

TAALERI
Energia

**Sustainability
report
2023**



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About us

Financing the Green Transition

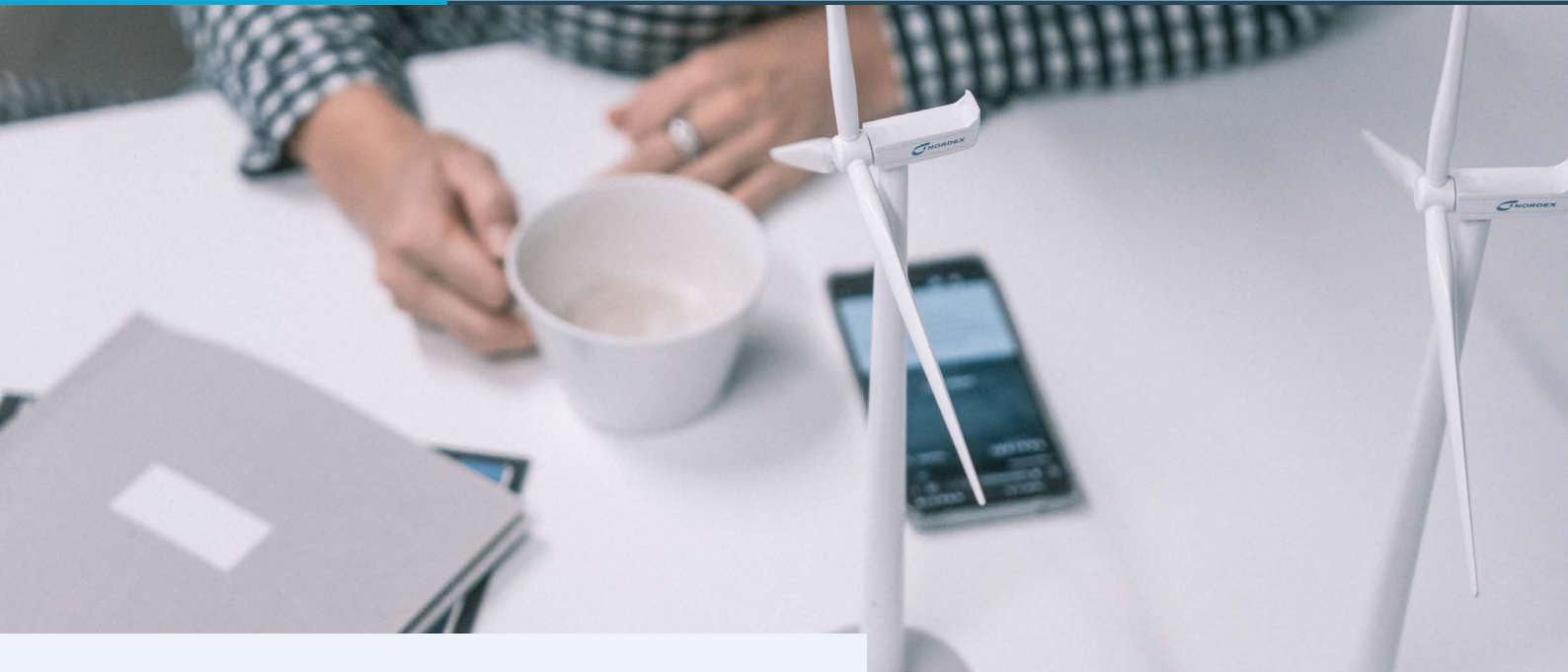
Taaleri Energia finances the transition into renewable energy. With operations started in 2011, we currently manage five private equity funds and have 1.1 billion euros of assets under management. Our funds develop and invest in utility-scale onshore wind, solar PV and battery energy storage plants in Europe, the US, and the Middle East. All funds are classified as Article 9 under the EU SFDR*. Our target is that all our investments will be EU Taxonomy aligned.

Investments in renewable energy production and battery energy storage are essential for increasing energy security and supporting the green transition. Wind farms and solar parks are mature technologies that offer the opportunity to quickly commence construction of substantial amounts of new and de-centralised energy production. Battery energy storage assets can balance electricity generation while also contributing to energy security. Battery energy storage assets support the growth of renewable energy production and together these investments work to help reduce the greenhouse gas concentration in the atmosphere, consistent with the long-term temperature goal of the Paris Agreement.

In addition to global and regional impacts, renewable energy production also has a meaningful impact on local communities. The increased electrification of the society in combination with the shift from fossil fuels to renewable energy production indirectly reduces air pollution, leading to a positive impact on the public health. The construction of de-centralised electricity production facilities requires significant improvements in the local and regional grid infrastructure, providing benefits for the industry and residents in the area. Our investments have a positive impact on employment, especially during the construction phase. Locally produced electricity also provides benefits via local and state tax revenues, as well as other support schemes. The income generated from a renewable energy production facility will in many cases materially improve the viability of the local community.

This report is dedicated to summarise our sustainability work during 2023 and to share our view on sustainability matters surrounding onshore wind, solar PV and battery energy storage investments.

