

Vontobel

Impact report 2022

Vontobel Fund – Clean Technology

October 2022

Asset Management

Marketing document for institutional investors in AT, CH, DE, ES, FI, FR, GB, IT, LI, LU, NL, NO, PT, SE, SG
(professional investors only)



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 Vontobel Fund – Clean Technology

“We clearly see a growing need for investments with a positive influence on the environment, and this is the guiding principle we as active investors hold dear. We are excited about the opportunities that lie ahead and believe that a “green” transition supported by environmental technologies will benefit the whole society, including investors.”

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Introduction

“Time keeps on slippin’, slippin’, slippin’, into the future”; goes the first line of Steve Miller Band’s hit “Fly Like an Eagle”. Well, that may have been true in 1976, but this year, some of us feel that time is slipping backwards. Events from the dark European past we would like to forget—a brutal land war, energy, and food crises—have suddenly become a reality or a realistic prospect again. Moreover, the Covid-19 pandemic that wreaked havoc on the global economy a short while ago hasn’t entirely gone away, as the continued lockdowns in China and again rising infection rates almost everywhere show.

If we haven’t realized an inconvenient post-pandemic truth before, this year has made it abundantly clear that relying on a single supplier comes with huge risks for the global economy. This holds true for manufactured goods from China, gas and oil deliveries from Russia, and grain shipments from Ukraine.

Western economies started weaning themselves off oil in the 1970s after an embargo by Middle Eastern petroleum exporters. Now may be the time to take another step in the area of energy, i.e. transition towards an economy based on renewable sources. In addition, impact investors like us have the ambition to contribute to various environmental challenges through a solution-oriented investment strategy that offers energy efficiency measures, long-lasting goods, closed product loops.

Solar and wind energy companies look set to benefit from tightening regulation in the European Union, or a recently signed US law aiming at no less than decarbonizing the US power sector. The nascent “clean energy” industry, which encompasses areas such as electric vehicles, batteries, or hydrogen produced in a sustainable manner, opens up new opportunities for the investing public as well.

In this year’s impact report for the Vontobel Fund – Clean Technology, the fourth yearly publication for this impact investment strategy of Vontobel, we will shed light on the latest developments, and explain how we view the industry from an active investor’s point of view. We also try to explain our stock-picking process and the philosophy behind it, which is more important than ever in times where many clients seek greater transparency from purveyors of “sustainable” funds.

Executive summary

Investors in our fund aim to obtain a “double dividend” comprising financial returns as well as a positive effect on our planet. We try to honor their expectations by constantly refining our process and tool kit. This year, we can report on our experience with our impact strategy assessment of each investee holding. We believe that the impact strategy scores on a portfolio level are very solid and support our investment approach. It helps to get a stronger conviction on each company’s potential for impactful growth while raising awareness of associated risks.

The EU SFDR¹ regulation applies since 10 March 2021 with certain disclosure requirements for financial products, including investment Funds. We have categorized Vontobel Fund – Clean Technology under Art. 9 SFDR and implemented the relevant disclosure requirements. Click [here](#) to find the latest SFDR-related documents of the Vontobel Group.

77% impactful revenues (see page 9)

The fund invests in companies with a focus on one of our six so-called impact pillars. They provide products and services that help to solve the challenges we are addressing with our impact objectives. Our investment approach follows an underlying principle of the theory of chance (ToC)². We estimate the proportion of sales derived from products and services that deliver positive contributions to a given impact pillar, the so-called purity factor, for each company. The aggregate purity of the fund was 77% as of June 30, 2022. Furthermore, we illustrate the contributions of the companies by looking at them through the lens of the United Nations (UN) Sustainable Development Goals (SDGs).



Measurable positive change (see page 13)

This year, better data quality and adjustments in baseline metrics have led to improvements in the calculation of what we call “potential avoided emissions” (PAE) further reducing double counting. The methodology was also aligned with the global greenhouse gas accounting and reporting standard for the financial industry that was developed by PCAF (Partnership for Carbon Accounting Financials). These improvements, alongside some portfolio changes, have led to lower result of PAE per million euros of invested capital versus last year (New: 1,650 tons of CO₂ versus previously 1,970 tons CO₂ per EUR 1 million invested). An enhancement in the baseline metrics is positive as it shows that the world is moving in the right direction. Other results from our impact indicators (IIs) also reflect advances in how companies report on their sustainability efforts, e.g. by disclosing data on the introduction of circularity in their processes, as opposed to just managing their waste.

Besides reporting on company’s official data and our own assessment regarding impact and avoided carbon emissions, we included a section reflecting various rating agencies’ assessments on the fund’s sustainability credentials. Overall, these third-party ratings confirm our own view that the fund’s investments contribute significantly to a positive transition on this globe.



¹ Regulation (EU) 2019/2088 of the European Parliament and of the Council of 27 November 2019 on sustainability-related disclosures in the financial services sector (“SFDR”)

² A theory of change describes a sequence of cause-and-effect actions that the investor believes will contribute to a set of targeted social and environmental results.



Impact investing through public equities

As we have outlined in our previous reports, impact investing has long been defined as allocating money with the **intention** to achieve a positive impact. For many years, impact investing has been closely associated with private markets, and an established set of practices and characteristics has gradually emerged. Over the past few years, investors have been increasingly drawn to investment strategies that deliver positive, intentional real-world outcomes across the **full range of asset classes**, including publicly traded equities. Public markets play an important role in companies' endeavors to scale up, a necessary condition for mass deployment of new technologies or operating practices to take on some of the global environmental challenges. At the same time, their capital needs make them magnets for investors' money flowing into the "sustainability" part of the market. We for our part have long been active stock-pickers in this field. For details on our impact investing methodology, read our [white paper](#).³

Over the past two years, we actively participated in the Global Impact Investing Network (GIIN) working group on listed equities. In a jointly developed guidance document, this group describes several practices or characteristics that an investor can expect from an impact investing fund. A core building block of such a strategy is the implementation of the **theory of change (ToC)** methodology. The ToC is a problem-solving method trying to identify necessary steps that would have prevented the issue from appearing in the first place. It is typically connected with a "problem statement" and illustrates the mechanism by which a given investment has a positive effect on the problem.⁴ It is one of the most common causal-based models used for the evaluation of positive impact of an investment.

³ Make your money matter—creating impact through public equity, 2021

⁴ www.impactmanagementproject.com

Impact strategy assessment— a year on

In the previous chapter, we briefly outlined the nature of impact investing. How this desired effect can be achieved and measured is explained in detail in our aforementioned white paper. In this chapter, we take a first look at the results of a more systematic approach we adopted last year to assess individual companies' strategies to generate positive impact. While a focus on the long-term strategy has always been important for active stock-pickers like us, to standardize and to document each analyst's assessment was the driving force to adapt a systematic, six-point approach. Apart from clarifying the portfolio companies' impact strategy, it enabled us to better identify the potential benefits of impactful activities, as well as the potential risks of the companies; it is now part of our investment process. Furthermore, it can help us to engage with company management regarding their activities we consider impactful or point out potential non-financial risks.

Systematic six-point strategy assessment

- 1. Management strategy**
Company culture and major commitment to drive positive change
- 2. Internal drivers for impactful products and services**
Towards which areas is capital allocated to, what is the focus of research and development budget and direction of acquisitions or disposals
- 3. External drivers for impactful products and services**
Growth potential of addressed end markets and achievable profitability drives the score

4. Measuring and reporting about impact indicators (IIs) on impact achievements

What is measured is managed, often a driver for improvements in management and culture

5. Potential risks related to impactful activities

Policy or regulatory changes, customer preferences, technology risks or hurdles, competitive landscape

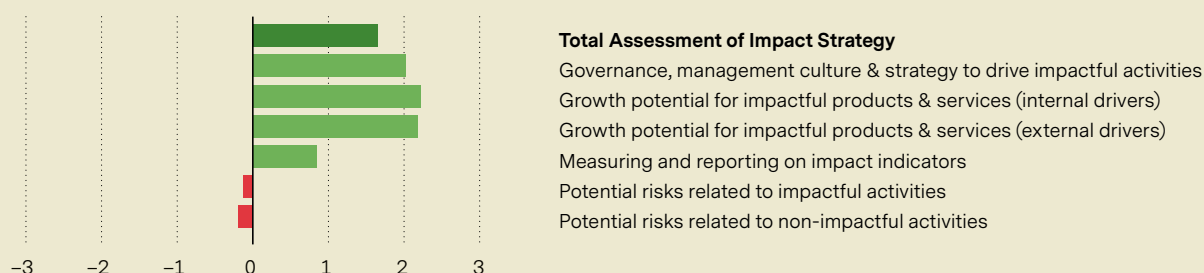
6. Potential risks related to non-impactful activities

Regulatory requirements or emission limits increase costs, stranded assets, legacy liabilities or reputational issues

For one year now we analysed our portfolio holdings strategies using the aforementioned six points, and assigned a score between -3 to +3 for each category. The average strategy assessment of all portfolio holdings resulted in a score of 1.66, with details depicted in Figure 1.

Inherently, the first four assessment points show a solid positive score. The two risk related assessment points are negative scores but show a very low risk on portfolio level. This should not surprise, as we would not invest in a company with low positive scores in the first four assessments, or high risk (negative) scores in the latter two. The largest potential for improvement we see in the measuring and reporting on sustainability IIs, hence a key focus of our on-going fact-finding engagement with the companies.

Figure 1: Portfolio weighted impact strategy assessment



Source: Vontobel Asset Management, June 30, 2022

Impact pillars

Our investment process is in line with the theory of change (ToC) concept (details see chapter on Impact investing through public equities) and explains how we trace back our steps from the sustainability challenges that we grouped into six so-called impact pillars and then identified solutions required to alleviate these problems. Each of our portfolio holdings is allocated to a pillar according to the environmental solutions they can provide with their products and services.

