

Ferd Impact Investing Impact Report 2023



A welcome note from Team Impact

The consequences of decades of excessive pollution is dawning upon us. During the summer of 2023 we have experienced more storms, heavy rains and flooding than ever before – the climate change should be apparent even to the skeptics.

The global mean temperature for 2023 to date (Jan-Sept) is 1.4 degrees higher than the pre-industrial average¹. According to UN secretary General António Guterres, we are no longer talking about global warming, but global boiling².

Fortunately, the majority of the world's largest economies have set a goal of net zero emissions by 2050, which is estimated to limit global warming to only 1.5 degrees. The journey to a low-emission society requires a huge restructuring of all sectors of the economy.

Unfortunately, we are not in a very good position; according to the IPCC, annual climate investments must be increased sixfold compared to the current level if we are to achieve the goal of limiting warming to 1.5 degrees³. According to the IEA, 35% of emission reductions by 2050 need to come from new technologies⁴.

Ferd Impact Investing invests in solutions to the climate and environmental challenges we face. We want to play a

role and we see great opportunities in the transition. We see no contradiction between our goal of creating a positive climate and environmental impact, and our goal of achieving a market-based financial return.

We invest in seed, venture and growth stage climate impact funds in Europe and North America. We also actively co-invest with our fund managers in some of their portfolio companies.

And what could be more motivating than working in the climate tech space? We get to work with some of the most significant problems the world is facing and interact with all of the brilliant entrepreneurs and managers that try to solve it. Hopefully, we can move the needle in the right direction for future generations. And we get to do it in a great team, in a company with and for visionary owners with sustainability top of mind.

We are proud to release our second annual impact report. We use it to showcase what we have been up to the past year and to highlight the great achievements of our fund managers and portfolio companies.

Enjoy the reading!

Kathrine Erik Anniken



Ferd Impact Investing is one of two impact mandates in Ferd

Sustainability is a natural part of Ferd's vision and characterizes how Ferd develops as an owner, investor and social actor.

Ferd is a family-owned investment company owned by the fifth and sixth generation of the Andresen family.

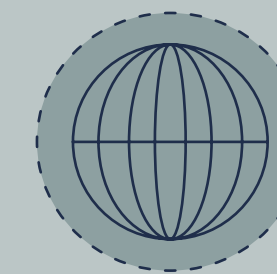
Our investment company is called Ferd ('journey') because, in the true sense of the word, it represents a 'travel without an end'.

The company's vision is to create enduring value and leave clear footprints. This brings the challenge of creating a return from multiple perspectives – not just from a financial perspective – and describes what all of us at Ferd strive to achieve.

Ferd's wide-ranging activities encompass active ownership and corporate development at private and listed companies, investment in financial assets, real estate development, investment via external managers, impact investing and social entrepreneurship.

Impact in Ferd

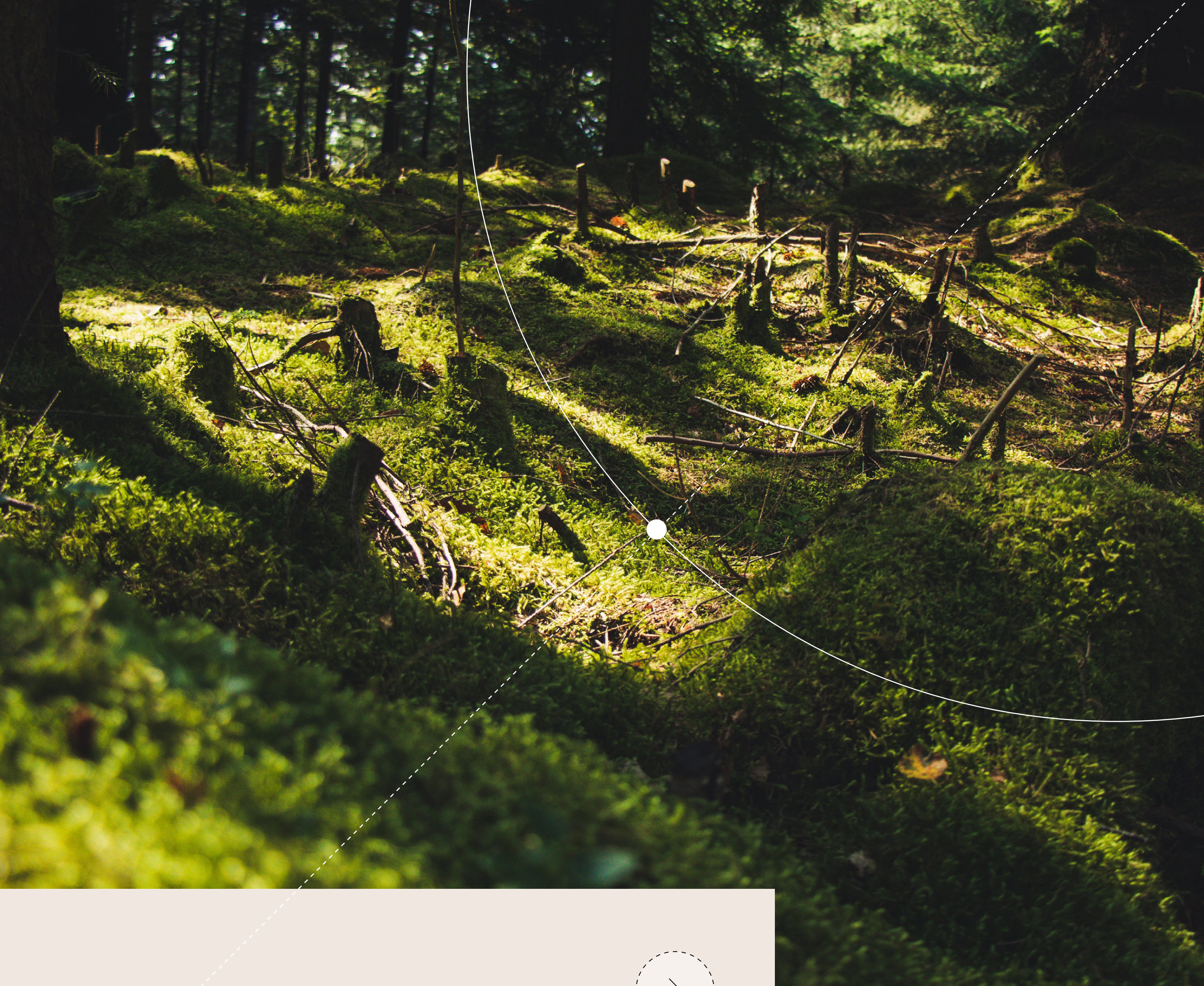
Ferd's business areas have different impact, risk and return expectations. Two out of five business areas have explicit impact mandates. It means that they have the intension to create positive, measurable social or environmental impact, alongside financial returns. These two business areas also play an important role for the rest of the company through strengthening the knowledge and attention to impact across the whole portfolio.