*Sustainable Finance Disclosure Regulation EU/2019/2088



We report in accordance with the recommendations of the TCFD*



All of our funds are classified as Article 9 under the EU SFDR



Our renewable energy funds business scored a full 5 stars in the United Nations PRI assessment

*Task Force on Climate-related Financial Disclosures

9.6 GW

wind, solar and battery energy storage portfolio capacity, including development projects, in 2023

1.9 GW

wind, solar and battery energy storage portfolio capacity in 2023

4.0 TWh

of renewable energy produced during 2023

624 000 households

consumption of actual energy supplied in 2023

1 460 000 tCO₂e

achieved reduction of carbon dioxide in 2023

Greetings from the Managing Director

A Sustainable Investment Strategy

Kai Rintala



In 2023 we launched our sixth flagship renewable energy fund, Taaleri SolarWind III. With fundraising continuing throughout 2024, the fund reached 430 million euros in commitments by the end of 2023. The fund owns a development portfolio of more than 60 on-shore wind, solar PV and battery energy storage development projects and the fund's investment strategy is to develop, construct, operate and exit these projects.

The rapid and sustainable deployment of new renewable energy generation capacity is at the heart of solving many of the challenges that threaten the global economy, society, and the future of life on the planet as we know it. Local, clean and affordable electricity has the potential to both mitigate climate change and provide energy security. Taaleri Energia's funds are focused on making a substantial contribution to this transition.

Reaching the goals set in the Paris Agreement requires nothing less than a shift in paradigm. During the last few years, navigating from one crisis to the next, has become the new normal. With all that must change to combat global warming, it is reasonable to assume that both the market itself, as well as local and regional policymaking, will keep providing new challenges for investors. While our investment strategy is simple – develop, construct, operate and exit – the transition makes the market much more complex. With numerous new opportunities and risks arising, the rules of the game are ever-changing.

Managers must constantly be on the pulse, ready to evolve and capitalise on new opportunities as they arise. Our predecessor fund, Taaleri SolarWind II, was able to invest in fully developed, ready to build projects, and secure long term power purchase agreements, all with excellent returns. The market has shifted fundamentally, and our investment strategy along with it. There have been two material changes to the Taaleri Energia fund strategy: development and battery energy storage. Both of which support the transition better than ever.

Development

For Taaleri SolarWind III fund, taking on the challenge of project development has been vital for its success. One of the bottlenecks for rapid deployment of new production is the lack of high-quality developed projects to construct. Introducing development as part of the fund's strategy allows for a quicker rate of deployment. This also gives us the opportunity to fully control the quality. In the role of the developer, we decide the layout, materials used, how landowners and other stakeholders are considered throughout the permitting of the project, and how natural value on the site are considered. Our team of technical and development experts have been developing, constructing, and operating projects in Finland for more than a decade. Implementing these learnings and standards on an internationally level allows us to produce a state-of-the-art portfolio of projects in our selected target markets.

Battery energy storage

Volatility in electricity prices increases as the share of renewable energy production in the market increases. Whilst adjusting to the inherent variability in production is a systemic change, requiring large scale adjustments across the board, we recognise that battery energy storage plays a critical role in integrating renewable energy generation. Storing electricity balances out the volatility of renewable energy sources and ensures a more stable grid. Our fund strategy is to select opportunities to invest in batteries, both as stand-alone solutions, as well as behind the meter in connection with our renewable energy production facilities.

The ability to store and discharge electricity dependent on demand significantly enhances the opportunities to deploy a greater share of renewables in a given market. This again reduces the reliance on fossil fuels. This is why we see accelerating the widespread deployment of energy storage as an important component for achieving a greener and more sustainable economy.

CEE region

With these changes in strategy, pursue our mission, providing investors with the opportunity to invest in the transition to renewable energy. An important part of our investment strategy is our presence in the Central- and Eastern-European (CEE) region. This is also an important component of our impact strategy as, on average, our investments in the CEE region offset 164% more CO₂ emissions than the past investments we have made in Europe and the US. Going forward, we intend to continue on this path, with half of our 60 development projects being located in the CEE region.



Kai Rintala
Managing Director



Sustainability Highlights of 2023

UN PRI – United Nations Principles for Responsible Investment

The scoring system for UN PRI was renewed in 2023 and as a consequence, the 2022 UN PRI scoring results were published in late 2023. For the first time in Taaleri Energia's history, we scored a full 100% and achieved 5 stars in the sector of direct investments into infrastructure. This is a result of a decade of constant improvement, where Taaleri Energia's ESG team has been consistently dedicated to developing state-of-the-art sustainability practices.



TCFD - Task Force on Climate-related Financial Disclosures

In 2023, Taaleri Energia published its first ever formal report on climate-related financial risks and opportunities in accordance with the Task Force on Climate-related Financial Disclosures (TCFD). In the report, these risks and opportunities are described within four thematic areas that represent core elements of how organisations operate: governance, strategy, risk management as well as metrics and targets. The full report is available here: [Link \(pdf\)](#)

First investment into BESS

We believe batteries play an important role in a decarbonised future energy system. During 2023, we made our first investment in a battery energy technology (a 30 MW/ 36 MWh battery energy storage system (BESS)). Construction on the BESS started in summer 2023, and will result in one of the largest battery energy storage systems operating in the Finnish frequency reserve market. The battery energy storage facility will support the balancing of production and consumption in the main grid by participating in Fingrid's (TSO) reserve market, indirectly also balancing Taaleri Energia's own Finnish wind portfolio.