Impact pillars of Vontobel Fund – Clean Technology



WHAT ARE THE CHALLENGES WE ARE TACKLING WITH OUR IMPACT PILLARS

- | | | |
|---|--|--|
| <ul style="list-style-type: none"> – 733 million people have no access to electricity⁵ – Global warming progressing, greenhouse gas emission of the energy sector too high – Unstable energy supply | <ul style="list-style-type: none"> – 3 billion people rely on water sources with unknown quality⁶ – Rising demand for water and increased water pollution – Access to safe and affordable drinking water | <ul style="list-style-type: none"> – Global rapid urbanization. Almost 60% of the global population now live in cities⁷ – Buildings consume too much energy |
|---|--|--|

WHAT ARE THE POTENTIAL SOLUTIONS PROVIDED BY PORTFOLIO HOLDINGS

- | | | |
|--|--|---|
| <ul style="list-style-type: none"> – Manufacture renewable energy equipment and technologies that provide a smarter and reliable grid and greener power | <ul style="list-style-type: none"> – Provide products to improve water efficiency – Invest in new infrastructure in emerging markets – Upgrade aging water infrastructure using new technology and services | <ul style="list-style-type: none"> – Provide products for smart building technologies – Produce materials to lower the environmental impact over the lifecycle of a building – Minimize power consumption for heating and cooling through energy-efficiency measures |
|--|--|---|

SPECIFIC SCOPES WITHIN AN IMPACT PILLAR AND COMPANY EXAMPLES

- | | | |
|--|--|---|
| <ul style="list-style-type: none"> – Alternative energy: Vestas – Smart grid: Itron – Electric utilities: Nextera Energy – Power equipment: Prysmian | <ul style="list-style-type: none"> – Water equipment: A.O. Smith – Water infrastructure: Tetra Tech – Supply and disposal: American Water Works – Water analysis and chemicals: Thermo Fisher Scientific | <ul style="list-style-type: none"> – Building materials and insulation: Saint Gobain – Building technologies: Daikin Industries – Smart lighting: Universal Display |
|--|--|---|

CONTRIBUTION TO UN SUSTAINABLE DEVELOPMENT GOALS



IMPACT INDICATORS (IIS) PER IMPACT PILLAR




- | | | |
|---|--|--|
| Annual renewable energy generated or capacity installed | Drinking water provided; water recycled and wastewater treated | Potential avoided carbon emissions (PAE) |
|---|--|--|

⁵ www.unstats.un.org

⁶ www.unstats.un.org

⁷ www.weforum.org

Impact pillars of Vontobel Fund – Clean Technology

 <p>Low-emission transportation</p>	 <p>Resource efficient industry</p>	 <p>Life cycle management</p>
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WHAT ARE THE CHALLENGES WE ARE TACKLING WITH OUR IMPACT PILLARS

- | | | |
|---|---|---|
| <ul style="list-style-type: none"> – Aging, degraded or non-existent transport infrastructure hindering economic growth and societal progress – High carbon emissions of transport sector | <ul style="list-style-type: none"> – Growing population and economy growth require energy and scarce raw materials | <ul style="list-style-type: none"> – Unsustainable patterns of consumption and production cause climate change and biodiversity loss |
|---|---|---|

WHAT ARE THE SOLUTIONS PROVIDED BY PORTFOLIO HOLDINGS

- | | | |
|---|---|---|
| <ul style="list-style-type: none"> – Offer innovative technologies to connect economy – Invest in sustainable and resilient infrastructure development – Grow new concepts for environmentally friendly mobility | <ul style="list-style-type: none"> – Improve manufacturing efficiency in terms of energy and resources – Create clean and efficient production processes – Digital transformation helps to improve research and development, production and logistics in various end markets | <ul style="list-style-type: none"> – Reusing resources and reducing waste – Integration of product life cycle concepts – Recycling solutions that return materials to the production process |
|---|---|---|

SPECIFIC SCOPES WITHIN AN IMPACT PILLAR AND COMPANY EXAMPLES

- | | | |
|---|---|--|
| <ul style="list-style-type: none"> – Rail infrastructure: Alstom – Rail operator: JR East – E-mobility and alternative fuels: Samsung SDI – Auto suppliers: Nidec | <ul style="list-style-type: none"> – IT and software: Ansys – Consulting and services: Hannon Armstrong Sustainable – Industrial engineering: Air Liquide – Industrial equipment: Andritz | <ul style="list-style-type: none"> – Waste management and recycling: Ecolab – Circular economy: Smurfit Kappa – Functional materials: no investment |
|---|---|--|

CONTRIBUTION TO UN SUSTAINABLE DEVELOPMENT GOALS



IMPACT INDICATORS (IIS) PER IMPACT PILLAR

- | | | |
|---|---|---|
| <p>Passengers transported in an eco-friendly way; cargo transported on rail</p> | <p>Potential avoided carbon emissions (PAE)</p> | <p>Waste treated / processed / recycled; circular economy (recovery, reuse)</p> |
|---|---|---|



Purity factor reflects impactful revenues

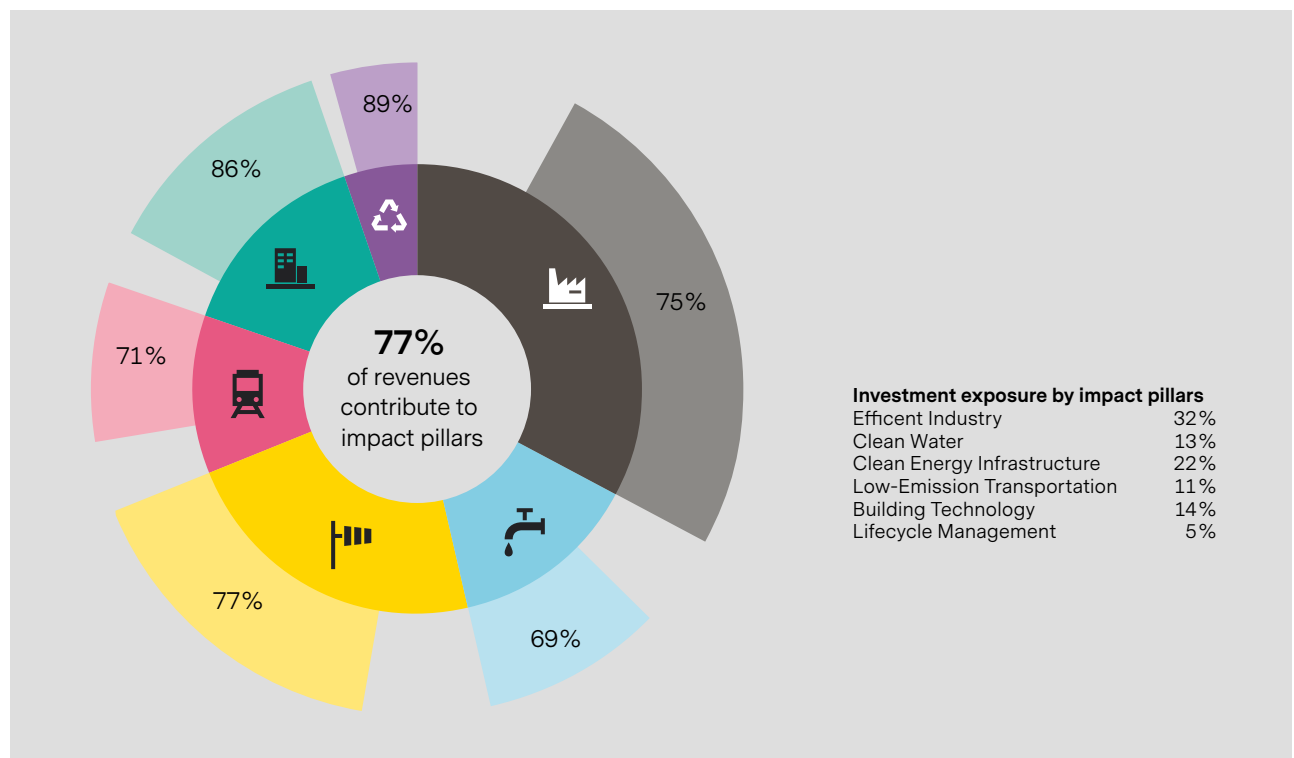
We have long applied investment principles aiming to identify companies whose products and services can create a real-world impact in one of the areas defined by our impact pillars. At the same time, we follow good governance practices and the “do no significant harm” approach. This aligns us with the requirements to integrate sustainability considerations under the European Union’s Markets in Financial Instruments Directive (MiFID II).

It is important to understand that a sustainable investment strategy that is in line with the EU’s Sustainable Finance Disclosure Regulation (SFDR)⁸, article 2(17), can also contribute to an environmental objective outside the EU Taxonomy. While this taxonomy classification system dividing “sustainable” from “non-sustainable” economic activities consists of six clearly defined environmental

objectives, there is no widely accepted definition of sustainable investment objectives. Under our own classification system, once we have identified the company as being “sustainable”, it must contribute to one of our “impact pillars with material revenues generated through their products and services. We believe that this approach fulfills the requirements of the wider EU term of sustainable investment objectives and we use it also for the SFDR reporting templates.

The inner circle in Figure 2 shows the portfolio’s allocation to the six impact pillars of the clean technology strategy, while the outer circle represents the percentage of relevant revenues within each pillar. Across the whole portfolio, on average 77% of all revenues are considered to provide a direct or indirect positive impact.

Figure 2: The Fund offers a high “purity level”: 77% of revenues create an impact



For companies with activities (revenues) in several impact pillars, all relevant revenue shares are allocated to the main impact pillar. Pillar weights in the portfolio add up to 98%. 2% is cash. Source: Vontobel Asset Management, as of June 30, 2022

⁸ SFDR requires financial market participants and financial advisors to be much more transparent when promoting financial products based on sustainability criteria.

SDG mapping

How do we pick the “right” companies for our clean tech portfolio? An important part of our investment approach is to identify companies offering products and services that contribute to at least one of the impact pillars. As one can see from the impact pillar overview table, each pillar investment then contributes to one or two key Sustainable Development Goals (SDG). On a company level we may assign additional specific SDGs.

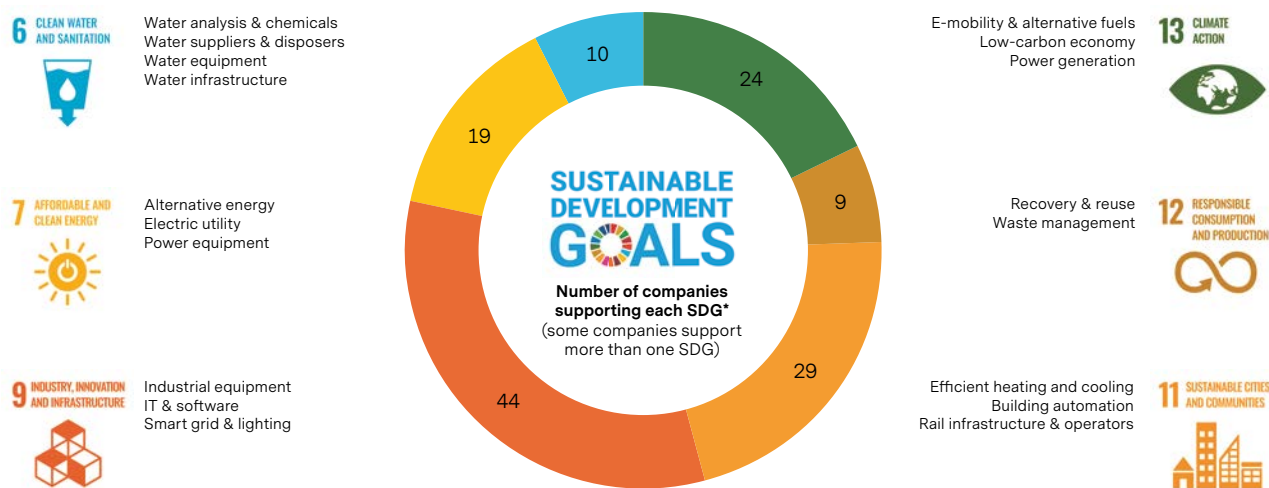
The 17 SDGs were adopted by all United Nations member states in 2015 as a universal call to action to end poverty, protect the planet and ensure that all people enjoy peace and prosperity by 2030. The individual goals are defined in a list of 169 targets with progress towards these targets being tracked by 232 unique indicators. Regardless of the generally open wording of the SDGs, they are so far the only universally accepted system that aims to define sustainability.