Ferd Impact Investing was established in 2019 to invest in early-phase companies with the potential to have a positive impact on the **climate and environment** and to generate a robust risk-adjusted financial return.

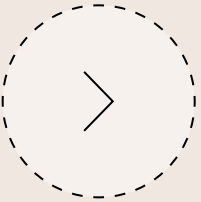


Ferd Social Entrepreneurs was established in 2009 to create social impact. They invest in companies that create new solutions to **social problems** and contributes to broadening the companies' market potential.



Contents

1. Introduction	5
2. Our impact approach	10
3. Impact highlights across our portfolio	14
4. Selected case studies	20



Chapter 1: Introduction



Ferd Impact Investing in a nutshell

(as of Q2 2023)



24

investments

11 funds

13 portfolio companies



Global footprint

We are directly and indirectly invested in **20 countries** across **5 continents**



100% of our funds
69 % of our companies

report on impact KPIs



Impact highlights

740k tons
of CO₂ equivalents abated

2.5k tonnes
adjusted for ownership

138 GWh
energy produced

15 GWh
adjusted for ownership



We have invested and committed

~MNOK 850

70 % increase YoY

Our investments mainly
contribute to the following
**UN Sustainable
Development Goals:**



Our investment areas



Energy transition

The global energy sector must transition from fossil-based to zero-carbon by the second half of this century. We invest in new technologies and business models to achieve this target.



Sustainable cities

A sustainable city is engineered to improve its environmental impact. We invest in sectors that require systemic changes if we are to make our cities greener, such as construction and real estate, mobility, waste management and our food systems.



Ocean

The ocean is the heart and lungs of our planet. Yet, the ocean faces existential threats through overfishing, pollution and climate change. We invest in solutions to save our oceans and secure more sustainable aquaculture solutions.































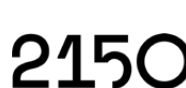











































Broad climate impact


We also invest in funds and companies outside our three investment areas, as long as they have a significant environmental or climate impact potential.





We have a growing portfolio of funds that matches our sector focus

Fund investments				About		Offices	
					Fund IV	Ecosystem Integrity Fund is an early growth stage investor in companies contributing to environmental sustainability within renewable energy, energy transition, waste reduction and transport.	
					Fund III	ArcTern Ventures invests globally in earth-tech companies: technology companies solving climate change and sustainability related issues.	  
					Fund II	Momentum is a Bergen-based venture fund that invests in sustainable, innovative and ambitious companies in an early growth phase.	
					Fund I, II	Invests in seed-stage climate tech startups that reduce and reverse the climate crisis and help us prepare for a new world.	
					Fund I	2150 is a venture capital firm investing in technology companies that seek to sustainably reimagine and reshape the urban environment and enable a sustainable and scalable future of mass urbanisation.	 
					Fund I	Swen Blue Ocean is an impact fund investing in innovations that help regenerate ocean health, hence contributing to achieving SDG14.	
					Fund II, III, IV	Startuplab is an incubator and early-stage investor for Norway’s most ambitious technology startups.	
					Nordic Fund II	Antler Nordics is the Nordic part of Antler, the world’s largest early-stage investment platform. Invests in pre-seed/early-stage fast-growing Nordic tech startups with focus on impact and ‘planet positive’ companies	   
					Partnership	Arkwright X Investment Family (AXIF) is an Oslo-based club deal structure. AXIF invests in early-stage B2B tech companies with attractive business models and and the potential to positively impact the UN SDGs.	
					Partnership	Dovetail is an investment company that focuses on tech-enabled products and services.	
					Infrastructure	NeXtWind is building a portfolio of onshore wind energy assets in Germany, with the ambition to either replace the old wind turbines with new and more efficient turbines (repowering) or to increase the lifetime of the existing turbines (life extension).**	

*New investments since last report
**Was exited August 2023










































































 Energy transition

 Sustainable cities

 Ocean


 Broad climate impact

Our portfolio companies are mainly co-investments with our fund managers

	Fund investments	Co invested with	About	Offices
	    		Shoreline is a Stavanger-based enterprise SaaS company for the wind industry. The company provides intelligent simulation and optimisation solutions for project development and field operations management for wind energy assets.	
	    	✂ Dovetail	360 Logistics is a third-party logistics provider focusing on efficient and sustainable last-mile delivery.	
*	    	Arkwright ✂	Kvist Solutions develops a software platform to enable environmental certification of buildings. Their goal is to make it easier and more efficient to build sustainable and environmentally friendly, facilitating more ambitious sustainability targets.	
*	    	✂ Dovetail	Ditio provides software tools to capture essential data insight within the civil construction industry, including time and resource tracking, QA documentation and mass haul operations - enabling optimized operations from both an economic and environmental perspective.	
	    	momentum*	Blue Ocean Technology (BOT) produces compact, efficient systems for handling sludge in aquaculture. The BOT investment is made through Ferd Capital's portfolio company Broodstock Capital.	
	    	Arkwright ✂	Ignite provides solutions for every aspect of strategic procurement. Embedded in the system is an easy way of collecting qualitative information about sustainability, certifications and performance from suppliers and thereby enabling green procurement.	
*	    	momentum*	Nofence is the world's first virtual fencing system for grazing animals and ensures better utilization of pastures, which enables regenerative agricultural practices ultimately improving soil carbon, rainfall infiltration and soil fertility.	
	    		Seagust will harness the offshore wind to further develop renewable energy and build a stronger Norwegian supplier industry.	
	    		Wind Catching Systems (WCS) develops a disruptive concept for offshore floating wind energy, with a potential to produce green electricity at a significantly lower LCOE than other floating wind technologies and in a smaller area.	
*	    		Disruptive Technologies develops wireless sensors and IoT infrastructure making buildings more intelligent and sustainable.**	
*	    		Brim Explorer designs, builds, owns and operates electric and hybrid electric ships along the Norwegian coast and in Oslo. They offer unique and sustainable experiences to their passengers with their innovative design with minimal impact on climate and the environment.**	
	    		Antler is the world's largest early-stage investment platform, investing in skilled and visionary people worldwide. Antler's portfolio companies solve genuine challenges and create sustainable value that makes the world a better place.	

