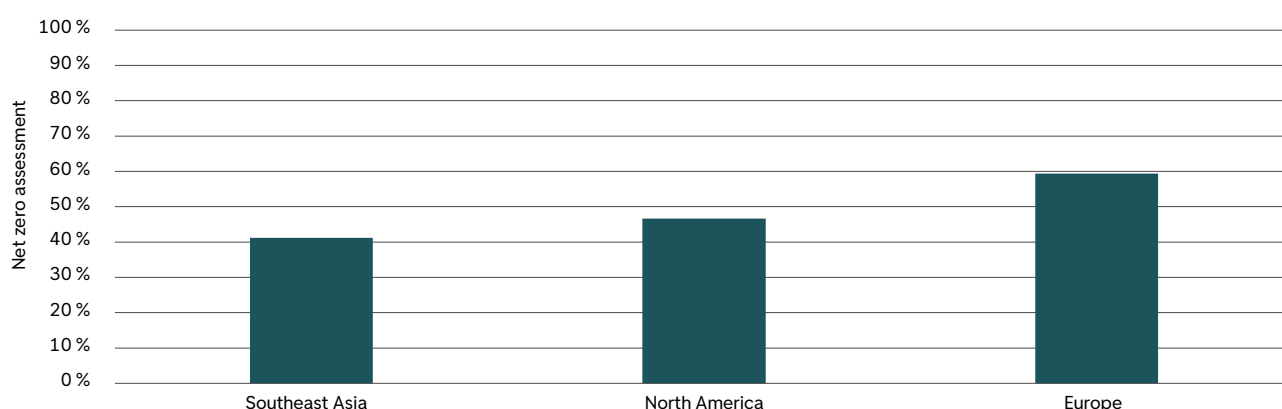
If we consider the status of the net zero assessments today and how these have changed compared to last year (where available), we observe the following:

Figure 31. 2023 vs. 2022 net zero assessments and change in percentage points Y/Y³³⁾



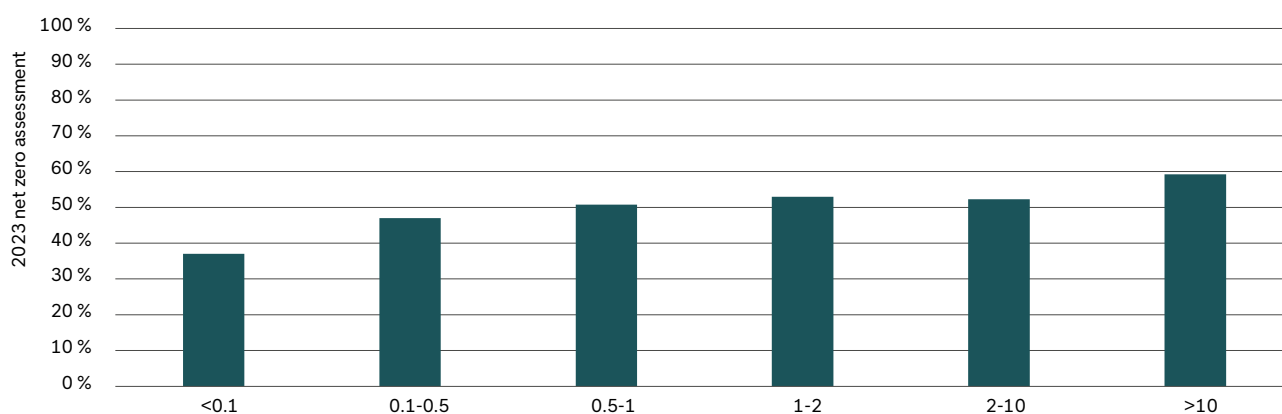
33) Source: DNB AM

Figure 32. Split of 2023 net zero assessment by region³⁴⁾



34) Source: DNB AM

Figure 33. Split of 2023 net zero assessment by market capitalisation³⁵⁾



35) Source: DNB AM

The three graphs reveal the following:

- We also observe that better performance on the net zero assessment tends to be associated with higher emissions. This may indicate that higher-emitting sectors and companies tend to have better targets, strategy and reporting of how they plan to address these emissions.
- Figure 32 illustrates that European companies are leading the way in terms of their work on net zero. This is not surprising given the strong regulatory push in Europe –

EU Taxonomy, the SFDR, the Corporate Sustainability Reporting Directive (CSRD), etc. In the US, however, we have seen a strong anti-ESG/anti-woke sentiment over the last few years, despite historic regulatory support through the IRA.

- Large cap bias is visible in our assessments, as shown in Figure 33. This speaks to the resource burden that setting and managing net zero targets incurs generally, particularly for small companies with limited resources.

Carbon reduction targets explained³⁶⁾

- **Science-based targets:** targets that are aligned with what the latest climate science deems necessary to meet the goals of the Paris Agreement – limiting global warming to well-below 2C above pre-industrial levels and pursuing efforts to limit warming to 1.5C. Companies that have a target approved by the Science-based Target Initiative (SBTi) have targets that have been validated by SBTi's technical experts. Those who have signed a commitment letter are recognised as "committed" and have two years to submit their target and have it validated and published by the SBTi.
- **Carbon neutral:** Carbon neutral refers to a policy of not increasing carbon emissions and achieving a carbon reduction of remaining emissions through offsets.
- **Climate neutral:** Same as the above, except all greenhouse gases are addressed, not just carbon dioxide.
- **Net-zero:** The IPCC estimates that limiting global warming to 1.5C above pre-industrial levels by 2100 will require a halving of global emissions by 2030 and reaching net-zero by 2050. By net-zero, the IPCC means that remaining emissions in 2050 would need to be balanced by removing CO2 from the air. Companies may contribute to this by either reducing the energy intensity of their operations, or by sequestering carbon from the atmosphere, or by combining both approaches. Net zero targets focus on decarbonising as much as possible and business transformation. Unabated emissions will not be offset, rather, residual emissions will be removed (i.e., CCS or other).



36) Sources: How it works – Science Based Targets, FAQs – Science Based Targets, [foundations-for-net-zero-full-paper.pdf](https://sciencebasedtargets.org/foundations-for-net-zero-full-paper.pdf) (sciencebasedtargets.org)

DEVELOPING A FRAMEWORK FOR BIODIVERSITY

Biodiversity describes the variety of all life on earth, including plants, bacteria, animals, and humans - and their interaction within ecosystems. Unfortunately, due to human interference and climate change, nature is threatened. Climate change and loss of biodiversity are closely interconnected, as nature absorbs large amounts of greenhouse gases and mitigates the harmful effects of climate change. Promoting biodiversity is therefore an important part of the solution to the climate challenges we face, and relevant for the DNB Renewable Energy fund to consider when looking for companies that are sustainable enablers or a better environment.

However, investors and companies have found biodiversity challenging to address given the local nature of biodiversity challenges, a lack of good data/metrics, no broadly accepted assessment tools, and no globally accepted reporting standards. Initiatives such as the Taskforce on Nature-related Financial Disclosures (TNFD) and the Science-based Targets Network (SBTN) will be key to guiding companies and financial institutions to identify their environmental risks and opportunities. In addition to being a supporter of the TNFD, DNB AM has also signed the Finance for Biodiversity Pledge, joined the UNEP FI Sustainable Blue Economy Initiative, and the DNB Group became a partner of the Partnership for Biodiversity

Accounting Financials (PBAF) in 2022. For more information about DNB AM works with biodiversity more broadly, see pages 59–63 of the [Annual Report on Responsible Investments 2022](#).

In 2023, we worked closely with DNB AM's Responsible Investment team to develop a framework to assess the status of companies' biodiversity efforts. We see this framework as complementary to our net zero framework, given the interconnectedness of these issues. The biodiversity framework builds on recognised frameworks, such as the TNFD's LEAP framework, as well as DNB AM's expectations document on biodiversity. It seeks to identify risks and opportunities, how companies plan to report, and, ideally, collect asset level data. The latter is an important hurdle to gaining a better understanding of companies' exposures and dependencies on biodiversity, given the local nature of biodiversity. However, asset level data is not widely reported by companies today. Through this framework, we seek to collect qualitative and quantitative data, better understand the status of efforts on biodiversity, and have a better dialogue on the topic. We believe our approach will develop over time, and our expectations are low to begin with given the challenges. In 2024, we intend to begin to test our framework with a few companies and make adaptations if necessary.



Figure 36. Framework for understanding and tracking companies' work on biodiversity³⁷⁾



37) Source: DNB AM

In the meantime, biodiversity is addressed qualitatively in company engagements where company research indicates that the topic is material and should be addressed. Expectations documents are the starting point for engagement. As part of DNB AM, the fund is also involved in a three-year engagement programme on deforestation linked to soft commodities, joined Nature Action 100+, and participates in collaborative engagements through

FAIRR on sustainable proteins, meat sourcing, sustainable aquaculture and biodiversity loss from waste and pollution. Quantitatively, biodiversity is currently understood and managed using PAI 7 on activities negatively affecting biodiversity-sensitive areas. Though data on this remains patchy, our observation is that coverage and quality is increasing. We aim to increase metrics and reporting on biodiversity as data quality and availability improves.