Initially, questions as to how specific companies can contribute to the SDGs were left unanswered. This changed later with the so-called *SDG compass*, a document offering tools and knowledge how to match business activities to the SDGs. The SDG Compass is the result of a collective effort from Global Reporting Initiative (GRI), the UN Global Compact and the World Business Council for Sustainable Development (WBCSD).

We map contributions generated through the companies’ products and services, not counting companies internal or operational contributions. For our SDG mapping process, we have defined the following rules:

1. SDG mapping must be aligned with the sustainable investment objectives of the corresponding impact pillars
2. SDG contribution must be related to product and services and shall be material. Likewise, company management’s behavior and initiatives, e.g. the focus on research and development, the funds available for capital expenditure, or activity tied to mergers and acquisitions play a significant role. As a result, the number of SDGs assigned tend to be lower than what companies claim themselves or what rating agencies may attribute to them
3. SDG contributions are commented in our database where needed and are reviewed at least yearly

Figure 3: Number of holdings with material contribution to UN SDGs through their products and services

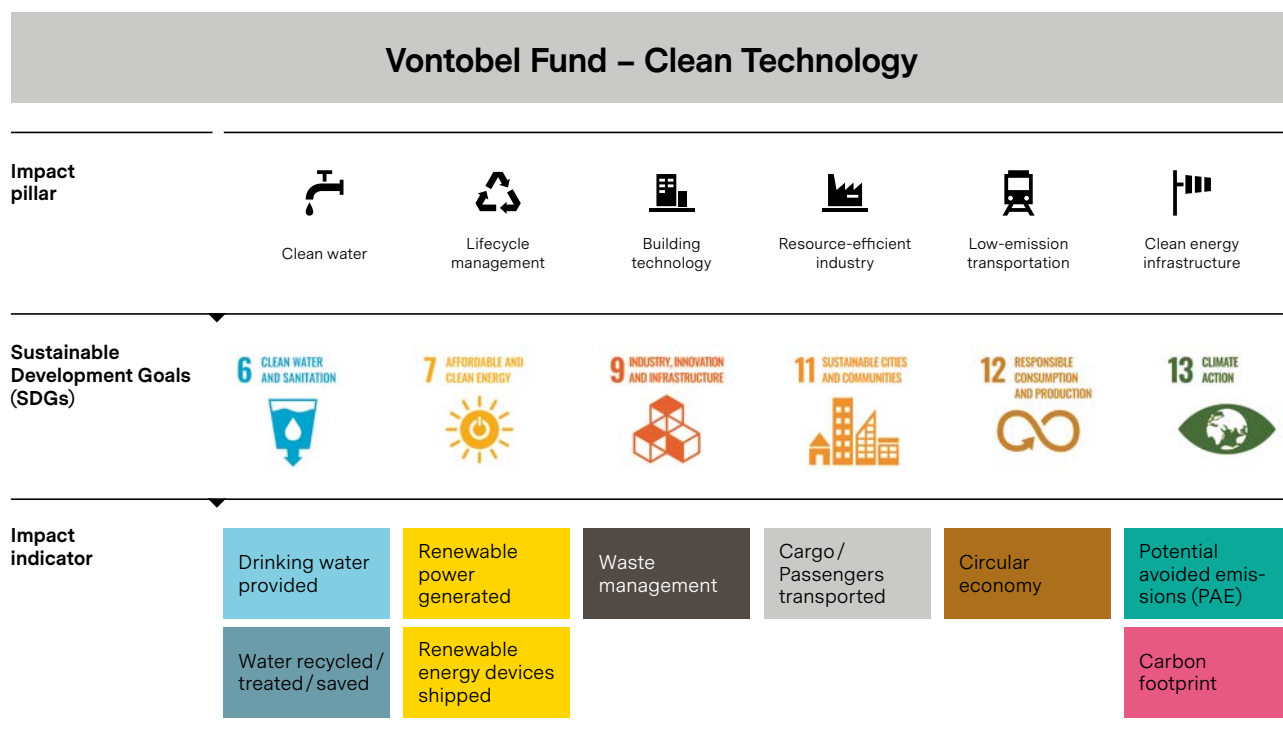


* Companies’ positive contributions via their products and services. Source: UN, Vontobel Asset Management, as of June 30, 2022

Impact indicators

The assessment of official company reports, in combination with regular contact and engagement with management of our portfolio holdings allows us to collect additional data that support our intention to invest in impactful businesses. This is reflected in the impact indicators and consolidated for all holdings as of June 30, 2022. The companies' data gathering and reporting isn't uniform as of now, but we hope through our active engagement to improve consistency. The most relevant impact indicators are depicted below for each impact pillar.

Figure 4: From the six impact pillars via SDGs to impact indicators



Source: United Nations, Vontobel Asset Management; for illustrative purposes only

The table below summarizes some impact indicators (IIs) we collected from individual companies held by the Vontobel Fund – Clean Technology. These IIs contain major contributions from products & services of companies active in the corresponding impact pillar (e.g. power utility generating renewable energy from a wind farm) but also minor operational contributions from many portfolio holdings (e.g. industrial company having installed solar

panel on their manufacturing sites for its own electricity consumption). The latter is however not used for company selection nor for the purity factor of the portfolio. Nonetheless, it is a positive operational contribution, which we like to emphasize. The table below shows the companies' data as a whole as well as what proportion is attributable to the fund based on its ownership.

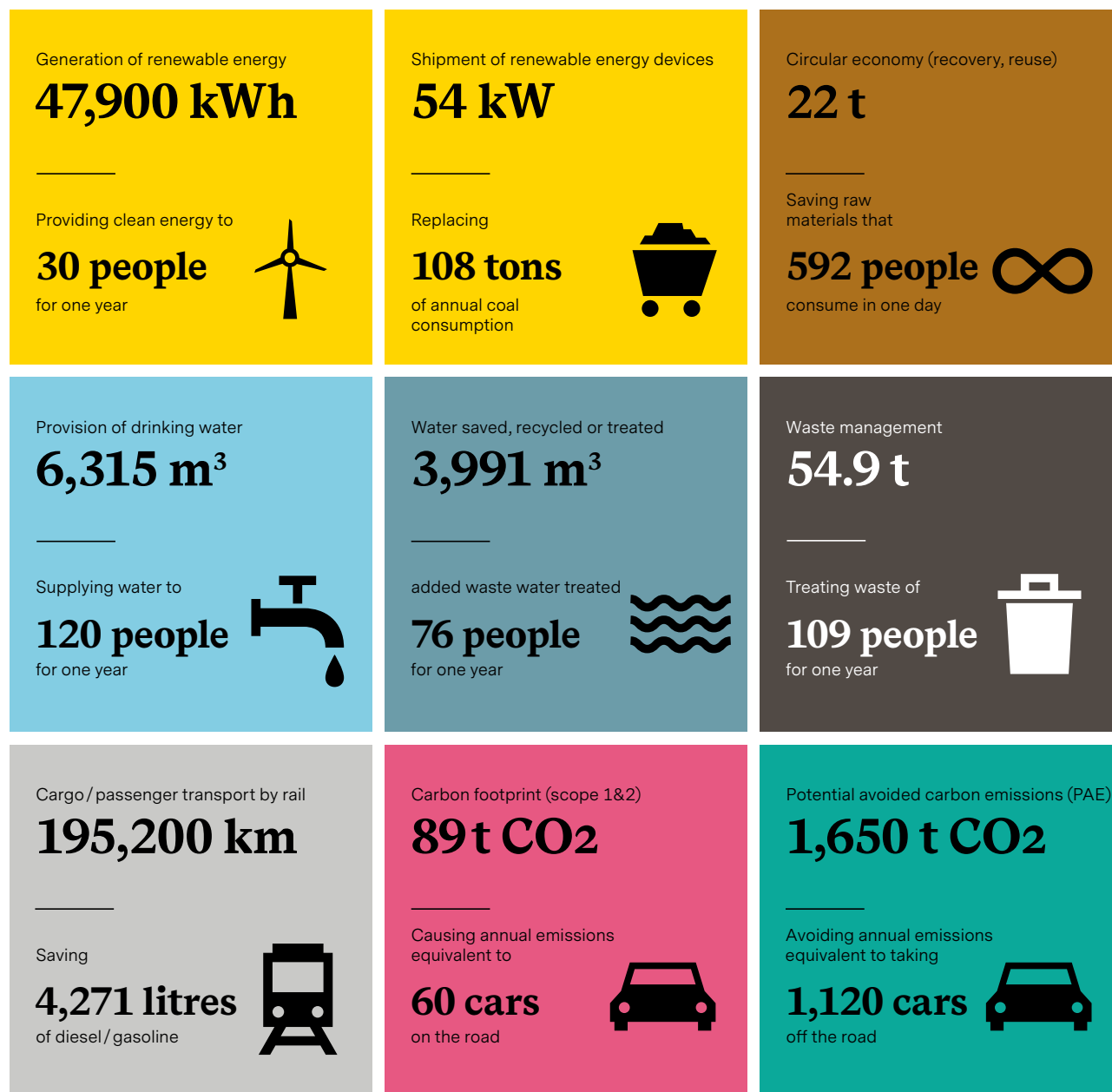
IMPACT INDICATOR DESCRIPTION	TOTAL FROM ALL PORTFOLIO COMPANIES	ATTRIBUTABLE TO THE FUND	MAJOR CONTRIBUTORS	TOTAL REPORTING COMPANIES
CO2 emitted (carbon footprint, scope 1+2)	171 million t	128,300 t	VEOLIA, AIR LIQUIDE	61
Potential avoided CO2 emissions	2.1 billion t	2.4 million t	SAINT-GOBAIN, VEOLIA, ANDRITZ	26
renewable energy generated	166.1 TWh	69.3 GWh	IBERDROLA, NEXTERA, ORSTED	12
annual renewable capacity shipped	77.3 GW	78.0 MW	LONGI, FIRST SOLAR, VESTAS	5
drinking water provided	8.1 billion m ³	9.1 million m ³	VEOLIA, AMERICAN WATER	2
Water recycled and / or saved	296.9 million m ³	357,300 m ³	SAINT-GOBAIN, ECOLAB	4
Waste water treated	5.2 billion m ³	5.4 million m ³	VEOLIA	2
Passengers transported in an eco-friendly way	91.3 billion passenger-km	66.8 million passenger-km	EAST JAPAN RAILWAYS	1
Cargo transported on rail	668.6 billion ton-km	215.6 million ton-km	UNION PACIFIC	1
waste managed as a service	58.5 million t	79,500 t	VEOLIA, CLEAN HARBORS, LKQ	3
materials captured for circular economy	19.8 million t	32,000 t	SMURFIT KAPPA, SAINT-GOBAIN, CLEAN HARBORS	19
Renewable/recovered energy use in production	47 TWh	109.3 GWh	WEST FRASER, SAINT-GOBAIN, AIR LIQUIDE	36

Source: Vontobel Asset Management ; 64 portfolio holdings as of June 30, 2022

In terms of continuity, we aggregate the above list of 12 impact indicators into nine key impact indicators that evaluate the favourable impact of the companies in the Vontobel Fund – Clean Technology.