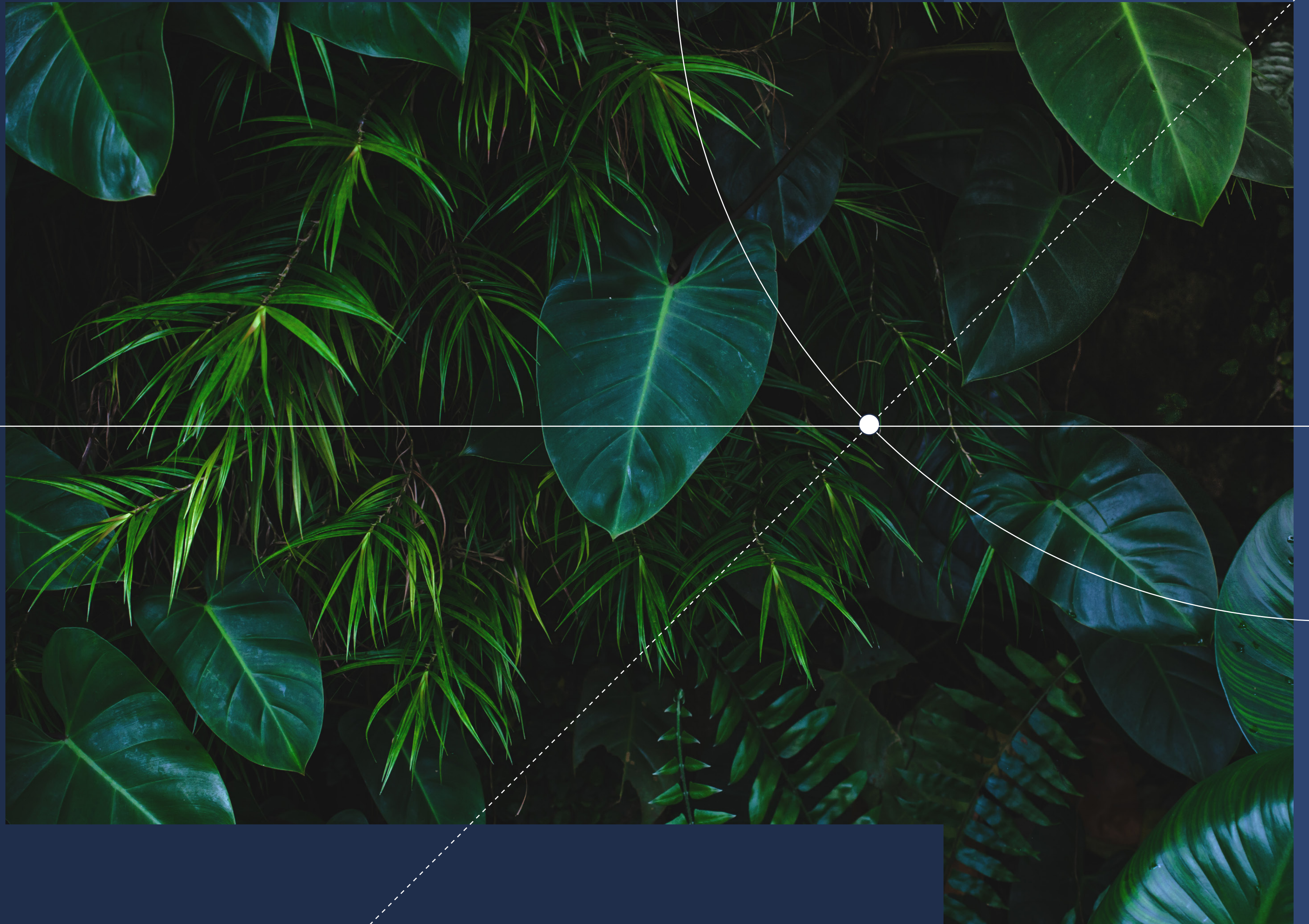
*New investments since last report

**Was transferred from Ferd Capital 1 January 2023

 Energy transition Sustainable cities Ocean Broad climate impact

FERD

Chapter 2: Our impact approach



Impact ≠ ESG

We see ESG and Impact as two distinct terms and focus areas when investing.



ESG focuses on the operational side of a company. Evaluating ESG during a due diligence involves understanding a company's environmental, social and governance risks and practices.



Impact is a change in an outcome caused by a company's products and/or services. To be regarded as an impact company, there must be an intention to generate positive, measurable environmental contribution alongside financial return*.



There are two pathways to impact** and we invest in both

Direct impact

Impact is created as a direct consequence of engaging with a product or service.

Example: [Wind Catching Systems \(WCS\)](#) develops a disruptive concept for offshore floating wind energy, with a potential to produce green electricity at a significantly lower cost (LCOE) than other floating wind technologies.

Indirect or enabling impact

Impact enabled further down the value chain. It can be an enabling technology that creates conditions for other technologies, sectors or industries to reach impact at greater scale.

Example: [Shoreline](#), our co-investment with [Ecosystem Integrity Fund](#), provides intelligent simulation and optimization solutions for project development and field operations management for wind energy assets. Thereby it is an enabler for more efficient deployment of renewable energy.

* Definitions according to Impact VC, established in 2023 by VCs backing startups that are building a better world for people and planet. It consists of over 160 community members from 120 top-tier VCs, including our fund managers 2150 and Antler. <https://www.impactvc.co/>

**Inspired by ImpactVC community as well as Swedish National Board for Impact Investing <https://www.swedishnab.se>

We use our impact lenses throughout the investment cycle

Investment strategy

We identify funds and companies within our three core areas with a significant environmental or climate impact potential.

To identify opportunities, we spend a lot of time staying up to date through newsletters and research. We also participate in climate-related events and prioritize introductory meetings with both emerging and established fund managers.

We are continuously working to be an active impact investor in order to gain access to attractive investment opportunities.

Our investment areas

Sustainable cities

A sustainable city is engineered to improve its environmental impact. We invest in sectors that require systemic changes if we are to make our cities greener, such as construction and real estate, mobility, waste management and our food systems.

Ocean

The ocean is planet. Yet, threats to the ocean and climate solutions are more subtle.

Screening and due diligence

Impact is one of our key investment criteria when we screen investment opportunities and perform our due diligence.

For funds and companies, respectively, we have developed impact scorecards, inspired by approaches used by other renowned impact investors and internationally recognised frameworks.

We evaluate whether there is a match between the investment opportunities and our investment strategy and whether there is enough impact potential for us to invest.

Active ownership/ reporting

We require all our funds and companies to report on impact. The level of reporting among funds and companies in the portfolio varies, and for those that have a less mature approach to impact reporting, we encourage and assist in the further development of this.

We aggregate and summarize results from the portfolio in our annual impact report, which was published for the first time in 2022.

Since 2023 we also report on CO₂ emissions across the portfolio.

We do not require our investments to be SFDR Article 9 compliant as we acknowledge that especially the reporting requirements are early-stage companies*.

*Sustainable Finance Disclosure Regulation ("SFDR"). An Article 9 Fund under SFDR is defined as "a Fund that has sustainable investment as its objective or a reduction in carbon emissions as its objective." There are certain reporting barriers to be Article 9 compliant making it especially difficult for early-stage funds

We hereby share our scorecards for assessing impact

Like many of our friends in the VC ecosystem we believe in transparency and sharing. Impact is one of several assessment criteria when investing, and we use these impact scorecards to assess whether an investment opportunity have «enough» impact for us to invest.

We have been inspired by among others Impact Frontiers, Carbon Equity and ETF Partners when developing these – while adding a bit of Ferd flare to them.