Case study:

Darling Ingredients

Darling Ingredients collects and processes waste fats and oil. These waste products are rendered and processed into value-added products with applications in a range of industries, including animal feed, pet food, human health, and renewable diesel (through Darling Ingredients' JV with Valero, Diamond Green Diesel (DGD)). The company considers itself the "original recycler", as its business model is to take products that would otherwise be "left on the field" and convert them into sustainable ingredients. The company has grown over time, primarily through acquisitions, and now operates with huge scale – it processes 15% of animal by-product globally and collects about 50% of Used Cooking Oil (UCO) in the US. In addition, DGD has increased its capacity over time and now has a capacity of 1,200mgal. The JV has premier access to animal and UCO from Darling Ingredients, which are non-crop-based feedstocks associated with lower Carbon Intensities (CI). These feedstocks are treated favourably in relevant regulatory support, such as the California's Low Carbon Fuels Standard (LCFS) and the Inflation Reduction Act's (IRA) proposed clean fuel production credit (45Z), where any fuel under a 50 CI threshold can qualify for 0.02USD/gal for each point of CI reduction from 2025 to 2027. In addition, the IRA also proposes new tax credits for Sustainable Aviation Fuel (SAF). In regard to the latter, DGD has made a Final Investment Decision (FID) on a SAF project – upon completion (expected 2025), DGD will have the capability to upgrade approximately 50% of its annual production capacity to SAF, which will make it one of the largest SAF manufacturers in the world. All-in-all, Darling Ingredients is the only vertically integrated renewable diesel producer in the world.

FAIRR: Waste & Pollution Engagement

DNB AM is part of the 80-strong investor engagement, with 23USDtrn in combined investor assets, on waste and pollution via FAIRR. FAIRR is a collaborative investor network that raises awareness of the ESG risks and opportunities in the global food sector. The background for the engagement is countries' commitment to halting and reversing biodiversity loss by 2030 through the Kunming-Montreal Global Biodiversity Framework (GBF) in December 2022. One of the framework's targets calls for a reduction in the excess nitrogen and phosphorus loss to the environment by half by 2030, emphasising the need for efficient nutrient use, management, and circularity. The



intensification of meat and dairy production, combined with poor management of manure and animal waste is a key driver of nutrient loss to the environment. However, livestock manure and waste also represent an opportunity, as an alternative to chemical fertilisers. The engagement primarily targets pork and poultry producers and is focused on the impacts of mismanagement of manure on pollution and biodiversity risk. Darling Ingredients and Yara are also engaged with to represent to opportunities side, as two listed circular solution providers. The investor engagement has concluded the first phase of the engagement, and will now be proceeding with a second phase, where DNB AM will continue to be signed on.

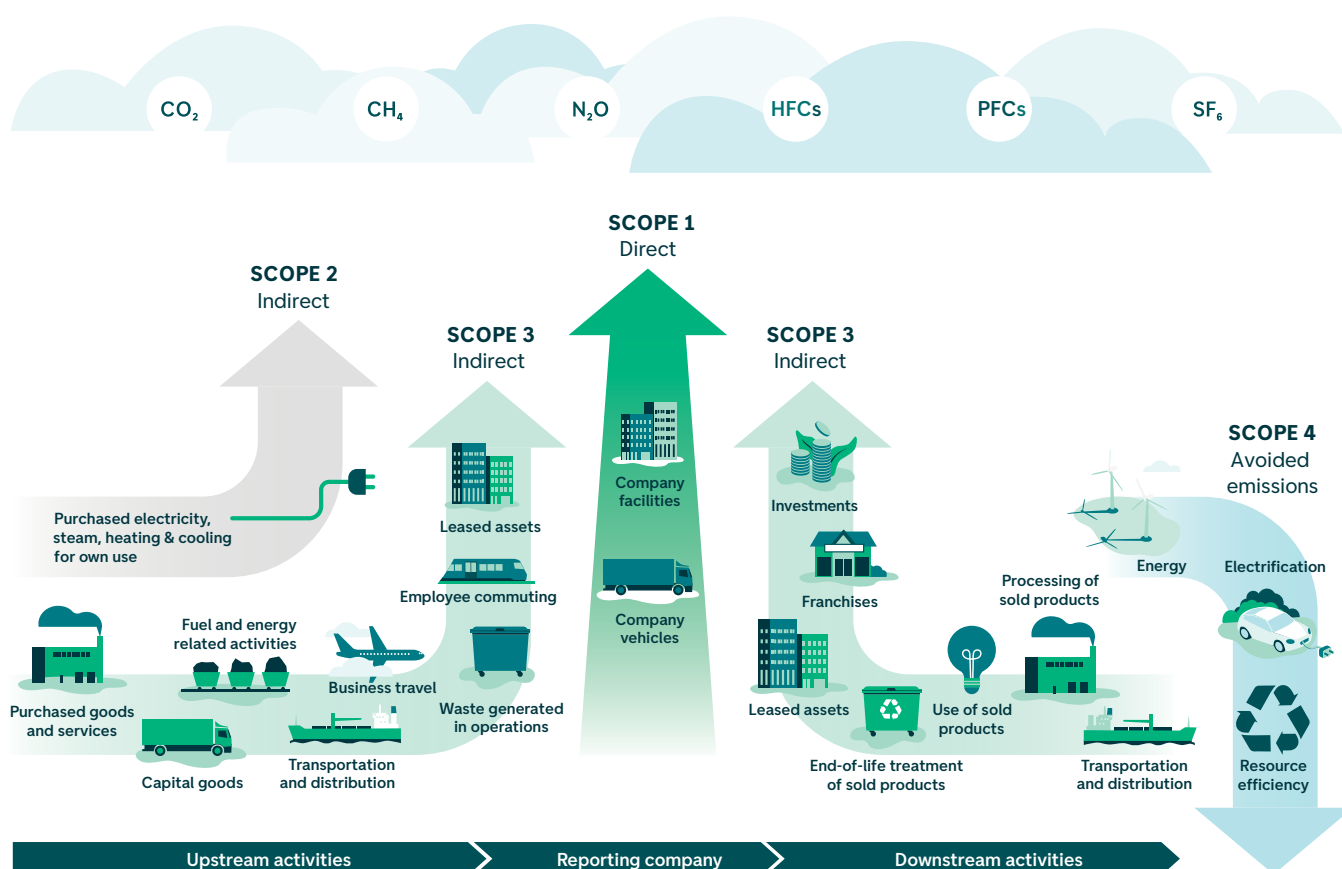
Direct company engagement

In addition to the above, DNB AM has also engaged directly with the company several times. Biodiversity has been specifically addressed in these ESG engagements, in addition to climate change/emissions reductions targets, ESG-related governance, and regulation. We learned the following on biodiversity in our latest company engagement:

Biodiversity and land-use/deforestation - Darling Ingredients recently acquired Gelnex, thereby adding to the size of its Brazilian footprint (in addition to the recently integrated FASA Group). Gelnex sources by-products from grass fed cattle in Brazil. Darling Ingredients does not have a deforestation policy, as its Brazilian presence is relatively new. It has a traceability programme, as gelatin is a food-grade product. The traceability includes third party audits and own audits. Darling needs to know what farm the by-product came from. This may head towards blockchain in the future. For food grade products, traceability is robust. It has over 300,000 suppliers, so it is challenging to ensure traceability for feed products down to farm-level. The company has plans to look at its Brazilian supply chain and understand how its suppliers are mitigating potential risks. The company does not adhere to any Brazil-specific certification schemes, but it is on the "to do" list. Darling will also be looking at calculating carbon avoidance moving forward, perhaps partnering/working with academia to achieve this. It will be interesting to see whether it can offer LCA assessments to customers, though it does not believe that customers are willing to pay a premium for this.

7 Key findings of potential avoided emissions analysis

Figure 37. Greenhouse gas emissions across the value chain³⁸⁾



- **SCOPE 1:** All direct GHG emissions.
- **SCOPE 2:** Indirect GHG emissions from consumption of purchased electricity or steam.
- **SCOPE 3:** GHG emissions relating to up- and downstream activities in the value chain of the company's product/service.
- **SCOPE 4:** Emissions that would have been released if a particular action or intervention had not taken place (can appear throughout third parties' value chains depending on the type of product or service offered and how this product or service affects operations)