To make the indicators more tangible, we tried to translate each positive impact into easier-to-grasp equivalents. Investing one million euros in the Vontobel Fund – Clean Technology results in ownership of companies which delivered the following impactful activities during their latest reporting year.

Figure 5: The potential annual impact of a EUR 1 million investment



Source: Vontobel Asset Management. Portfolio as of June 30, 2022

We would like to reiterate what we highlighted in the chapter “General framework” in our *white paper on impact investing in listed equities*. The impact is generated in two steps. First, investors allocate capital to what they have identified as a promising company. Secondly, the company’s products and services then generate the desired real-world effect. We as impact investors and

long-term providers of capital, aim to support these companies to improve and expand their products and services as well as their business practices to create a more sustainable environment and infrastructure.



Pillar focus

Building technology

Commercial and residential buildings account for a large share of global energy consumption. Companies related to this pillar provide technologies and materials to lower the environmental footprint over the lifecycle of a building from design and choice of materials and method of construction, to operation, maintenance and demolition. A particular focus lies on minimizing the amount of energy used for heating and cooling through energy- efficiency measures and adopting renewable energy to meet remaining energy needs.

Company Case Study: NIBE, Sweden

NIBE Industrier AB is an international heating technology company. The Company produces and sells heat pumps, boiler and water heaters, electrical heating elements as well as wood stoves and freestanding fireplaces. NIBE is organized around three business areas, all united under a shared vision to create world-class solutions in sustainable energy.

Impact Relevance

NIBE's main product, heat pumps, offer one of the most energy efficient ways to heat and to some degree cool buildings, while new refrigerants further reduce the environmental footprint during operation. In combination with highly efficient insulation, individual homes can reduce their carbon footprint significantly. If further combined with efficient ventilation systems, large buildings can even further optimise energy requirements. Furthermore, heat pumps in combination with modern ventilation technology can significantly improve living comfort with less energy, and as such lower long-term operating costs and less volatility. In combination with efficient insulation, modern control systems can activate heating or cooling when power prices are low and thus further reducing costs.

Impact Strategy

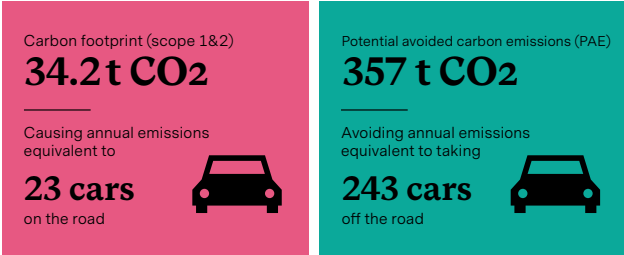
Nibe's management strategy is to further expand its heat pump offering in combination with intelligent controls and adaptation to power supply and pricing. The development of new refrigerants is part of its strategy. To expand its regional reach, Nibe has been acquiring smaller businesses to accelerate installations of intelligent heat pump systems.

Building technology—with an eye on efficiency

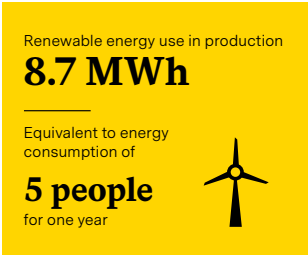
Weight allocation in the portfolio: 1.11%
Revenue Relevance: 95%
Impact Strategy Score: 1.6



Company Impact⁹ GHG indicators

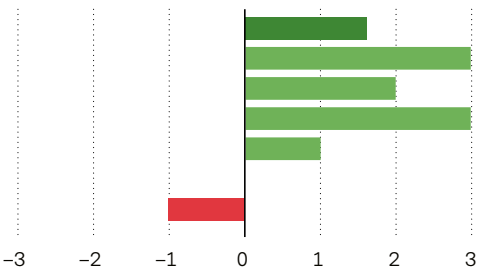


Other impact indicators



⁹ Impact indicator per ownership

Impact strategy assesement



Source: Vontobel Asset Management, June 30, 2022

Total Assessment of Impact Strategy

- Governance, management culture & strategy to drive impactful activities
- Growth potential for impactful products & services (internal drivers)
- Growth potential for impactful products & services (external drivers)
- Measuring and reporting on impact indicators
- Potential risks related to impactful activities
- Potential risks related to non-impactful activities

Pillar focus

Life Cycle Management



Reusing resources and reducing waste is increasingly important. We focus on companies that integrate product lifecycle concepts into their products and processes, from design and manufacturing to actual use and final disposal. Alternatively, we look for companies that offer recycling solutions, returning materials back to production.

Company Case Study: Smurfit Kappa

Smurfit Kappa Group PLC manufactures and sells paper-based packaging products. The company owns mills that produce containerboard, which is then shipped to the company’s plants, where it is converted into corrugated packaging products. The packaging products include solid board, sack kraft paper, and folding cartons. The company also develops alternative packaging products to replace the use of plastic. Furthermore, it designs folding machines to right-size each box according to its needs.

Impact Relevance

Smurfit Kappa manufactures paper-based products, hence recyclable and from renewable resources; it covers over 60% of its pulp and fiber needs from recycled card boards. The company puts a strong focus on intelligent packaging solutions reducing energy use, carbon emissions and replacing plastic and other hard to recycle materials. Thanks to its innovative folding machines, over-sizes boxes are avoided, and also inner-shapes can be folded with carton, avoiding use of protective polystyrene or plastics.

Impact Strategy

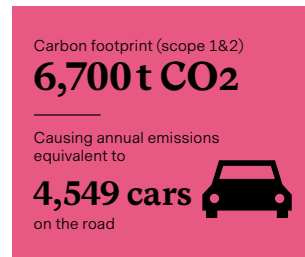
Smurfit Kappa’s R&D efforts aim to minimize the environmental footprint of its packaging solutions, by use of recycled materials, reducing required cardboard by right-sizing boxes and avoiding use of other materials such as plastics to make their packaging also easy recyclable.

Life Cycle Management—think of disposal before production

Weight allocation in the portfolio: 1.24%
Revenue Relevance: 92%
Impact Strategy Score: 1.6



Company Impact¹⁰ GHG indicators

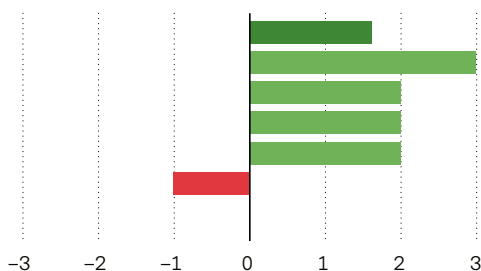


Other impact indicators



¹⁰ Impact indicator per ownership

Impact strategy assessment



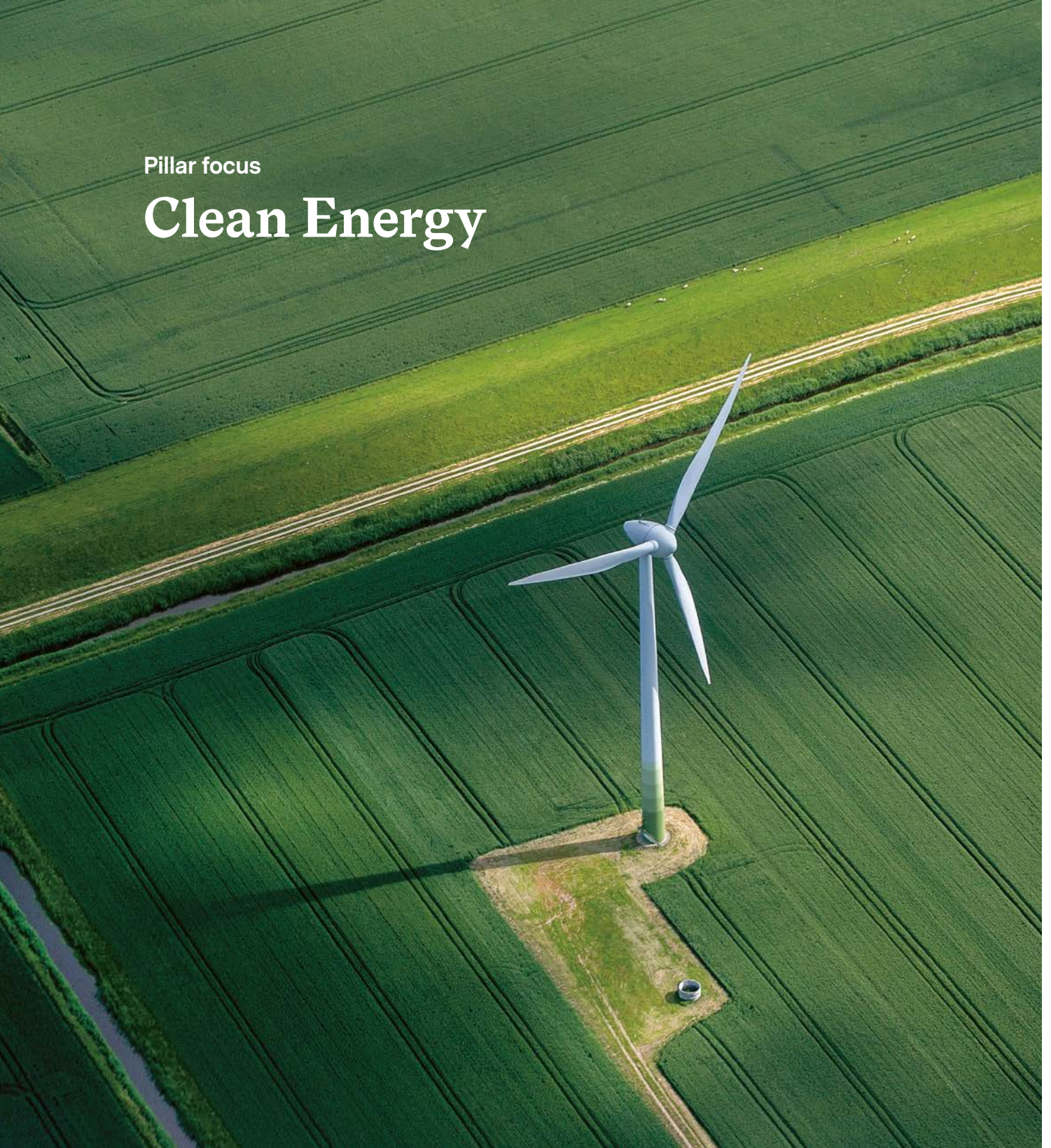
Source: Vontobel Asset Management, June 30, 2022