Sustainability training

Taaleri Energia has a diverse group of almost 50 energy professionals in Finland, Spain, Hungary, and Luxembourg, working across finance, development, construction, operations, legal and more. Embedding ESG and sustainability into daily operations is integral to scaling our operations. In the team's monthly knowledge sharing sessions, we brief the team on updates to policies, handbooks and templates or give concrete case examples. In 2023, focused training sessions on specific topics were held to provide in-depth instruction and discuss opportunities to improve. The team participated in two mandatory ESG courses, including knowledge testing.



Engagement

Taaleri Energia has investments in 14 different countries. This offers a great opportunity for us to engage in discourse on best practices, taking the learnings from one market and not only transposing those standards on our own investments in different geographies, but also influencing the direction in which the market develops. We engage with the industry via the local renewable energy associations in the markets where we have a presence. The associations provide insight into potential policy changes and give us a forum to influence their outcome. Taaleri Energia's Head of ESG, Jenny-Li Holmström, has over a decade been a member, and now acts as vice chairperson of the Board of Directors of the Finnish Wind Power Association (FWPA). Taaleri Energia's Sustainability Specialist, Laura Tiainen, is a member of the Sustainability Working Group of the FWPA. Taaleri Energia has memberships in the local renewable energy associations in Norway, Sweden, Poland, Lithuania, Latvia, and Serbia.



ESG Strategy

During 2023, we took the opportunity to create a formal ESG strategy for Taaleri Energia. With a relatively small number of dedicated ESG resources, it is of utmost importance to be strategic on how to focus resources, set targets and implement ESG aspects into the daily operations of the entire Taaleri Energia team. The ESG strategy was approved by the Board of Directors and it includes short- and long-term goals that are also used as KPIs for remuneration.



Sustainable procurement

The funds managed by Taaleri Energia develop, construct, and operate wind farms, solar parks, and battery energy storage facilities. We acknowledge that when procuring technology for these facilities, there are risks relating to labour rights, human rights, corruption, and the environment, not only on our project sites but also along the supply chain. Because of this, we have during 2023 developed a Sustainable Procurement Handbook that provides a detailed process for identifying, preventing, and mitigating environmental and human rights risks within our supply chain.

Sustainable procurement is one of the main challenges for the renewable energy industry and for us, as a fund manager. We have limited resources to secure that the technology we procure indeed has been sustainably sourced. Especially within the solar panel and battery energy storage technology procurement, there is a lack of transparency within the supply chain. Written statements and policies from suppliers can bring only a relative amount of comfort. Our sustainable procurement handbook is based on first analysing our position and then identifying the most effective tools available to us, along with identifying where we can still improve. Our fundamental approach is to conduct thorough due diligence on the suppliers we approve and to keep veto rights even in cases where procurement is outsourced. In addition to that, we must ensure that our contracts contain strict clauses, trickling down throughout the value chain, in order to all parties to have the appropriate commitments and processes in place to respect the minimum social safeguards, actively work on self-improvement and to increase transparency. We have also committed to work with the EBRD (European Bank of Reconstruction and Development) on the procurement of solar panels for our projects in the CEE region, and as a result, have the opportunity collaborate with their resources dedicated to improving sustainability on procurement.

Sustainable procurement is one of the main challenges for the renewable energy industry.



Taaleri Energia Renewable Energy Seminar

In October 2023, Taaleri Energia held its second annual renewable energy seminar in Zadar, Croatia. The seminar offered a 360 degree perspective on the renewable energy market in Europe and included topics like SFDR Article 9, project development, project financing and power market hedging strategies. A mixture of industry experts such as Taaleri Energia representatives, institutional investors and co-operation partners participated in the seminar. On one of the seminar days, we made a site visit to the 111 MW Zadar wind farm, a Taaleri SolarWind II asset, located around 300 km south-west of the capital city Zagreb. The Zadar wind farm will offset the equivalent of approximately 78 000 tonnes of carbon dioxide during each year of operation and is expected to increase Croatia's current electricity generation from renewable sources (excluding large hydro) by around 10%.

The annual seminar serves as a knowledge sharing forum among our investors, partners and other stakeholders. It was interesting to notice that although the 2023 seminar did not have a sustainability theme, each speaker touched on topics around sustainability and risk management. We also find that site visits are valuable opportunities to deepen stakeholders' understanding of the renewable power generation activities.

Taaleri Energia is continuing this tradition of annual knowledge sharing forums, with its next event coming up in April 2024 in Helsinki.



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Our Approach

Transparency and reporting



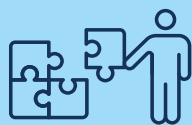
All funds are classified as Article 9 under the EU SFDR. Our target is that all of our investments will be EU Taxonomy aligned. Taaleri Energia has also adopted a number of voluntary frameworks to guide its sustainability strategy and reporting, including the Task Force on Climate-Related Financial Disclosures (TCFD), the UN Sustainable Development Goals (SDGs) and the Principles for Responsible Investment (PRI).