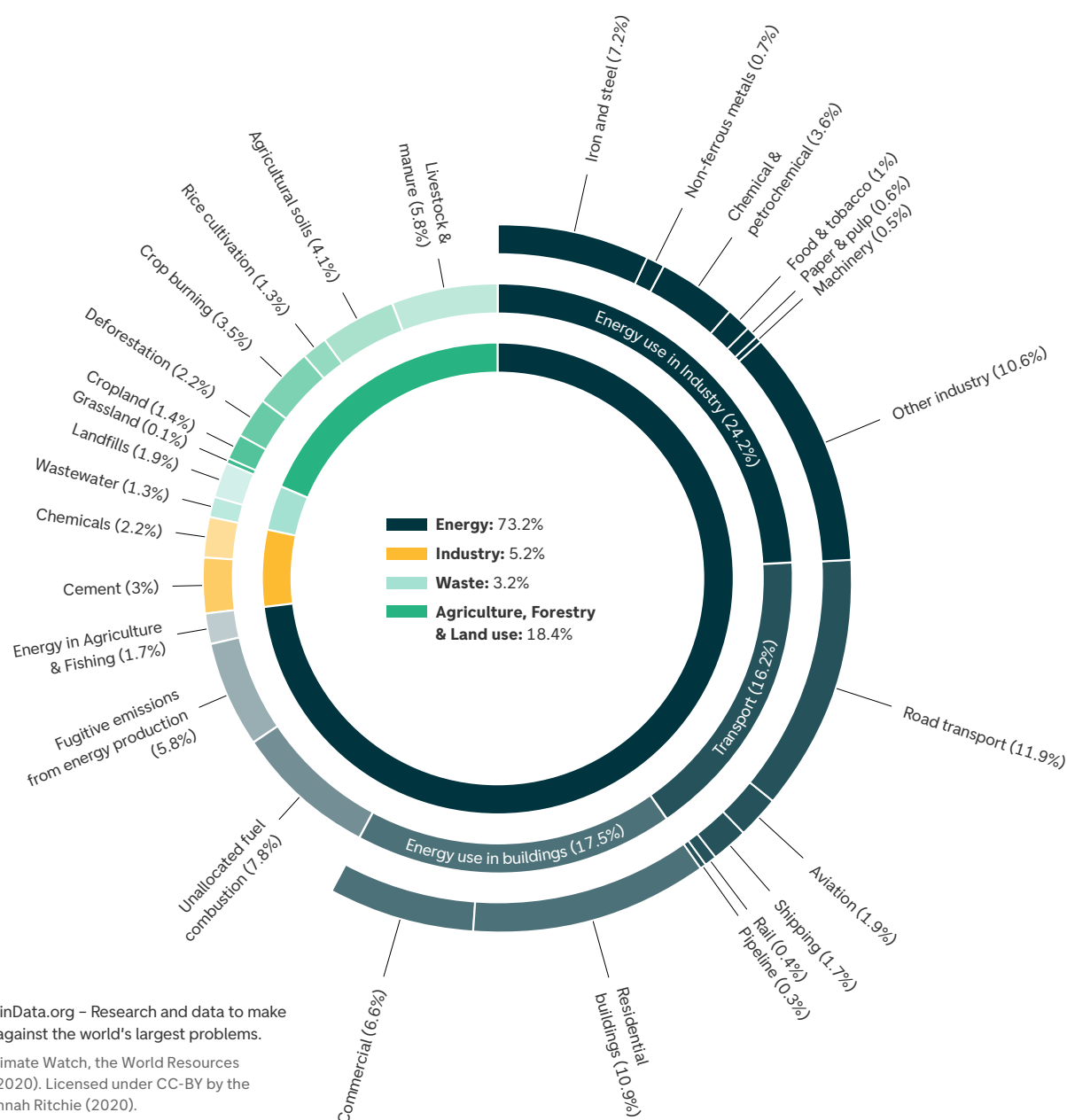
38) Source: GHG Protocol, Lazard

CARBON FOOTPRINT VERSUS AVOIDED EMISSIONS

Carbon footprint, also called carbon intensity, is the measurement of a company's greenhouse gas emissions relative to a company's turnover and is one of several factors that says something about a company's climate risk and impact. Companies and investors use carbon footprint to help identify and address carbon-related risks.

Considering the contribution from various sectors to global GHG emissions may be a useful starting point for identifying how to prioritise emissions reductions.

Figure 38. Global greenhouse gas emissions by sector



OurWorldinData.org - Research and data to make progress against the world's largest problems.

Source: Climate Watch, the World Resources Institute (2020). Licensed under CC-BY by the author Hannah Ritchie (2020).

Carbon footprint analysis considers a company's direct and indirect emissions to produce its product(s) and/or service(s). The GHG Protocol defines these emissions as scope 1 and scope 2 emissions (see Figure 37). These data

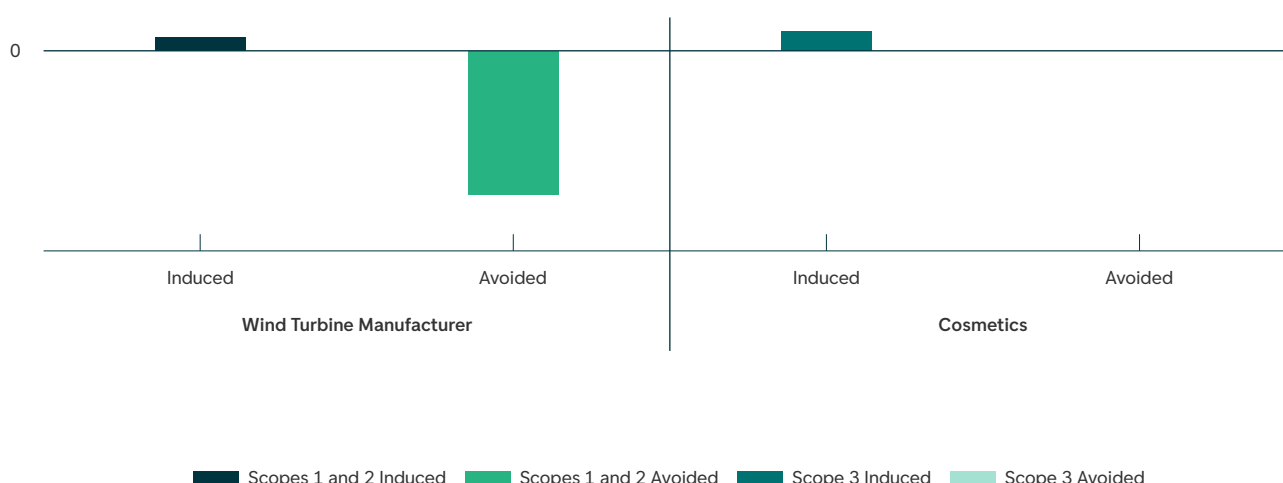
are relatively easy to measure and are widely available. Many green investment strategies have therefore been directed into companies and sectors that are carbon efficient in terms of their scope 1 & 2 emissions.

However, we see great value in looking beyond scope 1 & 2. Scope 3 emissions are emissions that happen because of a company's activities but are not owned or controlled by the company. These emissions are complex to measure, and double counting is a concern. As a result, these are typically not reported, or are reported, but not in their entirety. Though some ESG data providers estimate these emissions, it is still not common practice for these to be included in investors' carbon footprinting. It is also important to note that these underreported scope 3 emissions often represent the largest source of emissions for some sectors, such as oil and gas (approximately 80%). See our case study on pages. 56–62 in [last year's report](#) for more information about challenges related to scope 3. Ignoring these emissions may therefore underestimate the transition risks faced by the underlying company and may raise questions as to the validity of its profile as a "green" company.

Due to these challenges, we believe that considering all scopes of emissions (1, 2 & 3), coupled with an assessment of a company's emissions-avoiding capabilities, represents a fairer assessment of its true climate impact and positive contribution. We therefore engaged ISS-ESG to help us measure the Potential Avoided Emissions (PAE) associated with the fund again this year, for the fourth consecutive year. PAE is a useful quantification that seeks to evidence the solutions-providing capabilities of our fund holdings. We believe that the companies providing these solutions are best positioned to capitalise on the world's requirement to cut emissions.

The example below, Figure 39, demonstrates the avoided emissions concept. The two companies have similar emissions profiles in terms of their scope 1, 2 & 3 emissions, but vary vastly in regard to PAE. If we were only to focus on scope 1, 2 & 3 emissions, we would potentially be overlooking the opportunity to invest in companies providing real climate change solutions.

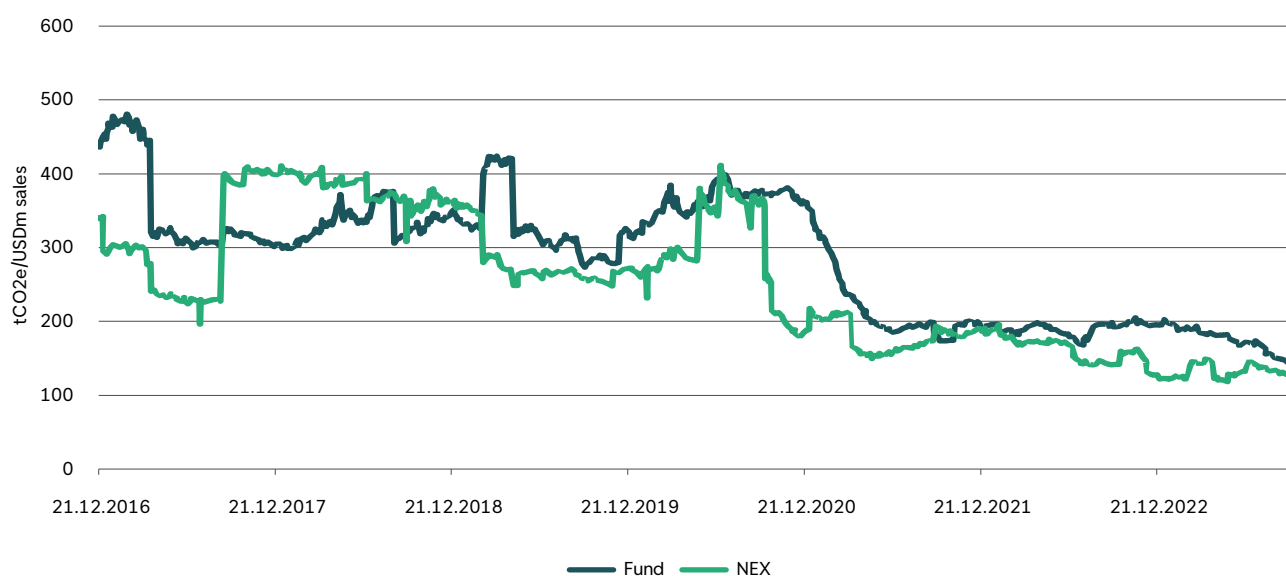
Figure 39. Emissions comparison for cosmetics company and wind turbine manufacturer³⁹⁾



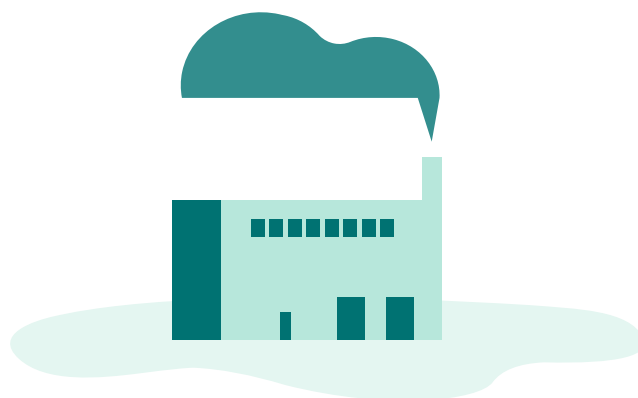
39) Source: Mirova/Carbon4

Though the fund does not target a weighted average carbon footprint lower than its benchmark, we monitor carbon footprint over time and changes at company and portfolio level do lead to engagement.