The foundation of our scorecards are in line with the five dimentions of impact defined by Impact Frontiers⁵ (formerly Impact Management Project), in identifying the positive and negative impacts that an enterprise has on people and the planet*.

We continuously develop these scorecards to reflect the ever-changing landscape we are operating in. For example, this year we have incorporated ESG further in our scorecards – whether funds and companies have sufficient ESG policies in place and whether potential negative harm is evaluated.

*Impact Frontiers defines five dimensions of impact. In our company impact scorecard Alignment with frame-works=WHAT; Impact Potential and Scalability=WHO and CONTRIBUTION; Impact KPIs = HOW MUCH; Impact risk=RISK

Impact approach

Fund impact scorecard

Assessment
1 2 3 4
Weak Strong

Theme	Topic	Key question	Score	Comment
Mandate	Investment mandate & strategy	Does the fund formally commit to target investments that contribute to solve climate and/or environmental challenges?		
Team	Impact expertise	Does the team have experience with impact investing? Do they understand what it takes to get net zero?		
	Impact ownership	Is it clear who owns and improves the fund's impact strategy? Dedicated person(s)?		
Investment process	Deal sourcing	Does the fund have a strategy for how to find the most impactful deals?		
	Impact quantification	Does the fund quantify the impact potential of each deal?		
	Deal selection	Is there a clear process or criterium for what is 'enough' impact?		
Impact management	Impact governance	Will the fund monitor and help communicate and improve each company's impact?		
	Impact scaling	How is the fund's ability to support each portfolio company in achieving scale?		
Measurement and reporting	Impact reporting	Does the fund publish an (annual) impact report?		
	ESG / 'do no harm'	Does the fund assess ESG related aspects, incl. carbon emissions?		
Impact trust-worthiness	Investments so far	Do we in Ferd believe the fund's investments so far are truly impactful?		
	Incentives	Are the managers' financial incentives linked to impact?		
	Thought leadership	To what extent are the managers contributing to driving the climate tech community, develop knowledge and attract capital		

FERD

Impact approach

Company impact scorecard

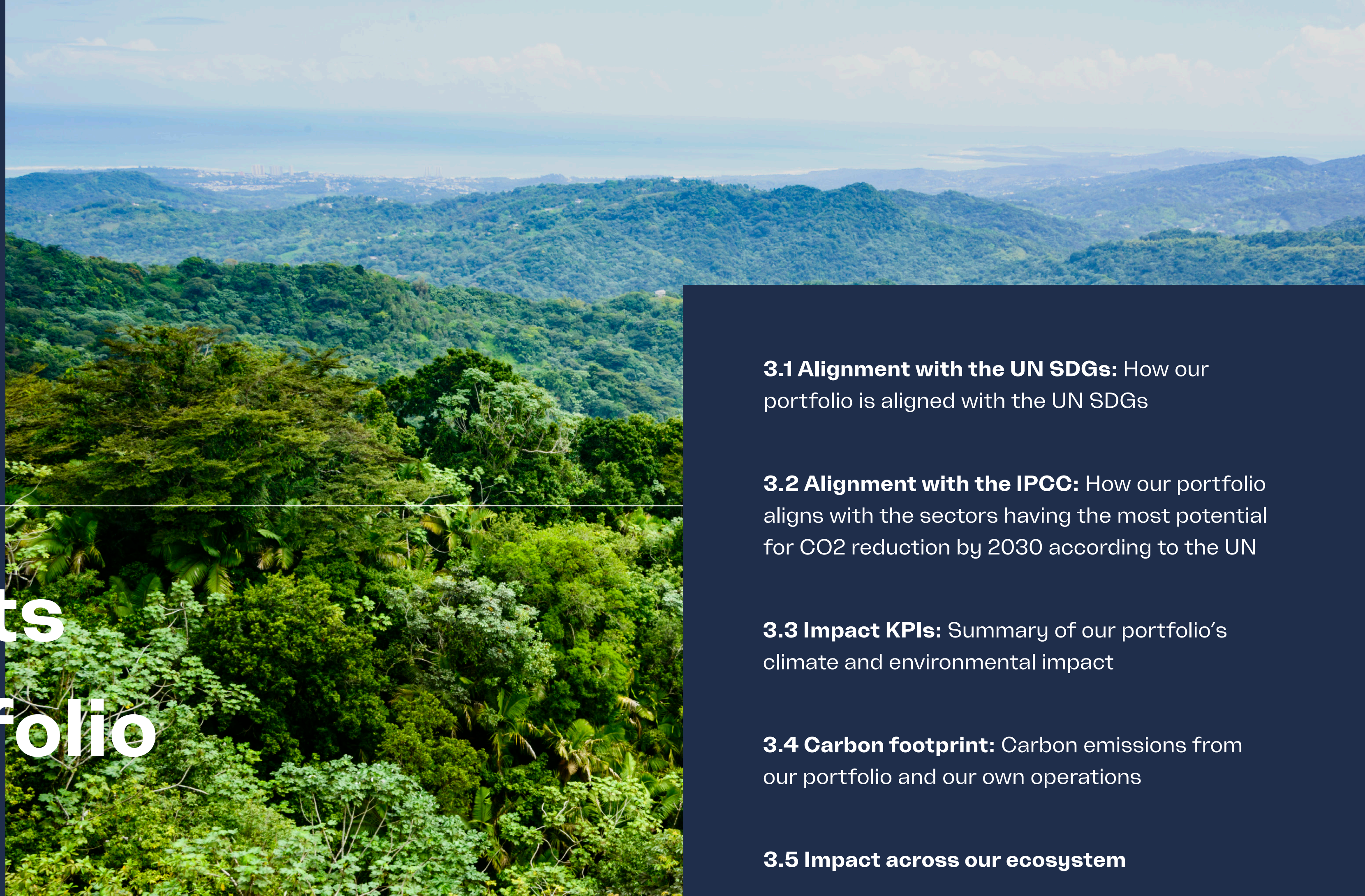
Assessment
1 2 3 4
Weak Strong

Theme	Topic	Question	Score	Comments
SDGs	UN SDG	How does the company align with UN SDGs (max 3)?		<div>Insert SDGs</div> <div>Insert SDGs</div> <div>To be aligned with an SDG it must be align with specific sub targets</div>
	IPCC	How does the company align with the sectors having most potential for CO2 reduction by 2030 according to the UN?		
Impact potential and scalability	Size of problem solved	To what extent does the company solve a significant share of a big environmental problem?		
	Degree of innovation	How would you consider the degree of innovation of the company's solution?		From (1) 'A solution with further improvement potential' to (4) 'A disruptive solution defining a new sector in its' industry'
	Global potential	What is the company's potential to commercialize its solution on a global scale?		
	Demographic coverage	What is the company's potential to positively impact people across multiple / all demographics?		
Impact risk	Impact maturity	What is the maturity (impact risk) of the company's solution?		(1) Concept / early development stage, (2) Development (almost done, ready for commercialization, (3) Product for sale, early commercial stage, (4) Selling proven product, in several countries
	ESG risk	What is the level of the company's maturity when it comes to ESG ('do no harm')		
Impact KPIs	Relevance	To what extent is the company able to quantify and measure the impact created?		
	Development	How has the impact KPI development been?		