Sustainable partnerships



We manage our suppliers and other partners through our Partner Code of Conduct. In addition to selecting only reputable counterparties, requiring our partners to apply these minimum standards on their operations ensures we can hold our partners accountable for their actions throughout the duration of the relationship.

Implementing our approach



Our investments are control investments, providing us with an opportunity to implement our policies fully on all activities we fund. In practice, this means that instead of voting in favour of what we believe is the right thing to do, doing the right things is entirely up to us. We directly implement our ESG Policy on the projects we develop, construct, and operate. Third party contractors working directly on our behalf on these types of activities are contractually obligated to apply our ESG Policy in their operations.

Management systems



Dedicated ESG experts manage corporate sustainability matters, while the project managers are responsible for implementing in ESG in to the investments. Project managers have a wide range of tools at their disposal, including the Environmental and Social Management System (ESMS), which is a template-based handbook on adopting all ESG related requirements of Taaleri Energia. To ensure quality, Taaleri Energia Head of ESG is the gatekeeper, signing off on ESG matters prior to any investment decision.

Best practice



It is in the planning and execution of each individual wind farm, solar plant, and battery energy storage facility that our sustainable actions matter. We implement our Stakeholder Engagement Policy in each individual project. We promote local employment and take care of the local environment. We understand that our facility is part of the local community, and a social license to operate is as important as a legal license to operate. We implement EU Environmental Impact Assessment standards on all projects, regardless of its location. If we can't avoid negative impact, we mitigate it. If we can't mitigate, we strive to compensate.



COP28 – Hottest Year to Start the End of the Fossil Fuel Era

The COP28 climate change conference that was held in November – December 2023 in Dubai was another step towards a fair and more sustainable future. The conference gathered leaders from around the world to negotiate and commit to solutions for limiting the global temperature rise to 1.5 degrees Celsius. A small delegation from Taaleri – including the Managing Director of Taaleri Energia, Kai Rintala, and the CEO of Taaleri Group, Peter Ramsay, participated in COP28 as a sponsor of the Finnish pavilion, and through meetings with business partners and government officials.

Among the highlights of the conference, a new 30 BUSD climate investment fund was announced, along with a Loss and Damage fund that was operationalised to address the increasingly severe ecological damage that vulnerable countries face due

to the impacts of climate change. The main focus of the negotiations was to tackle the primary driver of climate change – fossil fuels. This groundbreaking agreement referred to as the "UAE Consensus", included a commitment by all countries to take tangible steps to transition away from fossil fuels over the next two decades. By setting a target for the world to achieve net zero emissions by 2050, COP28's final agreement signified an important step forward since the UN climate negotiations began 30 years ago. In addition to these formal climate negotiations, progress was made with other aspects as well. For example, commitments were made to substantially reduce methane emissions and agreements were reached to create more sustainable food systems and protect forests and land usage.

As of December 8, 2023, a total of 130 countries committed to tripling the global renewable energy power capacity by the year 2030. Simultaneously, these countries committed to double the annual rate of energy efficiency improvements each year until 2030. The collective participation of these countries represents 40% of the global carbon dioxide (CO₂) emissions stemming from fossil fuel combustion, 37% of the overall global energy demand and 56% of the global Gross Domestic Product (GDP).

An essential aspect of Taaleri Energia's participation at COP28 was to meet with our partners from Masdar who, as the UAE's leading state-owned renewable energy company, played an important role in hosting COP28. In addition to discussing the ongoing development of renewable energy projects in the CEE region, Taaleri Energia and Masdar announced their joint investment in a 1.1 GW portfolio of hybrid wind and solar PV projects in Poland. Once developed and constructed, the projects will make a significant contribution to reducing carbon emissions, in light of Poland having one of the most carbon-intensive economies in Europe, due to its high proportion of coal-fired power generation capacity.

While the final agreement at COP28 was on one hand historic, all of the parties acknowledged that there is still much work to be done. In addition to the need to provide specific national targets around each coun-

try's commitment to transitioning away from fossil fuels, it remains to be seen if the commitments to concrete actions will be sufficient to achieve the 1.5 degree target. To effectively combat climate change, it is imperative to not only establish agreements but also to ensure the availability of financing to fulfil these commitments in a cohesive and targeted manner. While global agreements can send the right signals, the world's fate will ultimately be determined by whether countries play their part in addressing the climate crisis.

The COP28 conference is not simply a meeting of national climate delegations, but also a forum for business leaders, climate professionals, and private capital to meet and push for action.

Kai Rintala, Managing Director



Zeroing in: Using Science to Navigate Emission Reductions

Taaleri Energia has aligned its activities with the Paris Agreement by engaging all of its investments in the Net Zero Asset Managers Initiative (“NZAM”). NZAM is an international commitment from asset managers to achieve net zero greenhouse gas emissions by 2050 or earlier. This initiative aligns with the global objective to keep global warming below 1.5 degrees Celsius. It also emphasizes investment strategies that support this net zero target. Taaleri Energia is on track to reach net zero already by 2030, ahead of the timeline expected for advanced economies, while acknowledging the extended timeframe for emerging and developing economies to adjust.