Figure 40. Development of carbon footprint over time (as at 30.09.2023)⁴⁰⁾



40) Source: ©2023 MSCI ESG Research LLC. Reproduced by permission



RESULTS OF PAE ANALYSIS⁴¹⁾

Figure 41. Results of 2022 PAE analysis under STEPS scenario

Sector	Scope 1 & 2 emissions	Scope 3 emissions	PAE	Net PAE
Wind	0.21	26	-269	-243
Solar	2.89	16	-195	-176
Materials	5.08	10	-220	-204
Energy saving	0.65	261	-318	-57
Biofuels	3.51	10	-186	-172
Power generation	19.32	48	-218	-151
Other	0.01	0	-1	-0
Power storage	0.76	5	-7	-1
Fuel cells	0.21	7	-24	-17
Grid	0.04	13	-25	-11
Total	33	397	-1,462	-1,032

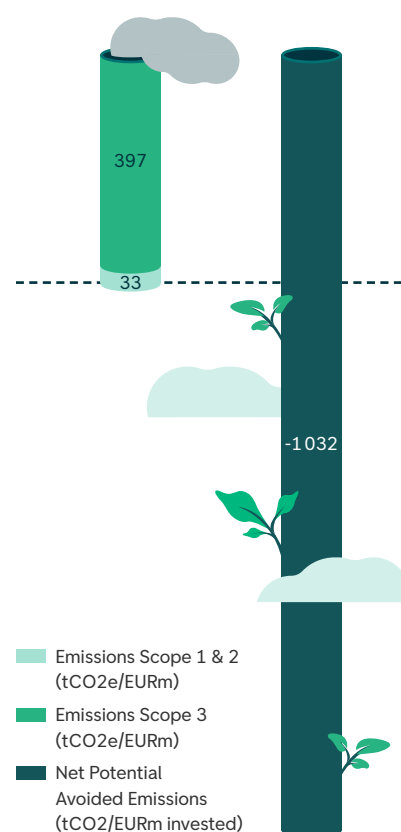
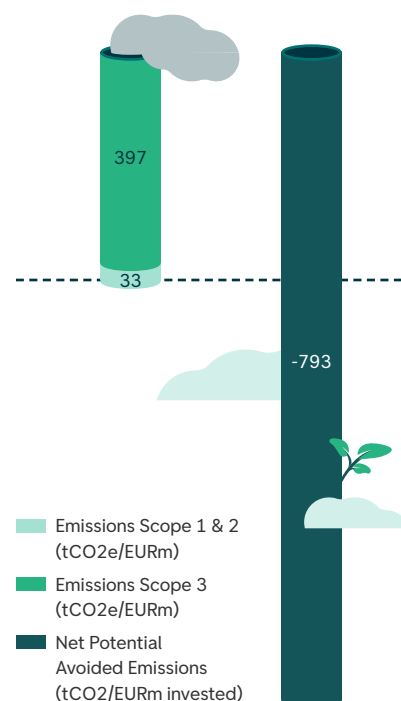


Figure 42. Results of 2022 PAE analysis under NZ scenario

Sector	Scope 1 & 2 emissions	Scope 3 emissions	PAE	Net PAE
Wind	0.21	2	-128	-126
Solar	2.89	14	-95	-78
Materials	5.08	15	-221	-201
Energy saving	0.65	263	-337	-74
Biofuels	3.51	13	-186	-170
Power generation	19.32	27	-192	-146
Other	0.01	8	-1	7
Power storage	0.76	13	-13	1
Fuel cells	0.21	26	-24	2
Grid	0.04	17	-25	-8
Total	33	397	-1,223	-793



41) Note that we have changed the way we refer to analysis performed during the year compared to previous years. In previous reports, we referred to the year in which PAE was calculated, whereas now and moving forward, we refer to results based on the year the data is based on. Thus, 2022 analysis is based on 2022 data, with calculations performed in 2023.

Figure 43. IEA scenarios⁴²⁾

Net Zero Emissions by 2050	Scenario Announced Pledges	Stated Policies Scenario
Definitions A scenario which sets out a pathway for the global energy sector to achieve net zero CO ₂ emissions by 2050. It doesn't rely on emissions reductions from outside the energy sector to achieve its goals. Universal access to electricity and clean cooking are achieved by 2030.	A scenario which assumes that all climate commitments made by governments around the world, including Nationally Determined Contributions (NDCs) and longer-term net zero targets, as well as targets for access to electricity and clean cooking, will be met in full and on time.	A scenario which reflects current policy settings based on a sector-by-sector and country by country assessment of the specific policies that are in place, as well as those that have been announced by governments around the world.
Objectives To show what is needed across the main sectors by various actors, and by when, for the world to achieve net zero energy related and industrial process CO ₂ emissions by 2050 while meeting other energy-related sustainable development goals such as universal energy access.	To show how close do current pledges get the world towards the target of limiting global warming to 1.5 °C, it highlights the "ambition gap" that needs to be closed to achieve the goals agreed at Paris in 2015. It also shows the gap between current targets and achieving universal energy access.	To provide a benchmark to assess the potential achievements (and limitations) of recent developments in energy and climate policy.

42) Source: <https://www.iea.org/reports/world-energy-model/understanding-weo-scenarios#abstract>

As shown in Figure 41 and Figure 42, the fund's underlying holdings potentially avoid more carbon than they emit. As in last year's analysis, two scenarios have been assessed – IEA Stated Policies Scenario (STEPS) and IEA Net Zero Emissions by 2050 (NZ). See Figure 43 for more information on what these scenarios measure.

To calculate the carbon footprint, we have scaled down the scope 1, 2 and 3 emissions provided by ISS-ESG in line with the percentage of revenues that the PAE analysis covers per company. As in previous years, the PAE analysis focuses on one primary product category per company. In practice, by scaling down the carbon footprint in this way we are assuming that the remaining revenue streams have a similar emissions profile to those covered by the analysis. Note that this additional analysis we have conducted to understand net PAE is not based on an established methodology. For some companies, a change in how the percentage of revenues was calculated has

changed significantly compared to last year. This has led to a material change in the relationship between total scope 1, 2 & 3 emissions and PAE (so-called "net PAE"). See our case study on the *Impacts of scaling scope 1, 2 & 3 emissions in line with revenues covered* for more information about this process and the impacts it has on this year's analysis.

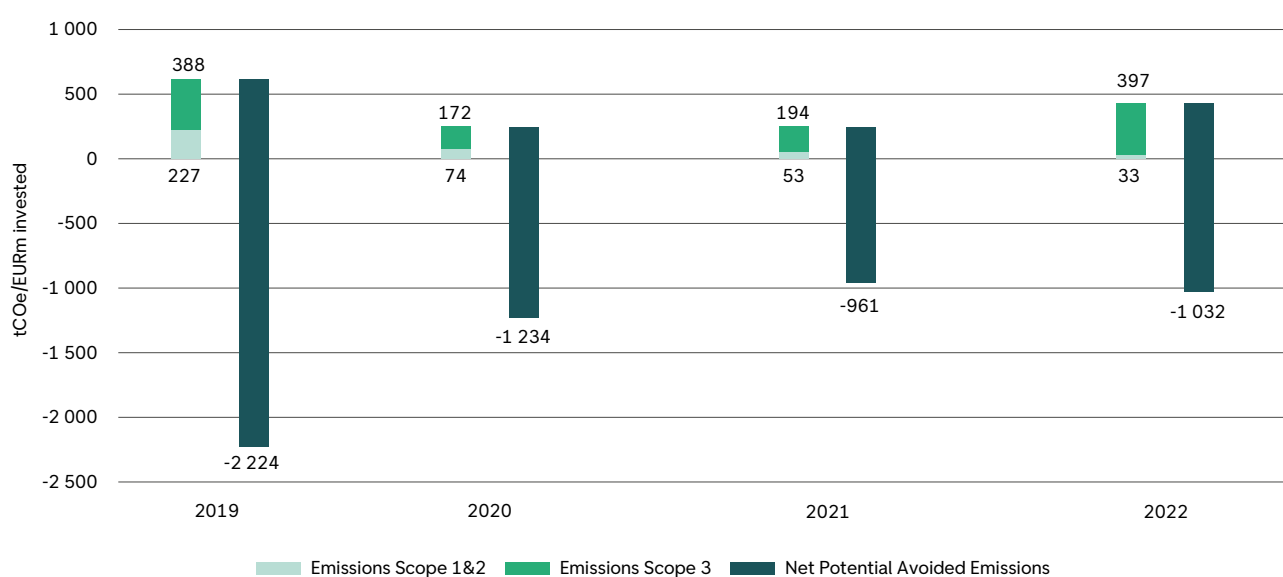
The PAE analysis covers 77% of the fund holdings (as at 31.05.2023). Note that some large holdings, such as IMCD, are not included in the analysis. See our case study on IMCD in last year's report for more information on why we this company is not suitable for this kind of assessment (pgs. 54–55). We use the portfolio composition as at the 31.05.2023 because the PAE analysis is a bespoke piece of work that begins around May each year and the companies selected for analysis were selected at this point in time. The PAE estimates cover an average of 68% of the revenues of these holdings.