Total Assessment of Impact Strategy

- Governance, management culture & strategy to drive impactful activities
- Growth potential for impactful products & services (internal drivers)
- Growth potential for impactful products & services (external drivers)
- Measuring and reporting on impact indicators
- Potential risks related to impactful activities
- Potential risks related to non-impactful activities

Pillar focus

Clean Energy



Since energy accounts for the vast majority of greenhouse gas emissions, clean energy is key to addressing climate change and represents a significant component to reduce the human impact. The overall focus lies on emission reduction with, electricity, hydrogen and heat generated from renewable resources, and technologies enabling a reliable as well as smarter and greener grid.

Company Case Study: Prysmian

Prysmian SpA is an Italian manufacturer of electric power transmission and telecommunications cables and systems. Its business is organized in three segments—Projects, which focuses on the execution of underground and submarine cable projects; Energy Products, which provides power distribution, and industrial and network components; and Telecom, which makes fibre optic cable systems and connectivity products. More than half of the firm’s revenue is generated in the EMEA regions, with the rest coming from North America, Latin America, and Asia-Pacific regions.

Impact Relevance

Prysmian manufactures connection cables for solar and wind power plants, including high voltage direct current (HVDC) connections for offshore wind farm and long-distance power transmission. Thanks to Prysmian’s cables, transmission losses can be significantly reduced and excess renewable power generated can be efficiently transmitted to storage facilities. Furthermore, fiber optic cables allow data transmission at very high rate with low energy requirements. Specialty cables for elevators provide increased safety features. Prysmian’s power transmission and optical cables are important for a reliable and efficiently functioning infrastructure, contributing to a healthier and safer living.

Impact Strategy

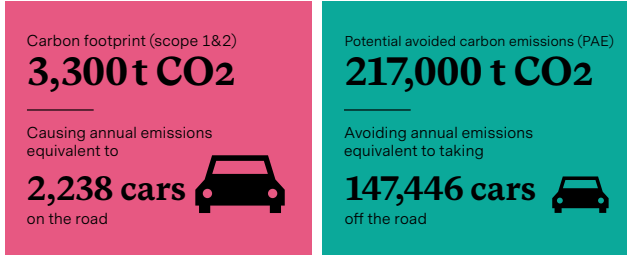
Prysmian spends R&D efforts to constantly improve quality and reliability of high and ultra-high voltage cables for low-loss transmission, and equipment for connection of renewable energy generation and distribution networks. Furthermore, via General Cable—acquired in 2017—Prysmian is refurbishing their facilities for the manufacturing of HVDC cables, bringing this low-loss transmission technology also to North America.

Clean Energy—build a low carbon energy infrastructure

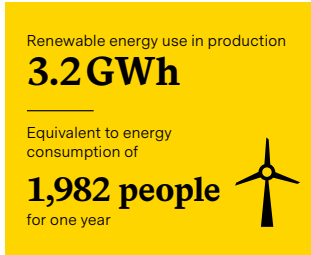
Weight allocation in the portfolio: 2.17%
 Revenue Relevance: 83%
 Impact Strategy Score: 1.75



Company Impact¹¹ GHG indicators

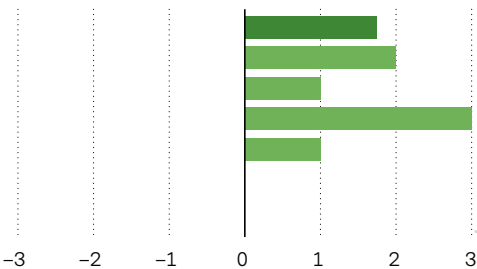


Other impact indicators



¹¹ Impact indicator per ownership

Impact strategy assessment



Source: Vontobel Asset Management, June 30, 2022

Total Assessment of Impact Strategy

- Governance, management culture & strategy to drive impactful activities
- Growth potential for impactful products & services (internal drivers)
- Growth potential for impactful products & services (external drivers)
- Measuring and reporting on impact indicators
- Potential risks related to impactful activities
- Potential risks related to non-impactful activities

Net zero targets— do it right

Many environmental buzzwords have emerged over the past two decades and “net zero” is a recent favorite. It alludes to the ability of a country or a company to remove the same amount of carbon out of the atmosphere as it emits. Would this be achieved, human’s caused global warming should theoretically stop.

In June 2022, the [Net Zero Tracker](#), an organization assessing emission reduction and net zero targets and plans for the world’s largest 2,000 companies by revenue – released its first comprehensive analysis of global net zero targets since March 2021. It showed that while their number continues to increase, there are shortcomings in terms of scope, interim targets, timeframes, and execution. For instance, only 11 % of the companies surveyed aim to achieve net zero in 2030. Others have pledged they would do so by 2040 (30%) or by 2050 (35%), or left the timeline or their commitment open.

For instance, **61 %** of the Clean Technology portfolio’s value show evidence or a commitment to align with international climate goals and demonstrate future progress with regards to net zero targets. This includes ambitious targets set by the companies themselves as well as defined by the Science Based Targets Initiative (SBTi), a co-operation between the UN, the World Resources Institute, and the Worldwide Fund for Nature (WWF). The World Economic Forum in Davos has always been a great platform for some of the world’s largest companies to showcase their inspiring net zero targets. Yet the New York Times, for one, was anything but impressed, citing concerns about empty promises and prospects of such targets even obstructing efforts to stop climate change. The NYT sees three main problems.⁹

1. The first and most prominent flaw of net zero targets is their timing. A company committing to a net zero pledge by 2050 while at the same time still increasing the its carbon footprint loses credibility and kicks the can down the road.¹⁰
2. Another issue is the incompleteness. Most companies only address scope 1 and 2, i.e. carbon emissions generated during the manufacturing process, leaving out so-called scope 3 emissions that take stock of the entire value chain and lifecycle of the product.¹¹

3. Another sore point, according to the NYT, is the reliance on immature technologies like direct air carbon capture for emission mitigation. To date, only 19 such plants exist globally, which is hardly enough to remove the annual emissions of 700 Americans. Another option companies seem to rely on is “nature-based solutions”, which means planting trees.¹²

The financial industry is under increased scrutiny, torn between extolling the virtues of sustainable investing and occasional failure to construct convincing portfolios. The United Nations is currently investigating whether bodies such as the Glasgow Financial Alliance for Net Zero, which groups together more than 450 financial companies, meet the latest criteria. Non-compliant companies could face the embarrassing prospect of being removed from the association or being named and shamed.

The alliance was designed to bring together the most powerful finance companies to commit to achieving net zero targets by 2050. However, it has just introduced tougher rules in June 2022. All signatories are required to abide to the following when it comes to picking projects for their financial investments:

1. Reduce and phase out all unabated fossil fuels and projects that are not offset by carbon capture
2. Stop the financing of new coal projects

An independent accountability body is currently being set up, formed of civil society groups including non-governmental organizations. They have the power to report non-compliant companies, which should increase transparency and accountability around financial sector strategies.

⁹ Based on data points from MSCI ESG Research

¹⁰ Among the examples cited by the New York Times video is the giant meat producer JBS, whose net zero by 2040 jars with a 50% increase of its carbon footprint during the past five years.

¹¹ For instance, Exxon Mobil emits 736,000 tons of greenhouse gases has committed to net zero by 2050. Unfortunately, it’s pledge only covers 15% of its total carbon footprint.

¹² Amazon’s chief executive Jeff Bezos said that planting trees is the company’s primary response to reaching carbon neutrality. By some counts, this would be equivalent to 2.5 billion trees annually.

The latest IPCC Report “Climate Change 2022” clearly stated that time for action is now. While the growth rate of greenhouse gas emissions has slowed a little, they were at their highest level in history on average between 2010 and 2019. The report explains developments in emission reduction and mitigation efforts, assessing the impact of national climate pledges in relation to long-term emissions goals. The Working Group III is of the opinion that global warming can be limited to 1.5°C and emission can still be halved by 2030.

A recent report from Aurora Energy Research¹³ comes to the conclusion, that without any actions the remaining carbon “budget” would be used up in around 8 years to limit global warming by **1.5°C only**. The think tank forecasts no material reduction in emissions in the next 12 months, even factoring recessionary risks. According to these climate experts, approximately 70% of the required reduction in greenhouse gases should come from changes in our lifestyle and behavior. Many companies have the necessary and tested technological solutions, not only for the remaining 30%, but also motivating human beings to adapt to low carbon routines. So it’s investors and governments can help tackle the climate crisis by making the right decisions to help mitigate climate change.

How do we as an asset manager deal with the task of picking the “right” candidates for the portfolio? We have adopted the concept called “potential avoided emissions” (PAE), which we believe centers on enablers of the transition towards a net zero carbon economy. This includes companies that generate, for instance, clean energy through their products and services or reduce energy needs of buildings and improve efficiency in industrial processes. PAE put the focus on the reduction of future carbon emissions. It measures the emissions saved thanks to efficient beneficial effect of the company’s activities versus the amount of greenhouse gases that would be released otherwise.