Reaching the goal of 1.5 degrees set in the Paris Agreement cannot happen only by increasing renewable energy production. It is also necessary to set targets to reduce emissions caused. That's why our target is to decrease our investments' direct and indirect Scope 1 and Scope 2 GHG emissions and, if possible, material parts of Scope 3 emissions by 50% by 2030. An important opportunity to reduce Scope 3 GHG emissions would be to shift to green steel in the manufacturing of the wind turbine tower sections, as well as green solutions in the foundations of onshore wind.

We measure performance against the baseline year of 2022, where we used a third-party analysis to calculate a starting point of 6.6 kg of CO₂/MWh.

Since then, we have been able to calculate actual emissions for the whole Scope 1 and 2 emissions and some parts of the Scope 3 emissions. The calculations and the target-setting method adhere to the GHG Protocol, which is a widely recognised international standard for measuring and managing greenhouse gas emissions. This approach ensures that our emissions data is both credible and consistent with global best practices, facilitating transparent and effective climate action (more information can be found Appendix 1.). Our emission reduction target is intensity-based. This means that the target is based on how much we emit compared to how much renewable energy our investments produce. So if the investments produce more renewable energy in a year, our emission reduction numbers will be higher and vice versa. In the case of renewable energy production facilities and battery energy storage assets, the majority of the emissions are caused before and during the construction period. This means that there will be an annual variance relating to our NZAM progress which may not accurately reflect the achievements made unless coupled with the amount of construction on-going within our portfolio during any given year.

More information on our NZAM target can be found in Methodology and Terminology Appendix.



Supporting Ukraine

At Taaleri we encourage everyone to keep their eyes open for opportunities to take sustainability action at the project level. We were nonetheless surprised and thrilled to hear the idea our technical team members had come up with. Below you can read our engineer's point of view on the event, which was ultimately recognised as Taaleri Energia's ESG Action of the Year 2023.



Tuomas Kupila
Technical Asset Manager, Electrical Operations

One way of approaching asset management is to strive to be consistently efficient and sensible. This approach leads to the aim of getting the most out of one's available resources which, in my opinion, means that you must have a clear understanding of your assets. This again naturally means that co-operation with your partners, colleagues and other stakeholders is a must. The more you understand the different functions and parties involved, the more you are likely to achieve your goal. For me, this means that I ask many questions and, at the same time, learn from others – and this is how we came up with the concrete idea of supporting Ukraine through the European Commission aid operation.

Russia's war of aggression against Ukraine led to an urgent need for, among other things, components, tools and machinery related to the energy sector. The European Commission launched an aid operation and member countries contacted their utilities, contractors and other relevant parties in order to gather donations to support Ukraine's energy supply. Ukraine's government prepared lists of urgently needed items and these were distributed by member states' governments. At a very early stage, it became obvious that virtually all items and help in general were urgently needed. Vast areas – whole cities and towns – were struggling without electricity. I learned that our Isoneva wind farm had, together with Exilion, a co-owned disassem-

bled high voltage item – a disconnecter - stored for some years in a substation yard. I started to think could this be something we could support Ukraine with. We started to investigate and discovered that the item had been stored properly, it was in good condition with all parts included, and also all documentation was available. The disconnecter was not something we could use in our own infrastructure due to grid changes some years ago, which meant that it had been waiting for a new home in the substation yard.

Feedback from the owners towards supporting Ukraine by offering the disconnecter as a donation was very positive. Although Taaleri had not been earlier identified by Finnish officials as a possible donating energy sector party, we went ahead and contacted the Finnish Foreign Ministry in Febru-

ary 2023, stating our willingness to participate and delivering information regarding the disconnecter. The Foreign Ministry was very pleased about our initiative and forwarded our donation proposal to Ukraine officials saying that processing the donation might take a while due to a shortage of resources at Ukraine's end. In June, we were approached by the Finnish officials saying that our donation had been accepted in Ukraine and that the Finnish government was ready to arrange transportation as part of the aid operation. In cooperation with our service partner, we loaded all quite sizeable parts to a semitrailer and now the disconnecter is hopefully already proudly serving the Ukraine's grid. To create a better understanding of the magnitude this item has for the grid it is safe to say that it covers the needs of a town or parts of a larger city.



Outlook for 2024

Head of ESG, Jenny-Li Holmström



The transparency journey continues

During 2023, efforts were focused on compliance and reporting. In the aftermath of the SFDR entering into force, managing sustainability requirements has been a constantly moving target. The regulation itself and the guidance on interpretation, as well as investor requirements are changing, evolving and, to our great pleasure, improving and becoming more fit for purpose. This is expected to be the trend also going forward. At Taaleri Energia, we embrace this change and intend to participate in creating workable, cost-efficient solutions. We believe moving quickly into efficient data management and taking opportunities to use AI is key to freeing up human resources for development activities and initiating concrete ESG actions.