The calculations are based on backward-looking figures from 2021 or 2022 (based on data availability at the time of analysis). We expect that significantly better avoided emissions results would have been achieved if based on forward-looking estimates. This is because the portfolio companies have business models centred on products and services that enable a better environment and should experience growth over the cycle.

Since this is our fourth year conducting PAE analysis it is also interesting to have a look at how the results compare year on year for the portfolio (see Figure 44). As a reminder, due to challenges associated with the sensitivity of the PAE calculation to underlying assumptions, our main focus is on the signals provided by this analysis, and less so on the actual numbers produced. In the previous three years, a reduction in PAE/EURm invested was observed. This was primarily driven by changes in methodology, repricing of environmental stocks and the fund and changes to the portfolio mix, driven by changes in the risk/reward assessment. However, between 2021 to 2022, we see an increase in PAE/EURm invested. This is driven by the

inclusion of certain companies that we were not able to include in last year's analysis and falling share prices of environmental stocks over the past year. When it comes to scope 1 and 2 emissions, we see a clear declining trend between 2019–2022, which is also reflected in the fund's weighted average carbon footprint coming down over time. This may be driven by companies setting emissions reductions targets for scope 1 and 2 and beginning to deliver on these and/or changes in the fund strategy which has changed portfolio construction and composition. However, scope 3 emissions have increased year-on-year between 2020 to 2022. Between 2020–2021, the main driver for this was changes to ISS-ESG's scope 3 estimation methodology and increased reporting from companies. Between 2021–2022, the main driver was the inclusion of Signify in the analysis. Last year the company was omitted due to challenges related to its scope 3 emissions. This year, due to changes in the way its revenues were calculated, we were able to include it in the analysis. This is also discussed in our case study on the *Impacts of scaling scope 1, 2 & 3 emissions in line with revenues covered*.

Figure 44. PAE for DNB Renewable Energy between 2019–2022⁴³⁾



43) Source: ISS-ESG (with adjustments by DNB AM)

Table 2 Top ten contributors to PAE in the fund

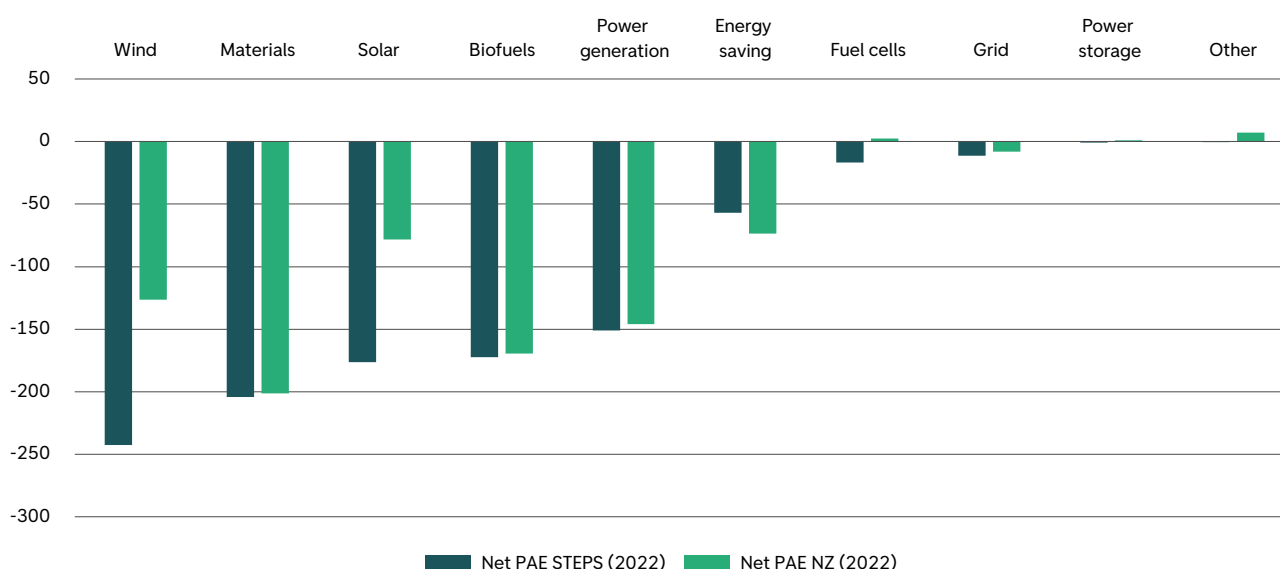
Top ten (STEPS)	Weight (%)	Fund PAE (tCO2)	% of total portfolio	Environmental angle
Vestas Wind Systems A/S	5.7 %	112 374 028	13.1 %	Wind equipment
Schneider Electric SE	2.9 %	92 999 960	10.9 %	All products
Canadian Solar Inc.	1.5 %	80 372 788	9.4 %	Solar equipment
Sika AG	2.6 %	77 000 000	9.0 %	Building materials - concrete ad mixture (reduces need for cement)
L'Air Liquide SA	3.3 %	74 200 000	8.7 %	Oxygen supply for oxycombustion in the steel industry, biomethane applications and hydrogen for fuels desulfurization in refineries
Novozymes	3.4 %	65 000 000	7.6 %	Enzymes and yeast for bioethanol production
Kingspan Group Plc	1.8 %	57 666 667	6.7 %	Insulation panels
BYD Company Limited	1.2 %	52 899 999	6.2 %	EVs
Xinyi Solar Holdings Limited	1.0 %	43 205 592	5.0 %	Solar equipment
First Solar, Inc.	0.5 %	34 663 145	4.0 %	Solar equipment
Total	24.0 %	690 382 178	80.6 %	



It is also useful to consider how different sectors contribute to the overall PAE result. As shown in Figure 45, the net PAE per sector varies considerably. The net results show that wind delivers the strongest contribution by sector, while "other" shows the weakest contribution. In the STEPS

scenario, the analysis reveals net emissions avoided for all sectors. This was not the case in last year's assessment, where some sectors reveal net more emissions emitted than avoided.

Figure 45 Net PAE breakdown by sector⁴⁴⁾



44) Source: ISS-ESG (with adjustments by DNB AM)

Wind and Solar

As in previous years, wind and solar come out on top. This year, wind remains the strongest contributor to PAE by sector, whereas solar has fallen to third place. The sectors' strong contributions to net PAE are partially explained by the fact that the PAE methodology favours technology providers, which are allocated PAEs over the full lifetime of their products installed in the measuring year. The lifetime assumption for both solar and wind is 20 years.

To explain differences in results between wind and solar and year-on-year, we need to consider, amongst other factors, changes in load factor. ISS-ESG uses load factor data from IRENA's annual Renewable Power Generation Costs report in its calculations. In 2022, the global

weighted average capacity factor for newly commissioned onshore wind was 37% (vs. 39% in 2021) and 42% (vs. 39% in 2021) for offshore wind.⁴⁵⁾ The average between the two has remained similar over the two years – 39.5% in 2021 and 39% in 2022. The decline in onshore wind is due to 2021 having benefitted from increased deployment in countries and regions with excellent wind resources (US, Latin America) whilst China's share of global deployment declined. China's share of global deployment increased in 2022, causing the global weighted average capacity to decline from its 2022 high. Though continued technology improvements, larger turbines, higher hub heights and

45) [Renewable power generation costs in 2021 \(irena.org\)](#) & [Renewable power generation costs in 2022 \(azureedge.net\)](#)

larger swept areas will continue to positively impact capacity load, the balance of deployment and resource quality will continue to impact the global average figure. For offshore wind, the increase compared to 2021 was driven by higher hub heights and larger swept areas enabling more efficient harvesting of electricity from the same resource. However, between 2017–2021 there was a decline primarily due to increased share of Chinese deployment. Chinese wind resources are generally not as good, and Chinese projects tend not to use turbines as large as those deployed in Europe and elsewhere (though turbine size jumped in 2022 as developers adjusted to new “grid parity” regime with the end of the FiT programme). Two wind companies have been included in the PAE analysis – Vestas Wind Systems and Cadeler. Vestas’ PAE decreased in 2022 compared to 2021 as its installed capacity decreased. Cadeler’s PAE increased due to increased capacity, though its net PAE/EURm invested fell as our ownership in the company has decreased. As a result, total net PAE for the wind sector decreased to -243 PAE/EURm invested in 2022 compared to -377 PAE/EURm invested in 2021.

Solar’s decline from second to third place in terms of contribution to net PAE may be explained by the global weighted average capacity factor for new utility-scale solar PV fell from 17.2% in 2021 to 16.9% in 2022. Total net PAE for the solar sector also decreased compared to last year, with -176 PAE/EURm invested versus -289 PAE/EURm invested in 2021. This is driven by significant increases in market capitalisation for two of the four solar companies assessed – Enphase Energy’s market capitalisation increased from 24,494.6USDm in 2021 to 36,151.4USDm, and First Solar’s market capitalisation increased from 9,267.9USDm to 15,969USDm in the same period. Market capitalisation flows through to Enterprise Value (EV) and PAE/EURm invested is calculated by dividing PAE by adjusted EV. All else equal, a higher market capitalisation leads to reduced PAE/EURm invested. In addition, we have reduced our ownership in Canadian Solar and First Solar, whilst increasing ownership in Enphase Energy, the latter of which is associated with a greater value chain adjustment. Net, our ownership has reduced in the sector compared to last year. These factors also lead to a reduction in allocated PAE/EURm invested.