Chapter 3:

Impact highlights

across our portfolio



3.1 Alignment with the UN SDGs: How our portfolio is aligned with the UN SDGs

3.2 Alignment with the IPCC: How our portfolio aligns with the sectors having the most potential for CO2 reduction by 2030 according to the UN

3.3 Impact KPIs: Summary of our portfolio's climate and environmental impact

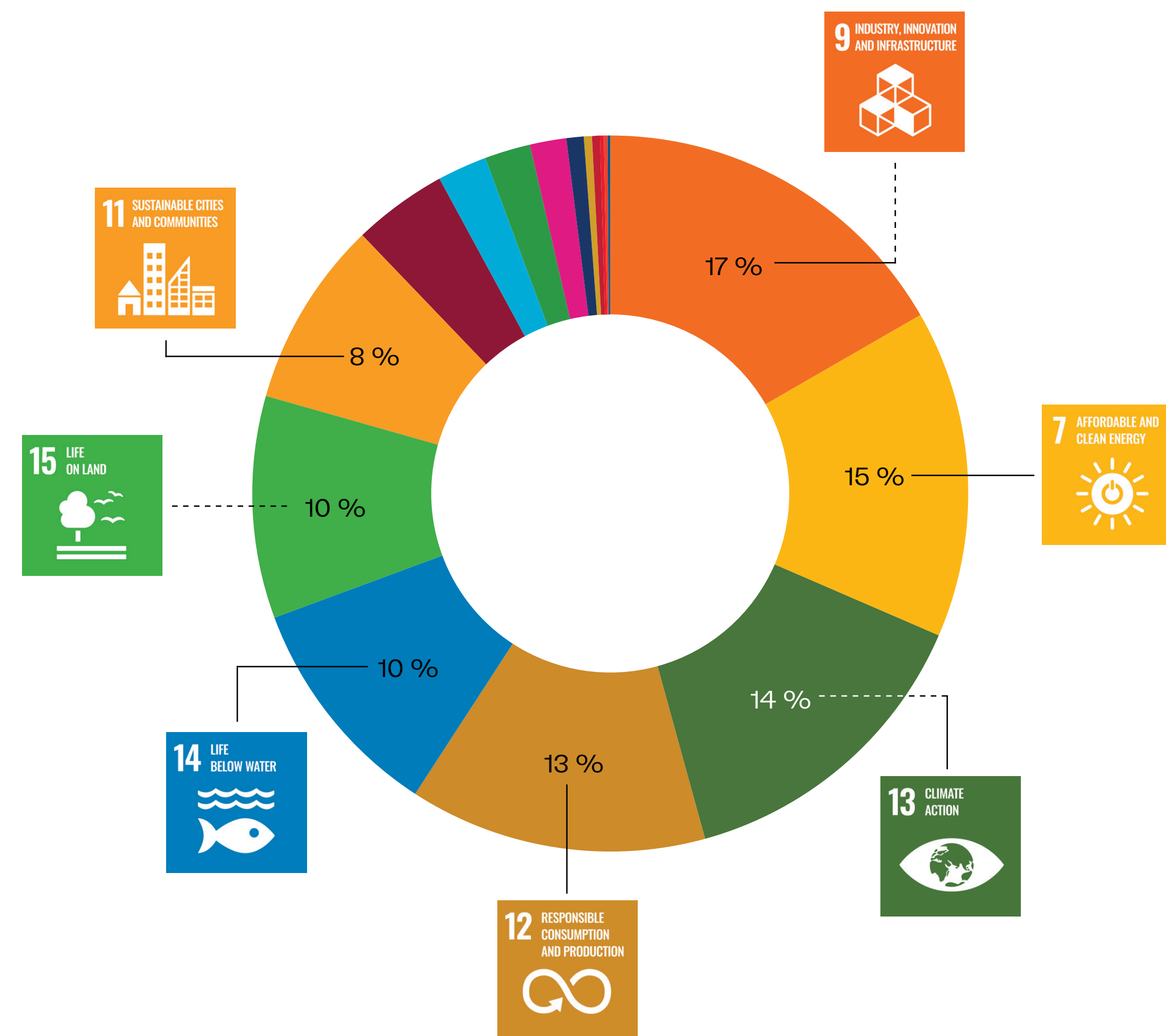
3.4 Carbon footprint: Carbon emissions from our portfolio and our own operations

3.5 Impact across our ecosystem

All of our top 7 SDGs have a strong climate and environmental impact

The chart to the right shows how Ferd Impact Investing's portfolio targets the different sustainable development goals when taking into account invested and committed capital.

7 of the SDGs stand for more than 88% of the value weighted distribution
– up from 85% since last year



84% of our value-weighted portfolio contribute to key emission reduction areas identified by the IPCC

UN’s Intergovernmental Panel on Climate Change (IPCC) prepares comprehensive reports about the state of climate change, its impacts and future risks.

We regard the IPCC reports as research-based guidelines to reach sufficient emission reductions in different sectors.

The graph to the right shows how Ferd Impact Investing’s portfolio is contributing to the CO2 emission reduction potential identified by the IPCC⁶. This is the second year tracking our portfolio’s sector contribution. We use this to be aware of the match (and mismatch) between the sources of global emissions reduction potential and our portfolio.