The EU Taxonomy was a kick-start, and now the masses have truly embarked on the road to transparency. Transparency is necessary for trust and access to information, and transparency requires data. The world of sustainability reporting and compliance requires implementing appropriate tools. The challenge is that there is no off-the-shelf product to buy, and creating one's own set of tools requires insight and strategic planning. This is not a small task, but I argue that it is worth the effort. This is a time and resource consuming learning experience for everyone. Let's, however, not spend all our time on this task, but instead, while this is taking place, keep our eye on the ball, which is making sustainable investments.

Sustainable procurement in focus

Going into 2024, we will keep working on some of the themes we've covered in this report. To mention a few, sustainable procurement, being one of the main sustainability challenges of our industry, will be one of our key focus areas going forward. Active discourse, including engaging with our peers, investors and contractors, is a part of that work. Knowledge sharing and improving the sustainability of the industry overall is for the benefit of everyone.

Regulatory changes will keep coming. The next hot topic is the Taskforce on Nature-related Financial Disclosures (TNFD), which provides recommendations and guidance to enable business and finance to integrate nature into decision making. While these recommendations will become applicable to our activities, already at this stage we can recognise that the impacts on nature are small on site, compared to the impact cause when sourcing the raw materials and producing the technology used. This is in line with the GHG emissions – most of the emissions are Scope 3, meaning the emissions are caused upstream and sustainable procurement is where we can have the largest impact.

**We will keep working
on the themes we've
covered in this report.**



Targeting net zero impact on natural values

While we can participate in influencing the technology producers, our opportunities to exercise control is limited. The situation is quite different on-site, as our investments are control investments and we are in control of the development activities on-site. To reduce on-site impact, we are already working on a plan for net zero impact on material natural values. We believe that the renewable energy industry has an opportunity to lead the way also in this respect. We hope Taaleri Energia will make some headlines on this topic during the years to come with the projects we have initiated in this respect.

Navigating the transition

Lastly, transition means change. Energy policy is and will always be political. While we must acknowledge that this inevitably means that there will be surprises in the years to come, we must also rely on the undeniable facts: the world needs renewable energy and renewables generally have the lowest levelised cost of energy. Where there will be changes that challenge us, there will also be incentives to support the transition. With a diversified portfolio and active ownership, these waters can also be navigated. We anticipate that the future will hold short-sighted policy-making and unintended spill-over effects of seemingly unrelated changes in policy and this is an area where we need to be especially alert. It is not, however, only how we can predict and prepare for these events, but more so how we react to these events that will make the difference on how successful we are in carrying out our business going forward.

Over the decade I have spent at Taaleri Energia, I have grown confident that our team of almost 50 professionals will be able to take on these challenges. It is with a sense of purpose we continue on this journey of financing the transition in 2024 and the years to come.

Five sustainability targets for 2024

1. Reduce the share of fossil energy consumption (Scope 1 and 2) to zero or compensate
2. Initiate 5 net zero projects and consider TNFD
3. Construct and operate only EU Taxonomy aligned investments
4. Develop at least 500 MW capacity of renewable power generation or storage to ready to build
5. Include the entire supply chain in all technology procurement contracts





SUSTAINABLE DEVELOPMENT GOALS

Sustainable Development Goals


As we know, the world is battling in a poly-crisis time, where the climate and nature crisis, conflicts, economic outlook, and post-COVID-19 effects pose significant challenges. According to the [SDGs 2023 report](#), global community have not made the wanted progress towards the sustainable development goals. Progress has been sufficient only for 15% of the SDGs. For 37% of the SDGs, there has not been any progress, or the progress has been backwards. The climate crisis is worsening as the heat waves, droughts, flooding, and wildfires have become more frequent, sea level rise threatens hundreds of millions of people, and global temperature is very likely to reach the critical tipping point of 1.5 degrees Celsius above pre-industrial levels by 2035. For the first time in three decades, progress in key areas such as childhood vaccination and income inequality between countries has moved backwards. If we stay on this path and trend, by 2030 575 million people will remain in extreme poverty, 84 million children will stay out of education and it would take approximately 300 years to close gender gaps in legal protection, eliminate discriminatory laws and end child marriage. What makes the lack of progress worse, is that the consequences are carried by the poorest and most vulnerable people.

These words are devastating and awakening. One can argue that the meaning of sustainable development goals is disappearing. Even ought these issues to be scary, we can change direction. It is essential to reduce the adverse impacts, but similarly to increase and support the positive ones more. Someone has said it well; the kitchen would not be tidier by leaving less dirt in it. We need to update the way we think about business and create activities that maintain the world we want to live in. We must be ambitious, have fundamental shifts, and work together. The problems cannot be fixed in the same way that we created them. To separate our investment activities' strong support and promotion from being aligned with or having only a small impact or a negative one, we have divided SDGs into two – the first presenting the SDGs that we strongly align with positively and the latter the SDGs that we do have a positive or neutral impact on, but the link is not that strong, or the link is obvious.

The SDGs present a more resilient, peaceful, and inclusive future and environment to live in. Taaleri Energia has consulted a third-party company to assess our funds investments' alignment with the SDGs.

We are strongly aligned or aligned with the following SDGs:

7 AFFORDABLE AND CLEAN ENERGY



Goal 7

Target 7.2.
By 2030, increase substantially the share of renewable energy in the global energy mix.