Materials

The materials sector is the second strongest contributor to PAE by sector. As in previous years, this is primarily driven by AMG Critical Materials. The company has a portfolio of CO₂-reducing business areas, but for this exercise we focused on the product category "thermal barrier coatings and turbocharger wheel castings". Last year we also included "lithium" but were unable to do so this year as the company was unable to provide certain estimates that were essential for ISS-ESG's calculations. Thermal barrier coatings and turbocharger wheel casting refer to proprietary AMG technology enables aircraft engine manufacturers to increase operating temperatures beyond the physical limitations of the base materials by coating nickel-based superalloy blades in the high-pressure combustion section of the engine. This dramatically increases aerospace fuel efficiency. AMG calculates a PAE for this product category (71.7m metric tons). ISS-ESG adjusts this value to account for the lifetime of the coated blades and their weight compared to the total engine. The PAEs attributed to AMG increased quite significantly compared to last year (32,262,000 tCO₂ total PAE in 2022 vs. 9,833,211 tCO₂ in 2021), as this ratio was revised by ISS-ESG. In terms of net PAE/EURm invested, AMG accounts for 93% of net PAE for the sector.

Biofuels

Biofuels is fourth, with Novozymes as the biggest contributor. Note that ISS-ESG did not calculate PAE for the company in this year's analysis – we rely on the company's self-reported figure.⁴⁶⁾ This figure is assessed as credible, given that ISS-ESG "verified" Novozymes' methodology when the company was included in our 2020 analysis. Novozymes produces enzymes and yeast for bioethanol production. Novozymes is merging with Chr. Hansen to form a leading global biosolutions company. Completion is expected 4Q23 or 1Q24.

Power generation

Power generation is fifth, with approximately 3x greater PAE compared to last year (-151 tCO₂/EURm in 2022 invested vs. -51 tCO₂/EURm invested in 2021). At the same time, scope 1, 2 and 3 emissions remain at a similar level compared to last year (67 tCO₂/EURm invested vs. 65 tCO₂/EURm invested). Cambi is the biggest

contributor to the sector's net PAE/EURm invested. For this company, ISS-ESG has taken the company's self-reported avoided emissions from thermal hydrolysis pre-treatment technology (THP) units sold in 2022 and extrapolated this over the assumed lifetime of the units (15 years). Cambi's THP technology is used to treat sewage sludge and bio-degradable waste treatment. This has advantages in terms of increased biogas production, improved biosolids dewatering, high-quality biosolids (sterilised sludge), increased digester throughput, and lower carbon footprint, as well as being low maintenance and easy to operate.⁴⁷⁾

As in last year's analysis, of the six companies within this sector that utilise ISS-ESG's utilities approach, all of them, except Concord New Energy Group, use ISS-ESG's primary model for applying emissions factors (read more about this on pg. 50 of [last year's report](#)). As there have not been any methodological changes this year, differences in total PAE are driven by amount of renewable energy produced or the number of solar modules sold, as some renewable technology manufacturers (distributed solar) are also included within this category. As in previous years, the biggest detractor to net PAE for the category is Enel. We still firmly believe that Enel is amongst the greatest contributors to the energy transition, as one of the world's largest renewables developers, adding 3–5GW of renewable capacity annually, which will increase to >10GW by the second half of this decade. The company's carbon footprint is driven by its coal exposure, which is due to be retired by 2027. Enel's combined scope 1, 2 and 3 carbon intensity continues to decrease from 1,232 tCO₂/EURm in 2021 to 916 tCO₂/EURm in 2022 – a ~26% decrease. However, unlike last year, PAE has actually decreased substantially (46,003,181 tCO₂e in 2021 vs. 33,243,244 tCO₂e in 2022). This is a result of the change in the countries' allocation (lower weights in high-impact countries) having a bigger impact than the company's increased renewable energy production.

Energy saving

Energy saving comes in fourth place. The companies in this category typically have broad product portfolios. As the PAE analysis focuses on one primary product category, the average share of revenues covered by the analysis for this sector are lower (51%) than for all companies covered by ISS-ESG (68%). Signify is the biggest contributor to overall

46) This was also the case in last year's report

47) [Thermal hydrolysis - Cambi](#)

PAE within this sector. Signify is the world leader in lighting products, systems, and services, with a strong focus on energy-efficient LED and connected technologies, enabling smarter and more efficient use of lighting. This efficiency leads to CO₂ savings, particularly in the product-use phase. Lighting represents a significant portion of global electricity consumption (the United Nations Framework Convention on Climate Change (UNFCCC) estimates that approximately 15% of global power consumption and 5% of worldwide GHG emissions) and replacing energy-inefficient lighting with energy efficient lighting is a low-hanging fruit. Signify was not included in last year's analysis (see pgs. 56–62 of [last year's report](#) and our case study on the *Impacts of scaling scope 1, 2 & 3 emissions in line with revenues covered* for more information).

Fuel cells

The fuel cells sector includes two companies, same as last year – Plug Power and Air Liquide. The former is at the forefront of building the future hydrogen economy through fuel cells, electrolyzers, and an integrated value chain. The latter is an established company with potential to transfer existing know-how to drive growth from emerging hydrogen and carbon capture technologies. Air Liquide is the greatest contributor to the sector's net PAE. In last year's analysis, the company was assessed as emitting more emissions than it avoided. The reason for the stark difference this year is explained by how we scale scope 1, 2 and 3 emissions to reflect the percentage of revenues covered for the product category assessed. Last year, the analysis assumed 100% revenue coverage for a company with high scope 1 and 2 emissions – this means that there was no adjustment. However, this year, the revenues are 1.2%, in line with revenues aligned with the objective of climate change mitigation as per the EU taxonomy. As a result, scope 1, 2 and 3 emissions have been scaled down significantly before they are compared to PAE. Again, this is a consequence of an imperfect approach to tackle the challenges associated with avoided emissions as a metric. Plug Power, however, continues to show net higher emissions emitted than avoided. As in last year's analysis, this is driven by high scope 3 emissions.

Grid

The result for grid is based on one company – Schneider Electric. Schneider Electric plays a key role in electrification. All of its products are covered by the analysis, as self-reported avoided emissions have been used by ISS-ESG as a starting point. In contrast to last year, the result shows potentially more emissions avoided than emitted. Its scope 1, 2 and 3 emissions have increased due to increased scope 3 emissions, however, its total PAE has increased by about 10,000,000 tCO₂e at the same time. This is driven by an increase in products sold year-on-year.

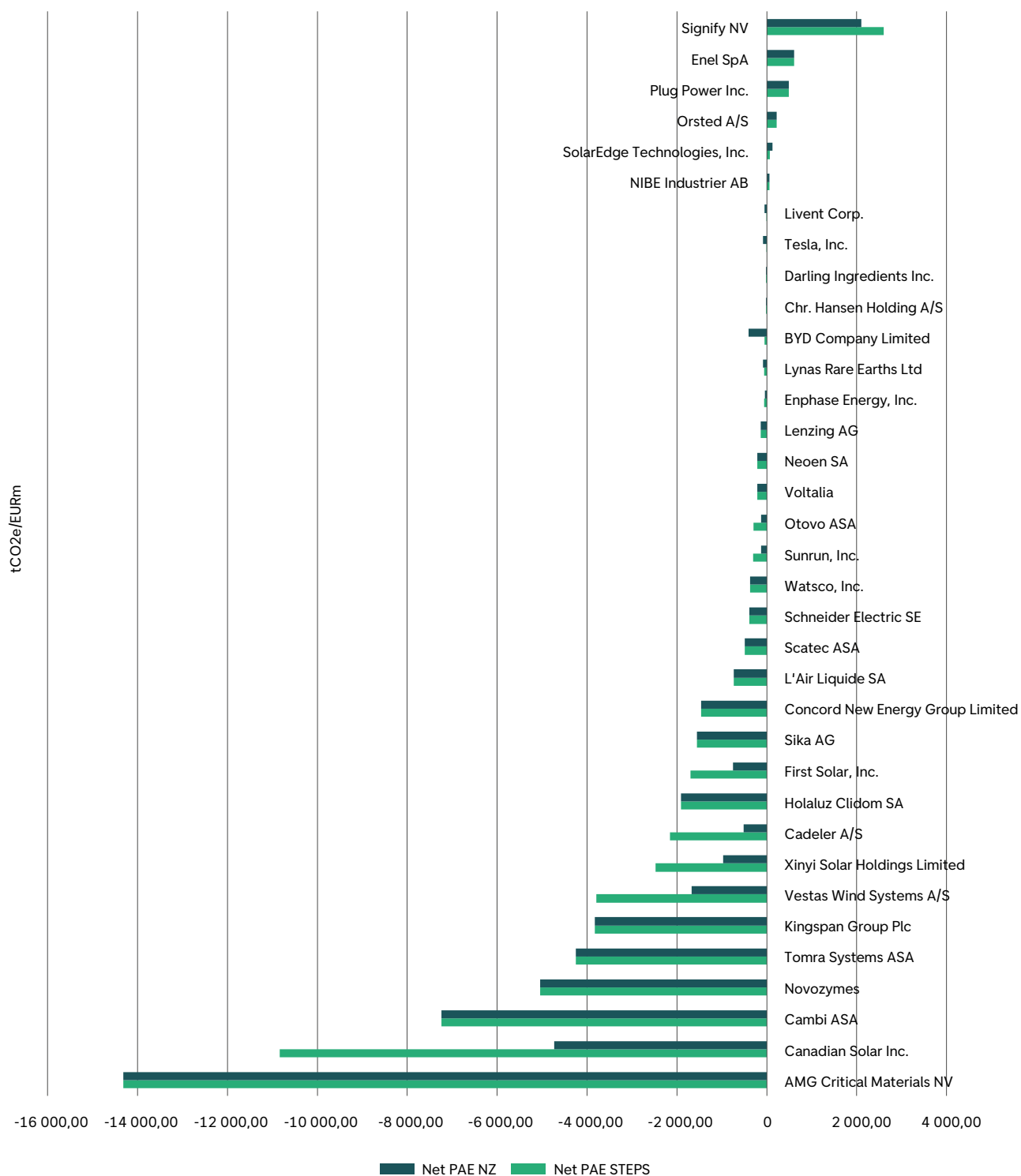
Power storage

The power storage sector includes two companies in this year's analysis – BYD and Tesla. The product category in focus for both is Electric Vehicles (EVs). BYD is the greatest contributor to the sector's net PAE. BYD sold ~3x more EVs in 2022 compared to 2021, hence its avoided emissions increased significantly. For both companies, PAE in the NZ scenario are much higher, as the NZ scenario assumes greater EV adoption.