¹³ Aurora Energy Research: The State of the Global Energy Transition in 2022, Sep 2022. Commissioned report for UBS

PAE reporting

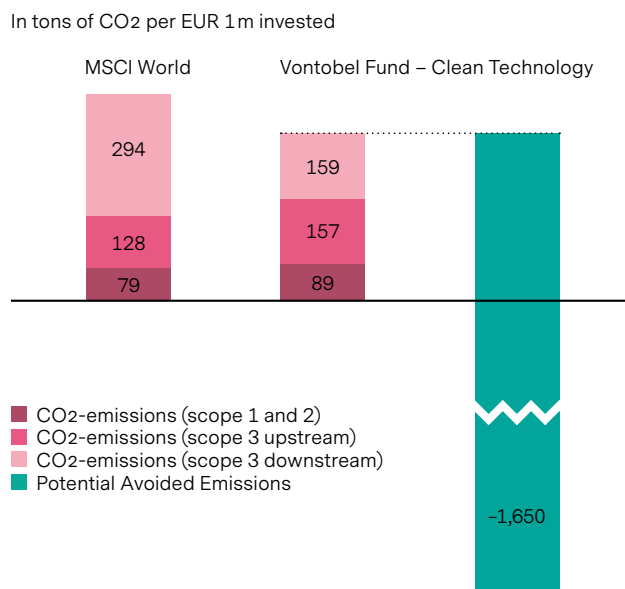
This is the seventh “potential avoided emissions” (PAE) analysis for the equity holdings of the Vontobel Fund – Clean Technology. For this we draw on a recently published PAE methodology paper by our partner for carbon and climate assessment, ISS ESG.¹⁴ ISS ESG’s methodology for PAE follows an attributional approach based on life cycle GHG accounting. PAE per holding are aggregated to portfolio level based on the attribution factor in line with the PCAF (Partnership for Carbon Accounting Financials) Global Standard.¹⁵

ISS ESG analyzed 27 companies with major PAE contribution out of 64 individual stocks in the portfolio. The ownership of each company used for the analysis is as of June 30, 2022. The total value of the fund was 1.447 billion euros. The fund is associated with 2,400 million tons of avoided CO₂ (PAE) coming from the holdings’ activities throughout the year 2021, or their latest reporting period. The four largest company contributors to avoided emissions on fund level are **Saint-Gobain** (32%), **Veolia** (31%), **Andritz** (10%) and **Prysmian** (9%). The PAE data was adjusted for potential double counting by ISS ESG, which affected PAE values for ten companies with a high probability for double counting. As a result, these values provide a rather conservative impact metric on a portfolio level and lead to lower overall PAE. This corresponds to **1,650 tons of potential avoided CO₂ (PAE) per one million euros invested** in the Vontobel Fund – Clean Technology. Overall, the fund has a large positive impact in terms of CO₂ emission reductions across all impact pillars, and the products and services provided by the companies avoid more CO₂ during their use phase than what was emitted for their manufacturing. Further details on the PAE methodology can be found in the appendix.

The carbon footprint of a portfolio is traditionally measured under scope 1, 2 and 3 upstream, but this reports only past emissions. Our focus lies on solution providers that **help and enable to reduce future emissions**, especially also those of their customers. This is of utmost importance in businesses causing inherently high emissions, where a more holistic approach to carbon emissions paves the way to transform to a low carbon economy. Therefore, we might accept a holding company to emit considerable scope 1 and 2 emissions to manufacture more efficient products, as long as the life-cycle emissions, including the use of its products, will be significantly lower; New green infrastructure and energy efficient buildings or manufacturing processes will avoid far more carbon emission over their life span than they

caused in manufacturing. The overall carbon footprint of the Vontobel Fund – Clean Technology turns out to be lower than its reference index, the MSCI World (Figure 6) but more importantly, the large amount of PAEs—**19 times more than the CO₂ scope 1 and 2 emitted**—validates the significant and effective driver to reduce future carbon emissions. Hence, a high PAE shows a strong support for industry transition and a real-world impact.

Figure 6: Carbon footprint and potential avoided emissions



Source: Vontobel Asset Management and ISS-ESG, MSCI ESG Research LLC. Data as of June 30, 2022

¹⁴ Available upon request from ISS-ESG

¹⁵ PCAF (2020). The Global GHG Accounting and Reporting Standard for the Financial Industry. First edition.

EU's initiatives on sustainable investing

Latest developments

Among the world's jurisdictions, the European Union had a headstart in codifying the terms and conditions of "green" investments. It has done so through various directives and initiatives, such as the Sustainable Finance Disclosure Regulation (SFDR), the European Green Deal or the EU Taxonomy. The latest developments on regulation are summarized below.

- The Complementary Delegated Act (CDA) under the Taxonomy Regulation has been published on July 15, 2022, and will take effect from January 1, 2023. The CDA classifies certain areas of natural gas and nuclear power generation as transitional activities contributing to climate change mitigation under the Taxonomy regulation. In our view, this politically driven decision will make things more complicated for the financial industry. Asset managers' sustainability reports will probably feature contributions from companies active in gas and nuclear power alongside data excluding these sectors. Clients will thus get the nuanced information they want (for more detail, read our [Viewpoint](#) from January 13, 2022). We also believe the discussion should be more about planning a meaningful and secure phasing-out of existing nuclear power plants rather than building new ones. Such projects take a long time to realize and wouldn't undo the current bottlenecks in electricity supply in the short term, anyway.
- The amended Markets in Financial Instruments Directive II (MiFID II), effective since August 2, 2022, will require financial advisors to consider clients' sustainability preferences when conducting suitability assessments. MiFID II applies to all clients domiciled in a country within the European Economic Area (EEA). The onus is on advisers and portfolio managers to sound out the extent to which their client is sustainably conscious, the objective of their current or proposed investment, and how such a strategy is in line with environmental, social and governance (ESG) considerations. Sustainability factors must be demonstrated in the policies and procedures used to provide advice. Amalgamated from two separate but related pieces of EU regulation – the SFDR and the Taxonomy Regulation – sustainability preferences are defined in relation to financial instruments:

1. Invested in EU Taxonomy-aligned environmentally sustainable investments,
 2. Invested in environmental or social economic activities as defined in SFDR or,
 3. Investments that consider Principal Adverse Impacts (PAI)¹⁶, i.e. the harm caused by investment decisions, determined by a client.
- Clients looking for investment points 1 or 2 as a guiding principle, must also specify what proportion of the portfolio should reflect such a point at a minimum. This raises the question of data availability and proportionality. While financial products have to disclose the minimum level of taxonomy alignment, the companies they invest in will only be obliged to disclose this information from 2023 onwards. We believe investors will probably need help to understand the differences between the different types of products and their features as well as general advice on what sustainability target they may want to look at in their portfolios.
 - In practice: Market participants selling products (distributors, intermediaries) will look for the appropriate products based on the information contained in the precontractual disclosures annexes(templates) and reflected in the EET.¹⁷

SFDR requirements

We have categorized the Vontobel Fund – Clean Technology as an **"Article 9 SFDR"** financial product, the most demanding SFDR category with the highest disclosure requirements. To qualify for this category, an impact fund such as ours must reflect intentionality and must have a sustainable investment objective, i.e. the ambition to contribute to environmental and/or social objectives. SFDR demands certain disclosure and reporting requirements. We will publish a first periodic report as requested by SFDR as part of the annual report of the fund for the fiscal year from September 1, 2021, to August 31, 2022. We are using the official RTS template providing specific disclosure requirements issued by the European Commission. This is the so-called "SFDR Level II" and will be available in the fund documentation on the Vontobel website. It includes, but is not limited to a percentage of environmentally sustainable economic activities according to the EU Taxonomy, the percentage of investments with a broader sustainable investment objective, and a Principal Adverse Impact statement.

¹⁶ Principal Adverse Impacts are the most significant negative effect of investment decisions on sustainability factors relating to environmental, social and employee matters, respect for human rights, anticorruption and anti-bribery matters.

¹⁷ EET: European ESG Template



Ratings from external ESG data providers

Several ESG rating agencies evaluate our Vontobel Fund – Clean Technology, and their findings are used by clients, asset owners or financial advisers. To increase our fund’s transparency, we not only report our own impact data, but also show a selection of ESG, climate and impact ratings from external sources.

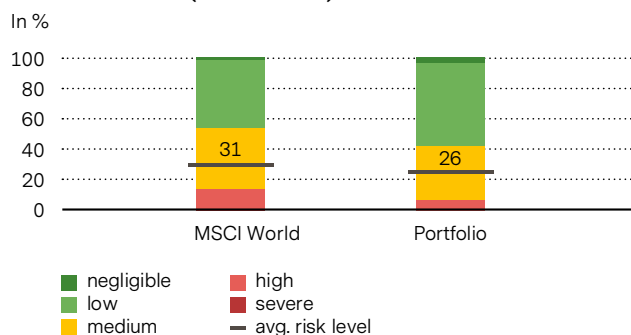
Overall ESG ratings of the fund

While our objective is not to optimize our overall ESG rating, the companies we invest in tend to be well rated by agencies too. But first and foremost, our focus is to invest in companies that create a positive impact within one of the six impact pillars, and generate a substantial part of their revenues with innovative products and services. At the same time, we avoid investments in companies with critical business involvements. In addition to the proprietary results of our investment approach (purity, SDG contribution, impact indicators), we would also like to show an “outside” view using external ratings. Several rating agencies confirm our fund’s beneficial effect compared to that of our reference index.

Sustainalytics

This ESG rating provider looks at the ESG risk levels and corresponding risk-level distribution of the Vontobel Fund – Clean Technology and compares it with the corresponding figures of the reference index MSCI World. The risk distribution is again clearly favorable for the fund. Compared to last year, the average Sustainalytics ESG Risk level of the portfolio increased from 22% to 26%. At the same time the reference index reduced its risk from 33% to 31% (see Figure 7).

Figure 7: Portfolio ESG risk levels below those of reference index (MSCI World)



Source: Sustainalytics, as of June 30, 2022

MSCI ESG overall ESG rating comparison

MSCI’s “ESG Quality Score” measures the ability of underlying holdings to manage key medium to long-term risks and opportunities arising from environmental, social, and governance factors. It is based on MSCI ESG ratings and is measured on a scale of 0 to 10 (worst to best). The distribution of scores is based on the universe of approximately 28,000 funds included in MSCI ESG fund metrics. ESG ratings are classified as ESG Ratings Leaders (AAA and AA), Average (A, BBB, and BB), and Laggards (B and CCC). Figure 8 shows the MSCI ESG Ratings as of June 30, 2022. The Overall ESG quality score¹⁸: for the portfolio is 8.29 vs 9.15 of the reference index.

Figure 8: MSCI ESG fund rating summary



Source: MSCI ESG

¹⁸ ESG Quality Score measures the ability of underlying holdings to manage key medium to long-term risks and opportunities arising from environmental, social, and governance factors. It is based on MSCI ESG Ratings and is measured on a scale of 0 to 10 (worst to best).