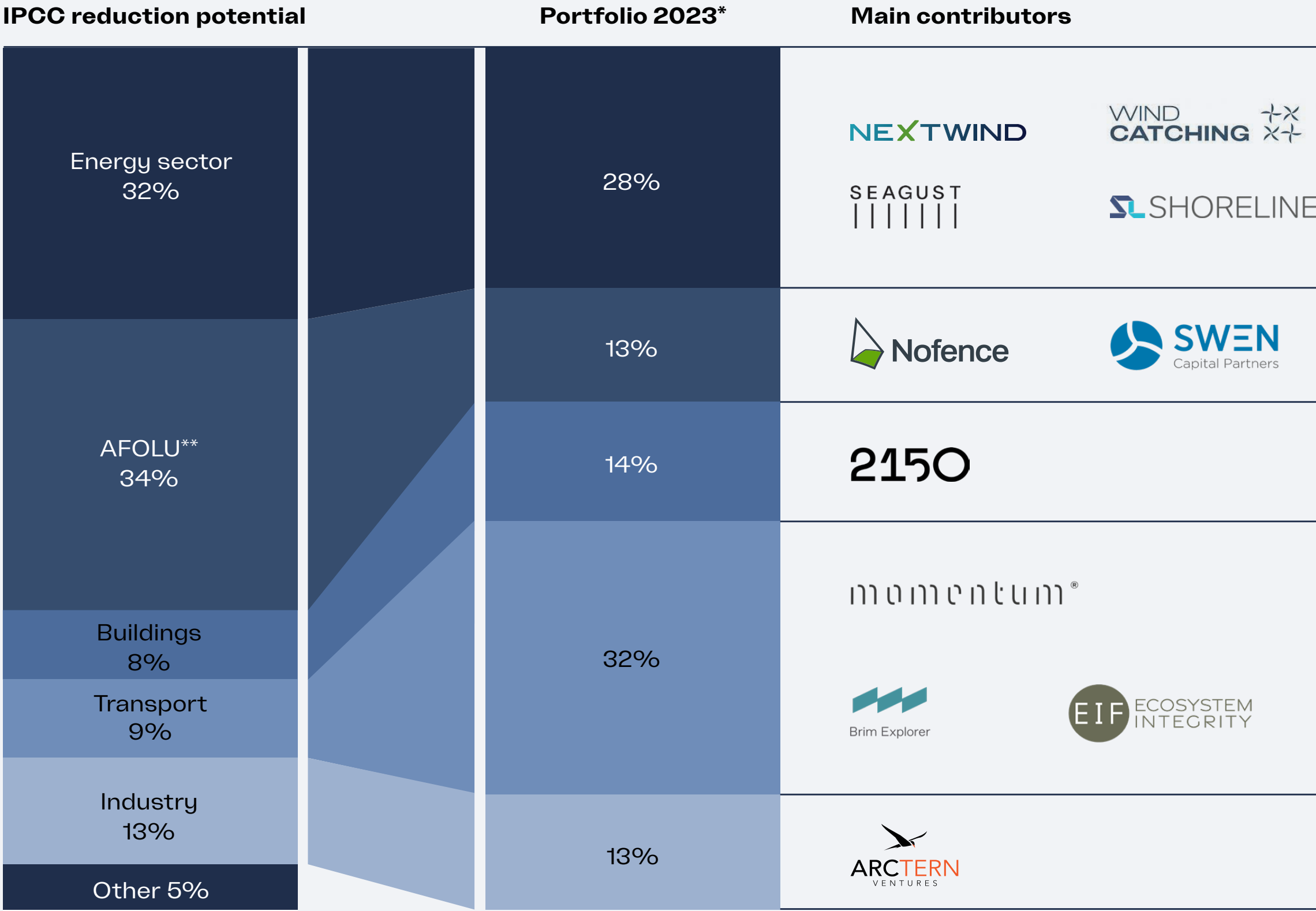
Climate investments must be increased sixfold compared to the current level if we are to achieve the goal of limiting warming to 1.5 degrees³

We regard our portfolio as a quite typical climate-tech early-stage portfolio with over-allocation to transport and under-allocation to agriculture, forestry and land-use (AFOLU)^{***}

* We have allocated our fund commitments to each sector based on the current portfolio of each fund


** AFOLU: Agriculture, Forestry and Other Land Use

***As described in [PWC's State of Climate Tech 2023](#)




Aggregated impact

740k tonnes CO2e abated ↑150% YoY

 equivalent to more than 160,000 cars removed from roads⁷

2.5k tonnes CO2e ownership adjusted

138 GWh energy produced ↑66% YoY

 equivalent to the annual electricity consumption of 23,000 German inhabitants⁸






15 GWh ownership adjusted



100% of our funds
69 % of our companies
report on impact KPIs.



Other selected impact highlights from portfolio*

	Imact metric	2021	2022	% growth
 <small>EIF ECOSYSTEM INTEGRITY</small>	Reduction in waste (thousand lbs)	845	1,200	42%
 <small>Nofence</small>	Accumulated km2 grazed	6,100	20,000	228%
 <small>Brim Explorer</small>	# guests experiencing the fjords and the Arctic in a sustainable way	11,500	36,000	213%
 <small>SHORELINE</small>	gW constructed wind projects in software		12	
 <small>SWEN Capital Partners</small>	Plastic diverted from landfill or nature (tonnes)		6	
	Biomass preserved or restored (tonnes)		15	

*Not adjusted for percentage ownership

Carbon footprint

In 2023 we started measuring the negative impact of our investments' operations, through scope 1-3 emissions.

We believe that scope 1-3 reporting requirements will inevitably hit the portfolio companies, so starting early will help prepare for what is coming, as well as improve the measurement approach and operational footprint over time.

Some of our funds and portfolio companies already track their emissions, but for those that are new to this, we have developed an excel spreadsheet to enable them to calculate their carbon footprint for the first time.

*Includes operational emissions from 90% of companies and funds in portfolio as of 31 Dec 22. It also includes Scope 3 Category 15 financed emissions from 2 funds in portfolio, i.e. portfolio companies' emissions. Note that we do not require funds to report on their portfolio companies' emissions, but we see an increased focus on it.

**Operational footprint for the Ferd Impact Investing team excluding Scope 3 Category 15 financed emissions. Calculation made in [Ignite's](#) carbon accounting module

Portfolio footprint 2022*

Total emitted
(tonnes CO₂e):

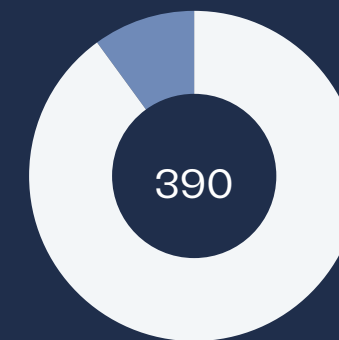
4,026

Ownership adjusted: 165

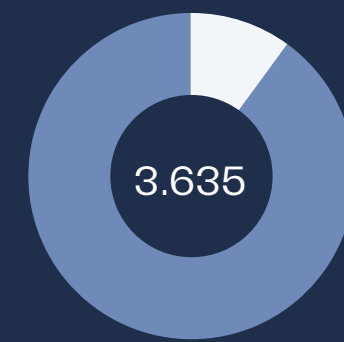
Scope 1: 0%



Scope 2: 10%



Scope 3: 90%



Share of portfolio reporting:

90%

Total portfolio footprint is equivalent to



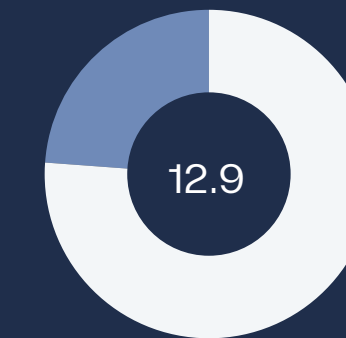
13,000 round trips Oslo-London⁹

Our own operational footprint 2022**

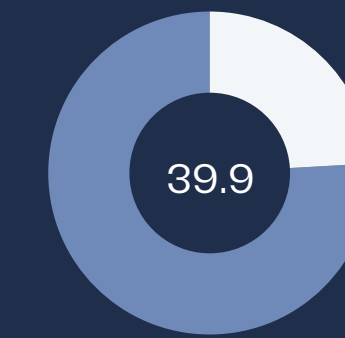
Total emitted
(tonnes CO₂e):

52.8

Scope 2: 24%



Scope 3: 76%



Scope 3 emissions:



Purchased goods and services (92%)
Business travel (8%)

CO₂ intensity
per employee:

17.6

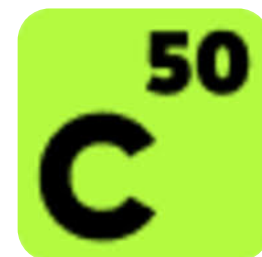
Operational footprint is
equivalent to



175 round trips Oslo-London⁹

Impact across our ecosystem

Many of our fund managers provide impact beyond the realized results of their portfolio companies. Through being thought-leaders, sharing knowledge and community building, we believe they can contribute to more capital being invested in solving the climate crisis.