Other

The sector showing the least net PAE is "other renewables". As in last year's analysis, only one company is included here – Chr. Hansen. The company's bioprotection segment has been analysed. Bioprotection involves the use of natural microbial food cultures to inhibit unwanted contaminants. This helps to prevent food spoilage and enhance food safety. Increased preservation reduces food waste and therefore emissions. We believe that emissions-saving investment opportunities within sustainable food and agriculture will be of increasing importance moving forward given that agriculture and land-use change accounts for approximately 25% of global GHG emissions. However, as demonstrated in the graph above, the net PAE result for the company is low. We estimate that bioprotection accounts for 5% of the company's total revenues. As a result, we believe the estimated PAE to be conservative, as the company has additional emissions-enabling capabilities beyond bioprotection.

Figure 46. Net PAE per company⁴⁸⁾



48) Source: ISS-ESG (with adjustments by DNB AM)

Case study:

Impacts of scaling scope 1, 2 & 3 emissions in line with revenues covered

Why are not 100% of revenues covered?

The PAE assessment considers a single product category per company. This approach is considered best practice today. However, sometimes this results in as little as 1% of company revenues being covered. As the companies often produce several products and services expected to be associated with PAEs, we are likely underestimating companies' full positive impacts. In addition, this means it is nearly impossible, especially as outsiders, to estimate PAEs for companies with tens of thousands of different products sold across the world. See our case study on IMCD on pages 54–55 in [last year's report](#) for more information on this. At portfolio level the analysis covers, on average, 68% of company revenues for the 35 names, with coverage ranging from ~1% to 100%.

Why do we scale emissions?

In order to calculate net PAE, where we compare emissions emitted to emissions potentially avoided, we believe it is fairer to compare as "like for like" as possible. We therefore scale down scope 1, 2 and 3 emissions provided by ISS-ESG in line with the percentage of revenues that the PAE analysis covers per company. Note that this additional analysis we have conducted to understand net PAE is not based on an established methodology. This means that if the PAE calculation covers ~1% of the company, we scale down scope 1, 2 and 3 emissions (which, untouched, cover 100% of the company) down to 1%. In practice, this means we assume that the remaining revenues streams have a similar emissions profile to those covered by the analysis. Our approach is likely to develop over time as best practice changes and if further guidance/data becomes available.

Changes since last year

In previous years, utilities have had 100% PAE coverage and, as such, 100% of their scope 1, 2 and 3 emissions were included in our total carbon intensity figure and compared to PAE in a net PAE calculation. Note that ISS-ESG does not offer bespoke PAE calculations for utilities – it relies on its database ("data desk"), as PAE calculations are easier to standardise and scale up for utilities.

Due to reporting in line with the EU Taxonomy, this coverage has dropped for some of the utilities from 2021 to 2022. The result of this is that their emissions will be scaled down in line with the lower revenue coverage. However, we have overwritten the coverage for Enel and Orsted to 100%

as these companies are associated with higher emissions due to some exposure to coal and natural gas. This override is therefore more conservative, as we do not scale down these emissions, and is consistent with our approach in last year's assessment.

Table 3 Scope 1, 2 & 3 emissions for power generation companies that utilise ISS-ESG's utilities approach⁴⁹⁾

Company	2022		
	Revenue coverage	Scope 1&2 (tCO2e)	Scope 3 (tCO2e)
Concord New Energy Group Limited	79 %	9 252	232 415
Scatec ASA	76 %	3 931	25 163
Enel SpA	100 %*	59 130 000	69 149 891
Orsted A/S	100 %**	2 511 000	18 179 000
Neoen SA	82 %	10 914	116 010
Voltalia	78 %	35 700	345 570

* Overwritten from reported revenues aligned with the EU Taxonomy. The company reports 21.4% of total revenue aligned with the objective of climate change mitigation, however, this does not only include activities related to power generation, but also transmission and distribution, customer services, and e-mobility. ISS-ESG has therefore adjusted the figure to only take into account renewable power generation activities.

** Overwritten from reported revenues aligned with the EU Taxonomy (73%).

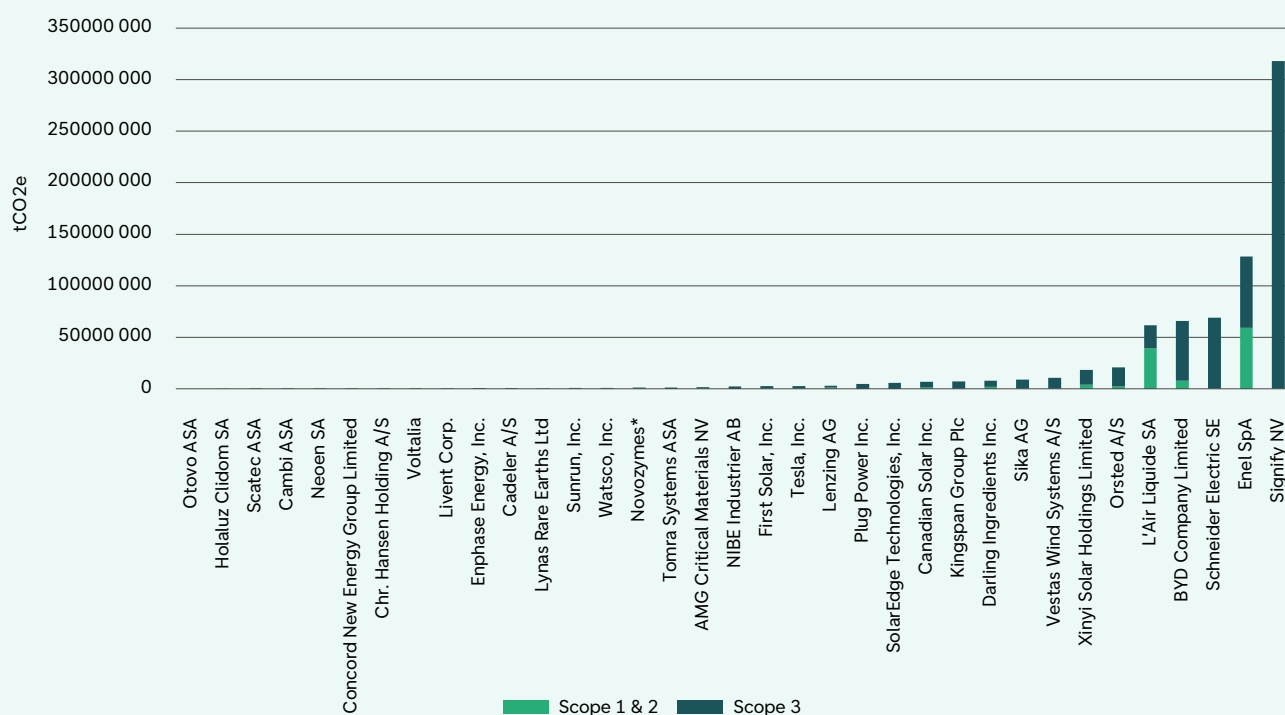
49) Source: ISS-ESG

Another noteworthy change is that Signify's revenue coverage has dropped from 83% in 2021 to 11% in 2022. Last year, the covered product category was LEDs and revenues associated with this were provided by the company. This year connected lighting/smart lighting/LEDs were covered, and the company's EU Taxonomy reporting was used to determine turnover related to these activities. This demonstrates that the LEDs segment is more broad than what is defined as "green" under the EU Taxonomy. In last year's report, we wrote a case study on the challenges related to calculating PAE for Signify and why we chose not to include it on our aggregated results ([pgs. 56–62](#)). We still believe that the avoided emissions methodology is not necessarily adequate in describing Signify's environmental impact, due to the way that its scope 3 use of sold products

are calculated, and how this impacts the company's net PAE result. However, due to the lower revenue coverage and our approach of scaling down scope 1, 2 & 3 emissions, we were able to include the company in this year's aggregated

results as it did not skew the results as dramatically as last year. However, it remains an outlier in terms of total emissions. As shown below, the company's total emissions are almost entirely driven by its scope 3 emissions.

Figure 47 Scope 1, 2 & 3 emissions per company⁵⁰⁾



50) Source: ISS-ESG (* Source: ©2023 MSCI ESG Research LLC. Reproduced by permission)

Implications at portfolio level

The inclusion of Signify in this year's analysis is the main driver of increased scope 3 emissions for the portfolio, and therefore has some impact on net PAE for the portfolio.