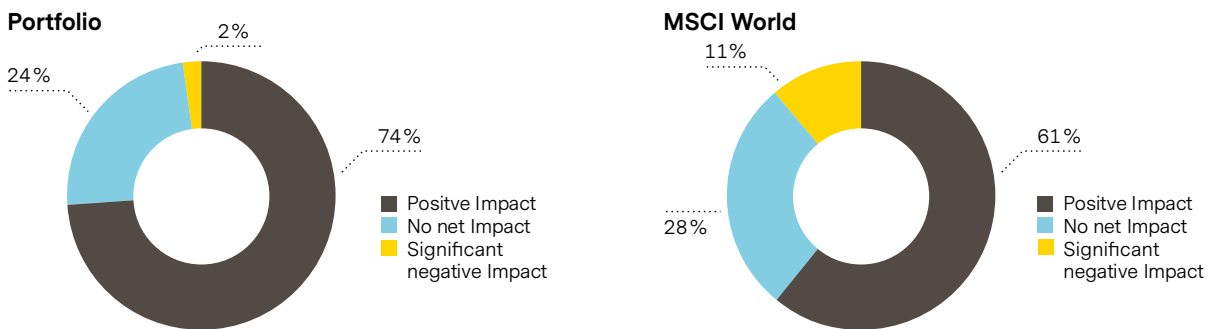
Ratings tied to UN SDGs

ISS ESG SDG Impact rating

The ISS ESG SDG Impact Rating provides a holistic metric of impact using the UN SDGs as a reference framework. The rating measures the extent to which companies are managing negative externalities in their operations across the entire value chain to minimize negative impacts, while at the same time making use of existing and emerging opportunities in their products and services to contribute to the achievement of the Sustainable Development Goals. A company's impact is measured thematically, following the SDG framework. For each of

the 17 SDGs, a company's impact is determined by three pillars: (1) the company's products and services; (2) the company's operational management; (3) the involvement in and responsiveness to controversies. Scores range from -10 (significant negative impact) to +10 (significant positive impact). The fund has an overall positive SDG contribution of 74% versus 61% of the reference index (see Figure 9). According to the ISS ESG methodology Trimble and Clean Harbors appear with a significant negative impact to SDG 12 and SDG 6, respectively; we do, however, not share ISS's negative view.

Figure 9: The portfolio's positive SDG impact exceeds that of the MSCI World Index



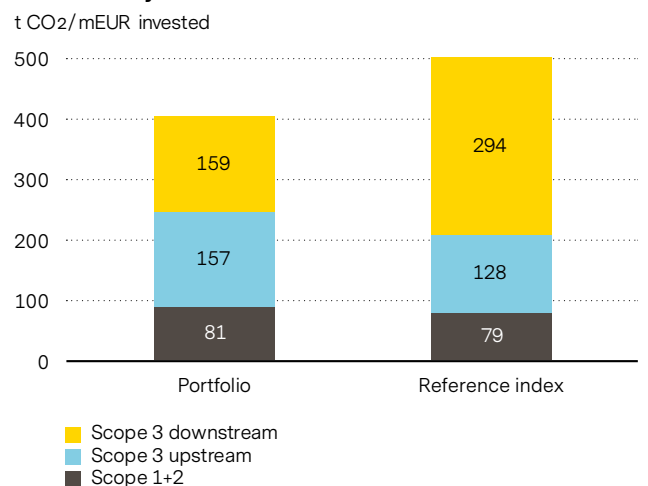
Source: ISS-ESG

Carbon footprint/climate assessment

MSCI ESG research

MSCI ESG research defines the portfolio carbon footprint as the tons of CO2 emitted per 1 million EUR invested. The carbon emissions by the companies in the Vontobel Fund – Clean Technology are 26% below those of the constituents of the reference index MSCI World. The portfolio carbon footprint data in Figure 10 originate from MSCI ESG.

Figure 10: The Vontobel Fund – Clean Technology portfolio excels in terms of carbon emissions and intensity



Source: Vontobel Asset Management. Certain Information © 2022 MSCI ESG Research LLC.

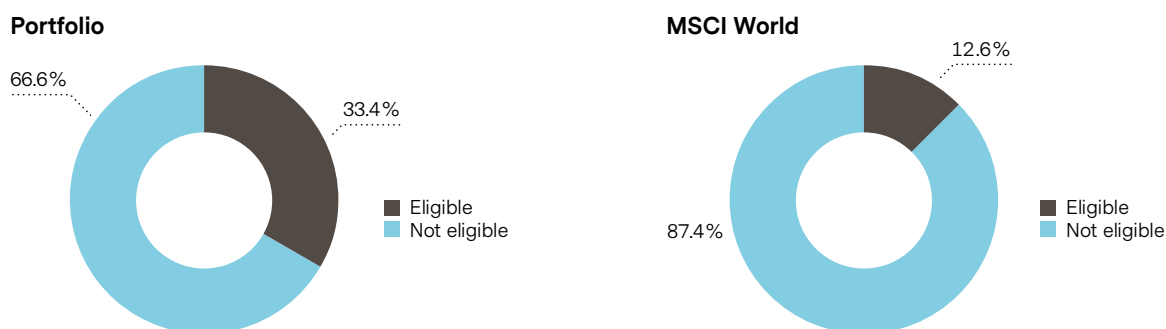
EU Taxonomy analysis

ISS ESG results

Regarding taxonomy assessment, we asked ISS ESG to conduct an analysis based on their data and methodology. The ISS ESG EU Taxonomy alignment report evaluates the alignment at portfolio level against the six climate and environmental related objectives set out by the regulatory text, by determining investee companies' involvement in Taxonomy-eligible economic activities, quantifying the respective revenues from these activities, and subsequently applying the three technical assess-

ment steps of "substantial contribution", "do no significant harm", and "minimum social safeguards"¹⁹. The ISS ESG results show that the Vontobel Fund – Clean Technology consists of 33.4% revenues from Taxonomy-eligible business activities (66.6% not eligible). In contrast, our reference index, the MSCI World contains only 12.6% Taxonomy-eligible revenues (87.4% not eligible), see Figure 11.

Figure 11: ISS ESG: The portfolio's EU Taxonomy eligibility is higher than that of the reference index



Source: ISS-ESG

MSCI ESG Sustainable impact metrics

The second analysis was conducted according to the MSCI ESG manager data and methodology. In reviewing investments and companies for potential alignments with the EU Taxonomy MSCI ESG uses their Sustainable Impact Metrics (SIM) as sensible proxy to assess the Taxonomy alignment. While the definition of "green" or "sus-

tainable" differs in some ways, MSCI's SIM dataset has a similar objective as the EU Taxonomy and can be used as a first screening for potential alignment. We applied the MSCI datapoint "EST_EU_TAXONOMY_MAX_REV"²⁰ to the portfolio. According to their methodology²¹ our fund has 19.1% of estimated EU Taxonomy aligned revenues compared to 4.7% of reference index MSCI World (see Figure 12)

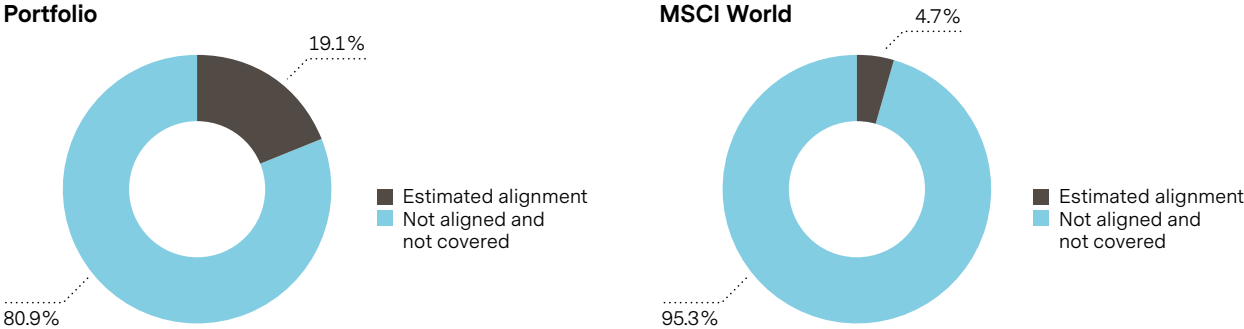
¹⁹ Further information on ISS ESG methodology can be found: [ISS Governance](#)

²⁰ Estimated "EU Taxonomy alignment - maximum percentage of revenue" indicates a company's estimated maximum percentage of revenue from products and services addressing environmental objectives, based on the MSCI SIM framework. Companies with a red and orange flag point to environmental controversies, and those with a red flag in "social and governance controversies" are excluded from the list for failing to meet the "Do no significant harm" as well as "Minimum social safeguards" criteria of the EU Taxonomy. Also excluded are tobacco producers and companies with any involvement in controversial weapons.

²¹ See [MSCI.com](#)



Figure 12: MSCI ESG estimate of the Vontobel Fund – Clean Technology portfolio’s EU Taxonomy alignment versus reference index



Source: Vontobel Asset Management, MSCI ESG Research LLC. Reproduced by permission, for more information see <https://www.msci.com/notice-and-disclaimer>.

The results from figure 11 to 12 show that there are still some discrepancies in the methodology, underlying assumptions and applied terminology, so there is no consistency yet across these metrics.

Appendix

Latest on ESG at Vontobel (policies, organization)

Vontobel has a Sustainable Investing and Advisory Policy Statement²² which describes how Vontobel integrates sustainability risks and principal adverse sustainability impacts in its investment decisions and advisory services. In particular, the policy explains our rationale, objectives, governance structure and how we implement these across our business divisions. The policy already addresses the level 1 and level 2 expectations, and during 2021, Vontobel regularly evaluates how subsequent regulatory technical standards (RTS) can be integrated. This policy was issued in 2019 and updated in March 2021 to be in conformity with Article 3 and Article 4 of the Regulation (EU) 2019/2088.

Voting and engagement

For the Vontobel Fund – Clean Technology we consider active ownership as very important for the development of sustainable economies, societies, and the environment. Material ESG issues can impact the future success of a company and therefore its investment potential. Consequently, we put a strong emphasis on direct engagement with our portfolio holdings, particularly on environmental issues and thereof arising opportunities, as this is an integral part of our research activities.

In selecting an investment for our portfolio, we typically have identified a specific connection between the products and services and our impact pillars. The theory of change explains the pathway between the sustainability challenges and the different company solutions. These challenges are also the core focus of the majority of our engagement processes. As an impact funds we rely on engagement as the fundamental vehicle for our investor contribution and therefore we want to demonstrate a clear connection between our impact priorities and our engagement actions.

The Voting and Engagement Guidelines for the Vontobel Fund - Clean Technology were updated and specified in 2022. They are on one hand based on the overarching Vontobel Voting and Engagement Guidelines and on the other hand, they describe the key objectives of our engagement, which are relevant for the investment objectives of this Fund.

Regarding collaborative engagements we work with BMO's reo[®] since January 2022. Such collaborative engagements allow us to exercise greater influence than the size of our holdings would otherwise permit and to benefit from BMO's reo[®] specialist resources and experi-

Figure 15: Statistics on our voting and engagement activities 2021

Nr of fact-finding engagements	45
Nr of collaborative engagements	27
Nr of AGM* votings	72
– In line with management	24
– Against management	48

Source: Vontobel Asset Management, Hermes EOS;
*AGM: Annual General Meeting

ence. We regularly observe that the type of engagement which helps drive structural changes is most effective in the context of long-established dialogue and a relationship of trust.