Indicator 7.2.1.
Renewable energy share in the total final energy consumption.

Our approach
We enable the development, construction and operation of variable green energy sources, wind and solar facilities and battery energy storage assets. We contribute to increasing the renewable energy share of total final energy consumption, while also increasing energy efficiency and balancing the electricity grid volatility.

9 INDUSTRY, INNOVATION AND INFRASTRUCTURE



Goal 9

Target 9.4.
By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities.

Indicator 9.4.1.
CO₂ emission per unit of value added.

Our approach
We enable the development, construction and operation of variable green energy sources that promote inclusive and sustainable energy infrastructure. We aim to maximise the efficiency of existing infrastructure. We report our renewable energy investments enabled GHG emission reductions annually tCO₂e/MWh.

8 DECENT WORK AND ECONOMIC GROWTH




Goal 8

Target 8.8
Protect labour rights and promote safe and secure working environments for all workers, including migrant workers, in particular women migrants, and those in precarious employment

Indicator 8.8.2
Level of national compliance with labour rights (freedom of association and collective bargaining) based on International Labour Organization (ILO) textual sources and national legislation, by sex and migrant status.

Our approach
We monitor our investments in health and safety aspects, report any major or minor incidents and have investment-specific health and safety plans, requiring compliance with both national regulation and international conventions. We do not tolerate the use of child labour, forced labour and modern slavery in our supply chain. We have integrated these practices into our policies and sustainable procurement handbook.

13 CLIMATE ACTION



Goal 13

Target 13.2.
Integrate climate change measures into national policies, strategies, and planning.


Indicator 13.2.2.
Total greenhouse gas emissions per year.

Our approach
All our funds contribute to climate change mitigation by developing, constructing, and operating renewable energy and battery energy storage assets. We play an important role in enabling greenhouse gas emissions reductions and supporting the transition from fossil fuel usage to intermittent, clean energy sources. We reduce our investment scope 1, 2 and 3 emissions annually and have set science-based Paris Agreement-aligned emission reduction targets.

We are aligned with or have an impact on the following SDGs:

Goal 3

Target 3.9.
By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination.



3 GOOD HEALTH AND WELL-BEING

Goal 12

Target 12.2., 12.5. & 12.7.
By 2030, achieve the sustainable management and efficient use of natural resources.

By 2030, substantially reduce waste generation through prevention, reduction, recycling, and reuse.

Promote public procurement practices that are sustainable, in accordance with national policies and priorities.



12 RESPONSIBLE CONSUMPTION AND PRODUCTION

Goal 6

Target 6.3.
By 2030, improve water quality by reducing pollution, eliminating dumping, and minimising release of hazardous chemicals and materials, halving the proportion of untreated wastewater, and substantially increasing recycling and safe reuse globally.




6 CLEAN WATER AND SANITATION

Goal 15

Target 15.5. & 15.6.
Take urgent and significant action to reduce the degradation of natural habitats, halt the loss of biodiversity and, by 2020, protect and prevent the extinction of threatened species.

Promote fair and equitable sharing of the benefits arising from the utilisation of genetic resources and promote appropriate access to such resources, as internationally agreed.



15 LIFE ON LAND

Goal 11

Target 11.4. & 11.6.
Strengthen efforts to protect and safeguard the world's cultural and natural heritage.

By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management.



11 SUSTAINABLE CITIES AND COMMUNITIES

Goal 16

Target 16.5.
Substantially reduce corruption and bribery in all their forms.



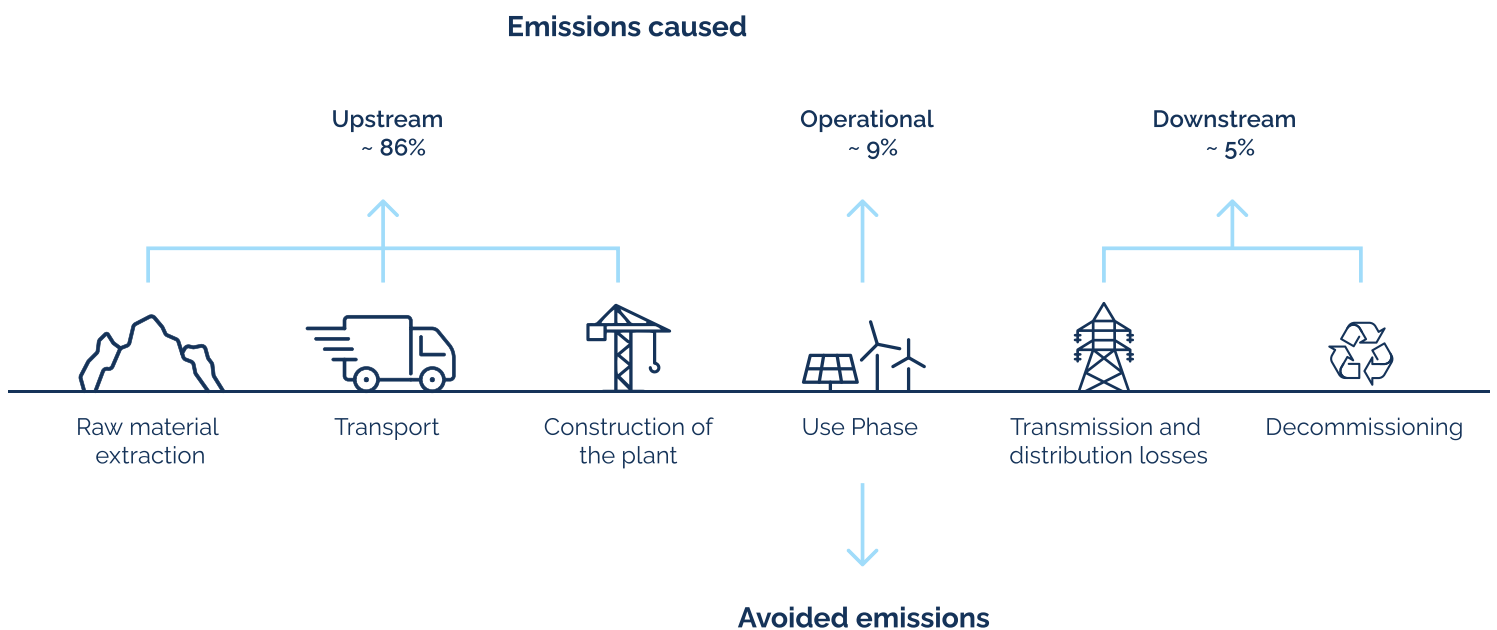
16 PEACE, JUSTICE AND STRONG INSTITUTIONS