To accelerate PE & VC finance in climate and sustainability, our fund manager 2150 co-founded Climate50 that develops an annual list recognizing the most impactful VCs around the world.



2030 is a program by Startuplab focusing on new technological solutions to address the climate crisis, and brilliant cleantech startups are answering the call.



2150 and Antler are supporters of Impact VC, established in 2023 by VCs backing startups that are building a better world for people and planet. The goal is to accelerate impact within venture and provides the community and resources to do this.



SWEN Blue Ocean has contributed to the development of the Ocean Impact Navigator, developed by 1000 Ocean Startups. It is an open-source impact KPI framework, designed to simplify, harmonize and strengthen impact measurement and reporting for the Ocean Impact Innovation ecosystem.



Pale Blue Dot has co-created the Drop. It is Europe's leading Climate Tech event, designed for people who want to meet and learn from the founders, investors and climate experts who are driving solutions to the climate crisis forward.



The Norwegian National Advisory Board for Impact Investing (NorNAB) is a newly established association, founded and backed by Ferd along with other key ecosystem players. The association's primary purpose is to increase capital flow to impact investments, thereby contributing to the achievement of the sustainability goals.



Many of our fund managers are though leaders in the impact space and openly share their climate research and insights, including 2150, Pale Blue Dot and ArcTern.

Chapter 4: Selected case studies





Co-invested with Arkwright X
Investment Family

Oslo, Norway



<https://kvistsolutions.com>



Impact Metrics:

Number of projects certified through the Kvist platform. The company will start reporting on impact next year



Problem

- The building and construction sector is by far the largest emitter of greenhouse gases, accounting for close to 40% of global emissions¹⁰
- Many property developers and owners strive to attain Green Building Certifications, not only to surpass current governmental requirements but also to prepare their portfolios for the anticipated tightening of regulations
- However, building sustainably is not easy. It involves unstructured, unscalable and time-consuming processes
- Drowned in paperwork and documentation, experts waste time on mundane and frustrating tasks instead of exploiting their expertise, leading to expensive and difficult certification processes

Solution

- Kvist Solutions develops a software platform that helps real-estate companies, contractors and consultancies with environmental certification of buildings
- Their goal is to make it easier and more efficient to build sustainable and environmentally friendly, facilitating more ambitious sustainability targets

Intended impact

- Help developers and building owners make more sustainable choices during the design and planning phase
- Enable bolder sustainability ambitions
- Enable better environmental performance and taxonomy alignment across real-estate portfolios

IPCC sector contribution⁶

- Buildings – buildings efficiency
- Industry – materials efficiency





Portfolio company of SWEN
Capital Partners
Storebø, Norway



<https://ecosubsea.com/>



Impact Metrics:

- 239k tonnes CO₂e reduced or avoided
- An average of 79kg of biofouling per cleaning collected in 2022



Problem

- Biofouling is the accumulation of microorganisms, plants, algae or small animals on wet surfaces that have a mechanical function, such as ship hulls, causing structural or other functional deficiencies
- Not only does biofouling have a negative impact on GHG emissions of the shipping industry by increasing the roughness of colonised surfaces, but up to 69% of introductions of invasive aquatic species to new environments occur via biofouling¹¹

Solution

- ECOsubsea has developed a system to inspect, monitor, clean and collect biofouling on ship hulls. The system is a cleaning station on dock side equipped with a cleaning ROV that collects all biological waste in a closed-loop manner, to be eventually recycled or valorised

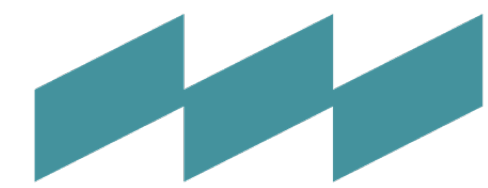
Intended impact

- Lowering fossil fuel consumption and associated GHG emissions through lowering biofouling levels
- Preventing the introduction of invasive aquatic species

IPCC sector contribution⁶

- Transport – Shipping: Efficiency and optimization





Brim Explorer

Oslo, Norway

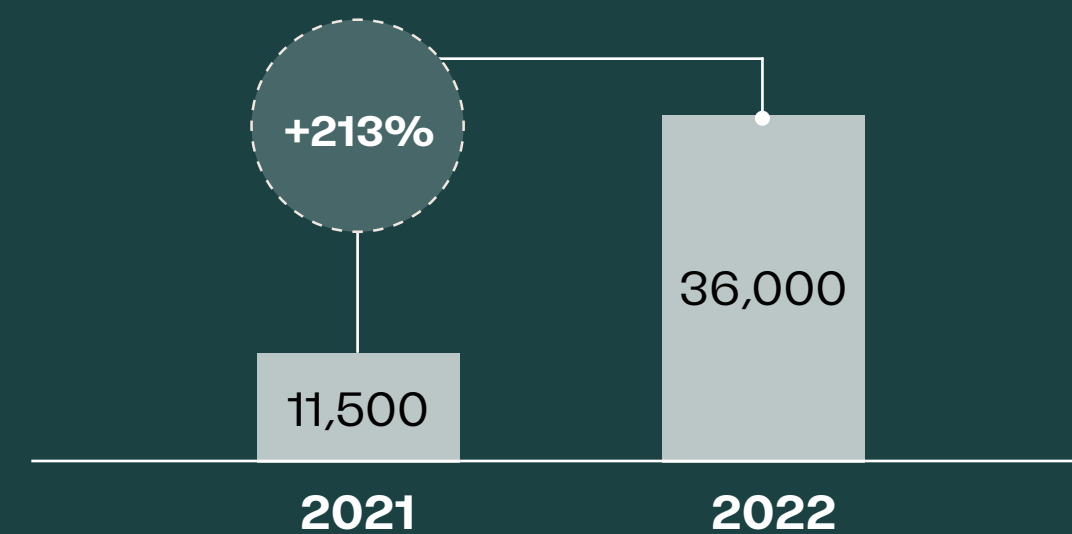


<https://brimexplorer.com/>



Impact Metrics:

guests experiencing the fjords and Arctic wildlife in a sustainable way



Problem

- Tourism accounts for about 8% of global greenhouse gas emissions¹². In addition to those direct emissions, travel also leads to negative impact on environment through local pollution to air and water, noise pollution, solid waste and littering
- The Arctic part of Norway has for the last years experienced increased maritime traffic in an area where marine wildlife is already under high pressure from global warming, ocean acidification, oil exploration and increased shipping activity