Impact Indicators: data, calculation and data quality and references

Wherever possible, we rely on reported data from companies held in the fund. This includes annual reports, CSR reports, websites, or other investor information. Requesting additional data and motivating companies to measure and publicly disclose the required data and indicators is part of our engagement work. An e-mail explaining our needs, comprising last year's impact report plus a list with all the impact indicators was sent to all portfolio holdings in April 2022. More than 30 companies took the time to thoroughly answer our survey, some however only with limited data. The relevant environmental metrics for the portfolio companies – mainly linked to their products and services – were applied where data was available or could be estimated. The analysis included all companies in which the Vontobel Fund – Clean Technology was invested in as of June 30, 2022. We aimed to obtain the most recently available environmental data from the invested companies; for over 90%, the data is from company's fiscal year 2021.

The data for each company is divided by its market capitalization (the total value of the listed shares of a company) in EUR. This figure is then multiplied by the amount invested into that company by the fund (ownership approach).

²² <https://www.vontobel.com/globalassets/legal/sfdr/vt-sustainable-investing-and-advisory-policy-statement.pdf>

The following reference values and sources and assumptions were applied for the impact indicators in figure 4 to translate the associated impact data into more tangible equivalents:

- **Renewable energy generated:** Electricity consumption by households per capita in the EU in 2020 was 1'596 kWh per capita. Source: <https://ec.europa.eu/eurostat>
- **Renewable energy devices shipped.** Assumptions: Wind and solar power—average capacity 30%. 1 kW of renewable capacity replaces 2.01 t of Coal in a power plant. <https://www.agora-energiewende.de/>
- **Circular economy:** Approx. 13.654 t of raw material consumption per capita in 2020 in the EU-27. Source: <https://appsso.eurostat.ec.europa.eu/>
- **Drinking water provided:** European environment agency: On average, 144 litres of water per person per day is supplied to households in Europe. (updated in 2021: per year: 144l * 365 days = 52'560l or 52.56m³). www.eea.europa.eu
- **Water recycled/treated/saved:** see drinking water
- **Waste treated/processed/recycled:** 505 kg of municipal waste per capita per year were generated in the EU in 2020. Source: https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Municipal_waste_statistics
- **Cargo/passenger transport by rail:** replaces car travels: average occupation in Germany: 1.46 passenger and average fuel consumption of 7.4l/100 km. Cargo: Net load of a 40t truck is 27 t and average diesel consumption of 35l/100 km
- **Carbon footprint:** Car average annual distance travelled in Germany 2020: 13'693 km; Average CO₂ emission of newly registered EU cars in 2020: 107.5g CO₂/km. Source: European environment agency (EEA)→ Total CO₂ per car/year: 1472 kg CO₂/year. Source: www.kba.de/
- **Potential avoided carbon emissions (PAE):** see carbon footprint

Important remarks:

The impact is generated by the companies, hence is only indirectly associated to the investments. As long-term providers of capital, we aim to support these companies to improve and expand their products and services as well as the business practices we consider impactful, and as such to create a more sustainable environment and society. However, while increasing an investment in the strategy increases your stake in the companies, it does not actually lead to a growth in the overall impact a holding company would have delivered last year.

The nine impact indicator data points provide an indication of the positive impact associated to the portfolio, they may however be vulnerable to inconsistencies. These can be caused by underlying assumptions, or in some cases, disclosed data required conversion to allow for aggregation across the portfolio.

PAE methodology and data applied by ISS ESG

Potential Avoided Emissions (PAE)

Avoided emissions are emissions that would have been released if an action or intervention had not taken place. The emissions avoided by using a more efficient product or service are often conditional on either consumer or market behavior. This analysis does not make absolute predictions about behavior or market developments. Consequently, ISS ESG has chosen to use PAE to underline that the avoided emissions presented are not assured or verified by a third party and are dependent on certain behaviors.

Description of the portfolio

This analysis looks at the potential avoided emissions for equity holdings of the Vontobel Fund – Clean Technology and the fund's respective ownership as of June 30, 2022. In total, ISS ESG analyzed 26 individual companies in the portfolio. All market cap data used in the analysis is from June 30, 2022. This is the 7th time this analysis has been conducted. No significant methodological changes have occurred since the previous year's analysis. However, this analysis includes now an alternative PAE value for 12 companies subject to a double counting correction (see 'Double counting' below).

Calculations

Each holding was contacted and asked to provide data on avoided emissions. If a holding was able to provide their own avoided emissions calculations, either via direct communication or publicly available information, these calculations were reviewed and used. In some cases, if the holdings' calculations were deemed imprecise, the calculations were amended. If no data was provided, a variety of methods were applied, such as an analysis of climate friendly product lines, or an extrapolation based on key figures from projects or companies in the same sector. The choice of assumptions and emission factors has followed a conservative approach. In other words, when choosing data points, the value generating the lower amount of PAE has been chosen. It is possible that the results would be higher if in-depth company-specific calculations were made.

Emission factors for electricity used in calculations are based on the International Energy Agency's 'Stated Policies Scenario' (STEPS) in 'World Energy Outlook 2021'.

For companies providing products or services where the PAE is expected to occur over a longer period, such as via an energy efficient battery or renewable energy technologies, an ex-ante approach considering the lifetime of the product or service has been applied. If a holding was

unable to provide data, and the products and services provided were difficult to define from an environmental perspective, the holding would be given the rating 'No Potential Avoided Emissions' (No PAE). The data request concerned 2021. If data from 2021 was unavailable, the latest available data was used instead.

Double counting

From an opportunity perspective, a company that is providing PAE is contributing to building a solution to the challenges posed by climate change. In an interlinked market economy with complex value chains, it is nearly impossible to completely exclude double counting. A couple of companies can provide interlinking services, each reporting how their service helps third parties avoid emissions. To illustrate, ISS ESG can look at the example of a wind farm. A wind turbine producer will report the avoided emissions from shipped capacity. An electrical utility may report avoided emissions based on operating the same wind farm. The energy generated can then be used by a rail service lowering the travel emissions of their passengers. All entities, being part of the same value chain, might report avoided emissions from the same source.

This does not pose a problem for analyses on a company level, such as year-on-year comparisons. But the possibility of double counting on a portfolio level can be quite high and increases the more portfolio companies are part of the same value chain.

In the absence of both a commonly accepted framework or methodology to account for double counting on a portfolio level, and the necessary data granularity on flows of products and services between individual companies, ISS ESG nevertheless addresses the issue of double counting in a holistic and precautionary way: This analysis includes an alternative PAE value for 14 companies identified as being subject to high risk and impact of double counting. The double counting corrections applied are based on share of capital cost of the final product and market share of the respective companies. Although ISS ESG believes that this approach might overestimate the impact of interconnections between companies in the sample at hand, the resulting aggregated, downward-adjusted PAE figure can serve as a more conservative impact metric on a portfolio level.

Explanatory power and limitations

The primary limitation of this exercise has been the availability of relevant data. The process of analyzing the activities of a company is time consuming and presents several challenges, including the interpretation of unstan-

standardized reports and a lack of available information. The results are therefore always dependent on the quality of the available data.

All results presented in this report are based on approximations and assumptions. The data used in this report is derived from various sources. For companies that were not able to provide data but whose offering enable PAEs, generic data has been used.

Allocation rules

The emissions and PAE are proportionally allocated 'per share' to the investor. If an investor owns 0.1% of a company, 0.1% of that company's emissions or PAE's have been apportioned to that investor. On a fund level, these PAEs and emissions are being aggregated based on the respective ownership of each holding.

Intensity metrics

In this study, ISS ESG presents the results with a primary intensity metric of emissions and PAE per million EUR (EURm) invested, attributing an investment's share of emissions to the investor.

Emissions and PAE per EURm invested: This metric displays how many tons of CO₂e emitted or avoided an investor would finance in relation to the respective ownership in a certain company or portfolio. The metric describes the emissions or PAE intensity of an investment amount. A company's share of PAE is determined by the value of shares held divided by the company's market cap.

Investor impact

Lastly, it is important to note that ISS ESG's PAE methodology does not allow for any claims about investor impact. The GHG emissions are avoided by the actions of the ultimate user of the product or service and are therefore largely driven by demand for the respective product or service. Consequently, an investment in a company whose products deliver PAE does not necessarily translate into an increase in future PAE delivered.

Figure 16: Major findings on company specific changes

COMPANY	DIFFERENCE 2020/ 21*	REASON/COMMENT
INFINEON TECHNOLOGIES	90%	PAE reported by the company are calculated based on the potential savings generated by technologies sold in 2021 in which semiconductors are used (eg. EV, renewable energy)
XINYI SOLAR	90%	PAE from yearly electricity generation from renewable sources
ANDRITZ AG	85%	PAE calculation for hydro turbines sold in 2021 and a single facility to generate biomethanol in the Pulp and Paper segment
SIEMENS AG	77%	Annual PAE from Environmental Portfolio elements. No lifetime adjustment possible / meaningful
NIBE INDUSTRIER	74%	PAE reported by the company calculated based on cut in emissions from the type of heating systems its heat pumps replaced in the respective markets
SAINT GOBAIN	-25%	PAE reported by the company for its insulation solutions sold in 2021 are adjusted for more conservative and aligned lifetime assumptions (20 vs approx. 40 years).
HANNON ARMSTRONG SUSTAINABLE	-52%	PAE from investments in renewable energy. Emissions avoided from project finance. It encompasses investments in energy efficiency, distribution, storage and generation of renewables across the US

*PAE Difference per EURm invested between 2021 and 2022 impact report



Third-party verification



REVIEW STATEMENT

Impact Indicators for Vontobel Fund – Clean Technology
30.09.2022

Review Summary

ISS ESG has reviewed the impact indicators reported in the impact report by Vontobel Asset Management.

- *ISS ESG has reviewed the impact indicators stated by the Listed Impact Team in the Sustainable Equities Boutique of Vontobel Asset Management. The team sent out an inquiry form to the holdings to gather the necessary data points in Spring 2022.*
- *ISS ESG reviewed a self-selected sample of 2-3 data points per type of metric provided by the Listed Impact Team.*
- *The information revised corresponds to that communicated by the investee companies and reflects the positive impact generated by the holdings in the Vontobel Fund - Clean Technology.*

ISS ESG provides corporate and country ESG research and ratings that enables its clients to identify material social and environmental risks and opportunities, including through advisory services.



Contact us

We would welcome feedback or suggestions from investors and companies to help us further develop our impact report.

For companies



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