Table 4 Impact of including Signify in analysis on emissions and net PAE⁵¹⁾

Emissions	2021 (without Signify)		2022 (with Signify)		Change	
	Scope 1 & 2	Scope 3	Scope 1 & 2	Scope 3	Scope 1 & 2	Scope 3
Energy saving	0.08	3.69	0.65	260.71	713%	6965%
Remaining sectors	53.30	190.10	32.10	136.30	-40%	-28%
Total	53.40	193.80	32.70	397.00	-39%	105%

Net PAE (STEPS)	2021	2022	Change
Energy saving	-70.00	-57.00	19%
Remaining sectors	-891.00	-1,089.00	-22%
Total	-961.00	-1,032.00	-7%

51) Source: ISS-ESG (with adjustments by DNB AM)

METHODOLOGY

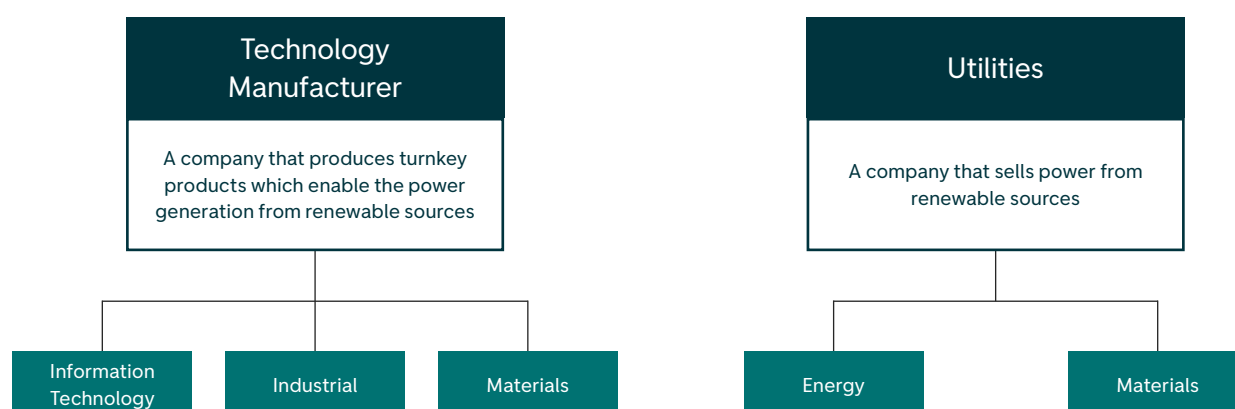
Avoided emissions are “emissions that would have been released if a particular action or intervention had not taken place”. Avoided emissions can appear throughout third parties’ value chains depending on the type of product or service offered and how this product or service affects operations. See example outlined in Figure 39.

To quantify an amount of PAE, a baseline must be established. The baseline describes what would have occurred if the product or service had not been made available. The PAE are obtained from the difference in GHG emissions between the baseline level and the scenario where the product or service is made available.⁵²⁾ The emissions avoided by using a more efficient product or service are often conditional to either consumer or market behaviour, although this analysis does not make absolute predictions about behaviour or market developments. Consequently, ISS-ESG has chosen to use the expression potential avoided emissions to underline that the avoided emissions presented in this report are not assured or verified by a third party and are dependent on certain behaviours. Furthermore, the companies included in this analysis provide popular services with a proven market demand, sometimes using infrastructure that has been in place for over a century. It is therefore difficult to establish additionality. For instance, if one company were to cease operation; it is likely that a company with a similar offering would take its place in the market. Further, the source of finance is arguably primarily driven by market demand and financial opportunity rather than a motivation to support activities with proven climate change mitigating effects. Most stakeholders therefore agree that climate mitigating contributions from products and services that are financed through traditional financial markets may not be additional in that they are already taking place in a business-as-usual scenario.

Nonetheless, this should not discourage investors from assessing positive impact. The products and services that are financed via investments, such as renewable energy or LED lights, are vital to transitioning away from carbon intensive activities. The private sector and investors are therefore expected to play a crucial role in the implementation of the Paris Agreement. The policy environments created by Nationally Determined Contributions (NDCs) are making low-carbon technologies attractive for investors, for example through renewable energy auctions. This encourages the private sector to contribute to reaching climate targets. Evaluating the climate change mitigating effects of an investment is a complex exercise. The methodology provides a simplified approach that can be applied at portfolio level. The methodology focuses on investments involved in the production and/or distribution of renewable energy. With a wide array of actors ranging from component manufacturers and material suppliers to wholly integrated manufacturers, project developers and operators to utility providers, the renewable energy sector is highly diverse. ISS-ESG defines two primary groups within this (see Figure 48): renewable energy technology manufacturers and utilities.

52) CDP, Technical note: Glossary terms.

Figure 48 ISS-ESG defines two primary products within the renewable energy sector⁵³⁾



53) Source: ISS-ESG

SHORTCOMINGS OF POTENTIAL AVOIDED EMISSIONS ANALYSIS

Our assessment of the shortcomings of the PAE analysis can be found in their entirety in [our 2020 report](#). Here we summarise the main points:

- **Double counting:** in an interlinked society with complex value chains, it is nearly impossible to completely exclude double counting.
- PAE assessment only considers a **single product category per company**: Sometimes as little as ~1% of company revenues have been covered by the assessment. Though this approach is considered best-practice today, we believe that the final result is highly conservative.
- The results rely on the **quality of available data**: we note a substantial difference in the quality and volume in company responses. For companies that were not able to provide data but whose offering enables PAEs, generic data has been used. In some cases, the calculations are based on generic estimates.
- **Calculations are based on backward-looking data:** Investors invest based on the prospect of what companies will deliver in the future.
- **Conservative assumptions:** For instance, the lifetime assumption of an asset is a key consideration. If we change the assumption around the number of years a solar park will be in operation in our discounted cash flow analysis, it will yield different results. For many of the products we have used conservative lifetime assumptions while, in reality, they will be in operation longer, thereby saving more emissions.
- **Determining the baseline:** The baseline itself introduces uncertainty. For instance, for the power generation sector, the local grid emission factor can vary substantially between regions. In practice, it is also difficult to obtain accurate data. The calculation for the baseline comparison is therefore based more on high-level and readily available data.
- **Additionality:** It is difficult to establish additionality.

8 Appendix

8.1 Exclusion criteria

The fund applies several layers of exclusion criteria:

Excludes	Based on
Companies found to be in breach of:	DNB's Instruction for Responsible Investments
→ Production-based criteria (tobacco, pornography, cannabis for recreational use, and/or controversial weapons)	
→ International norms and standards	
Companies with >5% of revenues from:	Additional exclusion criteria defined by DNB AM
→ Alcohol production	
→ Gambling	
→ Conventional weapons	
Companies with >5% of revenues from:	FNG Label
→ Manufacturers that mine uranium	
→ Companies that base their electricity generation on nuclear energy	
→ Operators of nuclear power plants and manufacturers of essential components for nuclear power plants	
→ Companies which use and/or produce hydraulic fracking technologies	
→ Manufacturers of conventional weapons	
→ Coal mining companies*	
→ Companies which base their power production on coal energy*	
→ Companies which exploit and/or concentrate oil sands*	

* Stricter threshold than in DNB's Instruction for Responsible Investments

8.2 Disclaimers

MSCI ESG RESEARCH LLC

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

DNB DISCLAIMER

This report is based on analysis conducted by DNB Asset Management AS, a fund management company within the DNB Group. The report is based on sources which have been assessed as reliable, but DNB Asset Management AS cannot guarantee that the information obtained from these sources is precise or complete. Statements in the report reflect DNB Asset Management AS's opinion at the time the report was published, and DNB Asset Management AS reserves the right to change its opinion without notice. The report should not be interpreted as an offer to buy or sell our funds, any security or any other instrument or as a recommended investment strategy. DNB Asset Management AS accepts no responsibility for direct or indirect losses should the report be used to make investment decisions

FNG LABEL

The FNG-Label is the quality standard for sustainable investments on the German-speaking financial market. It was launched in 2015 after a three-year development process involving key stakeholders. The sustainability certification must be renewed annually.

The FNG-Label gives the German-speaking countries a quality standard for sustainable mutual funds. The holistic methodology of the FNG-Label is based on a minimum standard. This includes transparency criteria and the consideration of labour & human rights, environmental protection and anti-corruption as summarised in the globally recognised UN Global Compact. In addition, all companies in the respective fund must be explicitly analysed in terms of sustainability criteria. Investments in nuclear power, coal mining, significant coal-fired power generation, fracking, oil sands, weapons and armaments are taboo.

High-quality sustainability funds that excel in the areas of "institutional credibility", "product standards" and "impact" (title selection, engagement and KPIs) are awarded up to three stars. The FNG-Label goes far beyond a mere portfolio assessment and is holistic and meaningful. With more than 80 questions, the Label analyses and evaluates, for example, the sustainable investment style, the associated investment process, the associated ESG research capacities and a possibly accompanying engagement process. In addition, elements such as reporting, the investment company as such, an external sustainability advisory board and issues of good corporate governance play an important role.

The auditor of the FNG-Label is the University of Hamburg. The Qualitätssicherungsgesellschaft Nachhaltiger Geldanlagen (QNG) bears overall responsibility, especially for coordination, awarding and marketing. An independent committee with interdisciplinary expertise also accompanies the audit process. The FNG-Label has been awarded the title "highly recommended" by the consumer portal www.label-online.de and has been added to the shopping basket of the German Council for Sustainable Development. The EU, together with the other national, governmental label systems, has also invited it to join a working group within the framework of the EU Action Plan for financing sustainable growth.

Detailed information on the methodology can be found in the [rules of procedure](#).

Further information on the FNG-Label: www.fng-siegel.org.



DNB Asset Management AS**Mailing address:**

P.O.Box 1600 Sentrum
N-0021 Oslo

Visiting address:

Dronning Eufemias gate 30
Bjørvika, Oslo

dnb.no