Solution

- Brim Explorer have brought to market an efficient electric driveline and a modern ship design
- The ships operate with lower emissions than their competitors during the voyage and they always switch to silent electric motors around arctic wildlife and marine mammals

Intended impact

- Contributing to the green shift in the maritime industry through reducing CO2 emissions from ships
- Minimize disturbance around marine wildlife such as whales, polar bears and walruses' societies

IPCC sector contribution⁶

- Transport – Shipping: Efficiency and optimization





Portfolio company of Momentum
Bergen, Norway



<https://7analytics.no/>



Impact Metrics:

accumulated projects
2022: 140



Problem

- The number of people living in urban areas will increase by ~2.5 billion by 2050, bringing the urban population to > 2/3 of the global population¹³. Climate change will bring more rain, flooding and unstable weather, making hazard prevention and sustainable development of cities even more vital

Solution

- 7Analytics' mission is to deliver the world's fastest and most advanced natural hazard platform, and their vision is to support the building and adaption of sustainable cities that can handle the climate of tomorrow
- The solution uses advanced modeling and AI to calculate implications of climate change, with the main focus currently on floods and landslide risks

Intended impact

- Plan for imminent and future impacts of climate change, being better prepared to handle extreme weather

IPCC sector contribution^{3,6}

- Climate adaptation option for settlements and infrastructure (Sustainable urban water management and Sustainable land use and urban planning)
- Society, livelihood and Economy (Climate services, including Early Warning Systems, and Disaster risk management)



Direct investment
– Exited in August 2023

Berlin, Germany

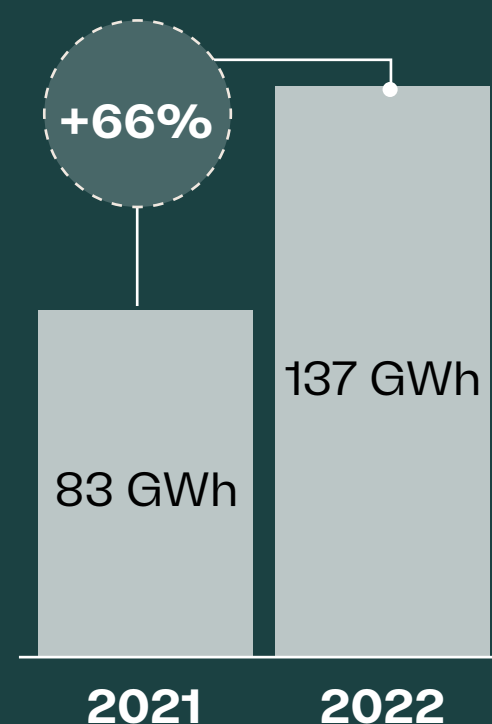


<https://www.nextwind.de/>



Impact Metrics:

In the future NeXtWind will be able to measure the increased energy output per site, resulting from repowering or life extension



Problem

- Reducing carbon dioxide (CO2) emissions is at the heart of the world's accelerating shift from climate-damaging fossil fuels towards clean, renewable forms of energy
- Germany is dependent on nuclear and coal today, with planned exits from both in the near future

Solution

- NeXtWind is building a portfolio onshore wind energy assets in Germany, with the ambition to either replace the old wind turbines with new and more efficient turbines (repowering), or to increase the lifetime of the existing turbines (life extension)

Intended impact

- Increased production of renewable wind energy
- Repowering will also avoid the interference in other areas:
 - reduce avian collision and mortality through fewer turbines
 - no new major changes to the landscape and ecosystem
 - better acceptance by the local community as less turbines implies easier integration in the landscape, reducing the visual impacts

IPCC sector contribution⁶

- Energy – Wind energy



Exit triggering 8x impact

Sandbrook, a private investment firm within energy transition infrastructure, communicated their acquisition of NeXtWind in August 2023. Sandbrook will commit up to 750 MUSD in NeXtWind, making it one of the largest privately held renewable IPPs in Germany.

Through Sandbrook's acquisition, NeXtWind will increase their investment capacity by ~8x, enabling a potential increase in annual renewable wind energy production in the multiple TWh range.

Sources

- 1 European Union's Copernicus Climate Change Service <https://climate.copernicus.eu/copernicus-september-2023-unprecedented-temperature-anomalies>
- 2 <https://news.un.org/en/story/2023/07/1139162>
- 3 IPCC, 2023: Summary for Policymakers. In: Climate Change 2023: Synthesis Report. Contribution of Working Groups I, II and III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change IPCC, Geneva, Switzerland, pp. 1-34 https://www.ipcc.ch/report/ar6/syr/downloads/report/IPCC_AR6_SYR_SPM.pdf
- 4 IEA, 2022: World Energy Outlook 2022, IEA, Paris <https://www.iea.org/reports/world-energy-outlook-2022> License: CC BY 4.0 (report); CC BY NC SA 4.0 (Annex A)
- 5 Impact Frontiers: Five Dimensions of Impact, <https://impactfrontiers.org/norms/five-dimensions-of-impact/>
- 6 IPCC, 2022: Summary for Policymakers. In: Climate Change 2022: Mitigation of Climate Change. Contribution of Working Group III to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change. Cambridge University Press, Cambridge, UK and New York, NY, USA. https://www.ipcc.ch/report/ar6/wg3/downloads/report/IPCC_AR6_WGIII_SummaryForPolicymakers.pdf
- 7 United States Environmental Protection Agency, Greenhouse Gas Emissions from a Typical Passenger Vehicle <https://www.epa.gov/greenvehicles/greenhouse-gas-emissions-typical-passenger-vehicle>
- 8 The Central Intelligence Agency: World Factbook <https://www.cia.gov/the-world-factbook/countries/germany/>
- 9 <https://klimatsmartsemester.se/flygutslapp-pa-karta> in collaboration with Chalmers Tekniska Högskola
- 10 37% according to the report Building Materials And The Climate: Constructing A New Future published by the UN environment agency (<https://www.unep.org/resources/report/building-materials-and-climate-constructing-new-future>)
- 11 GloFouling Partnerships <https://www.glofouling.imo.org/the-issue>
- 12 Lenzen, M., Sun, YY., Faturay, F. et al. The carbon footprint of global tourism. Nature Clim Change 8, 522–528 (2018). <https://doi.org/10.1038/s41558-018-0141-x>
- 13 The World Bank, Urban Development <https://www.worldbank.org/en/topic/urbandevelopment/overview>



Thank you for reading!

Contact:

Kathrine Lærke Søndergaard
kls@ferd.no

Anniken Hofgaard
ash@ferd.no

Erik Bjørstad
ebj@ferd.no