Life Cycle Impacts from Construction to Decommissioning

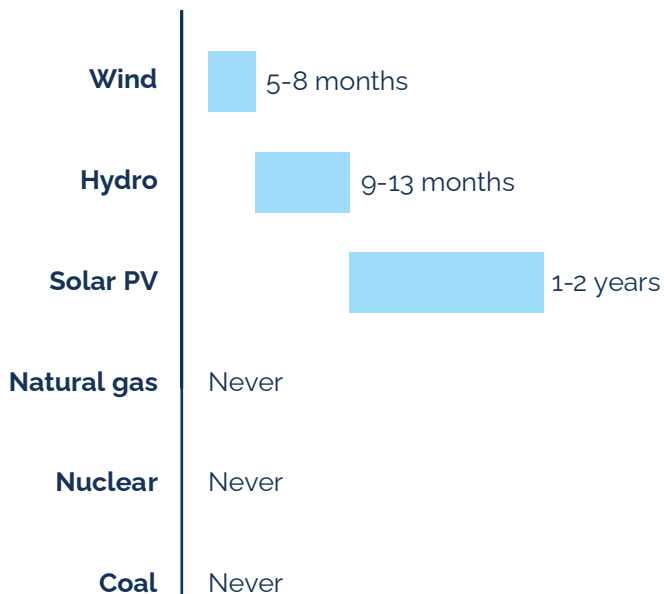
In our journey towards awareness of the themes of sustainability, understanding and assessing the life cycle impacts of our investments is critical. In this section we outline our approach to evaluating these impacts, ensuring our investments not only focus on the financial returns but also contribute positively to environmental and social outcomes. Each investment is an individual case and impacts do vary, but if dividing investments into project types, caused impacts can be modelled to give a comprehensive understanding. To effectively work towards Net Zero targets, the implementation of renewable energy projects together with battery energy storage systems (BESS) is important. Concurrently, there's a growing need to develop and apply sophisticated methodologies for evaluating the environmental impacts of these investments, particularly in climate change mitigation.

Wind and Solar

The evaluation of lifetime impacts for wind and solar energy is more advanced compared to battery energy storage systems. There's a wealth of research on renewable energy impacts, primarily focusing on lifetime avoided emissions and contrasting them with emissions from construction and decommissioning. As technology evolves, associated emissions may decline. Wind energy studies are more prevalent than those for solar, with estimated lifetime emissions of 6-10 g CO₂e/kWh. A significant portion of these emissions (about 86%) occurs during the manufacturing of the technology and construction of the power plant, with only 9% during operation. Key emission sources in wind projects include the wind turbine generator (70-75%), foundation (10-15%), and cables (5-10%), while emissions from installation, usage, and



Energy payback time for construction, operations and decommissioning



decommissioning are relatively minimal. The operational phase of wind energy notably contributes to its positive impact, complemented by the potential recycling or reuse of materials during decommissioning. The world's largest wind turbine manufacturer Vestas Wind Systems A/S estimates that a wind power produces the same amount of energy in five to eight months as it was required for wind turbine manufacturing and construction. Meaning that, over its lifespan, it can generate more than 50 times the energy needed for its construction. The picture above shows the energy payback time for construction, operations, and decommissioning for different energy production methods. (Source: [Vestas](#))

Also in the solar energy sector, the operational phase shows a significant reduction in greenhouse gas emissions. Studies indicate that less than 10% of solar energy's lifetime emissions occur during operation, with the majority arising from manufacturing and construction. However, there's a wide range in lifetime emission factors for solar, varying from 8 to 83 g CO_{2e}/kWh. This variation is attributed to the limited number of studies, diverse panel types, and differing construction methodologies.

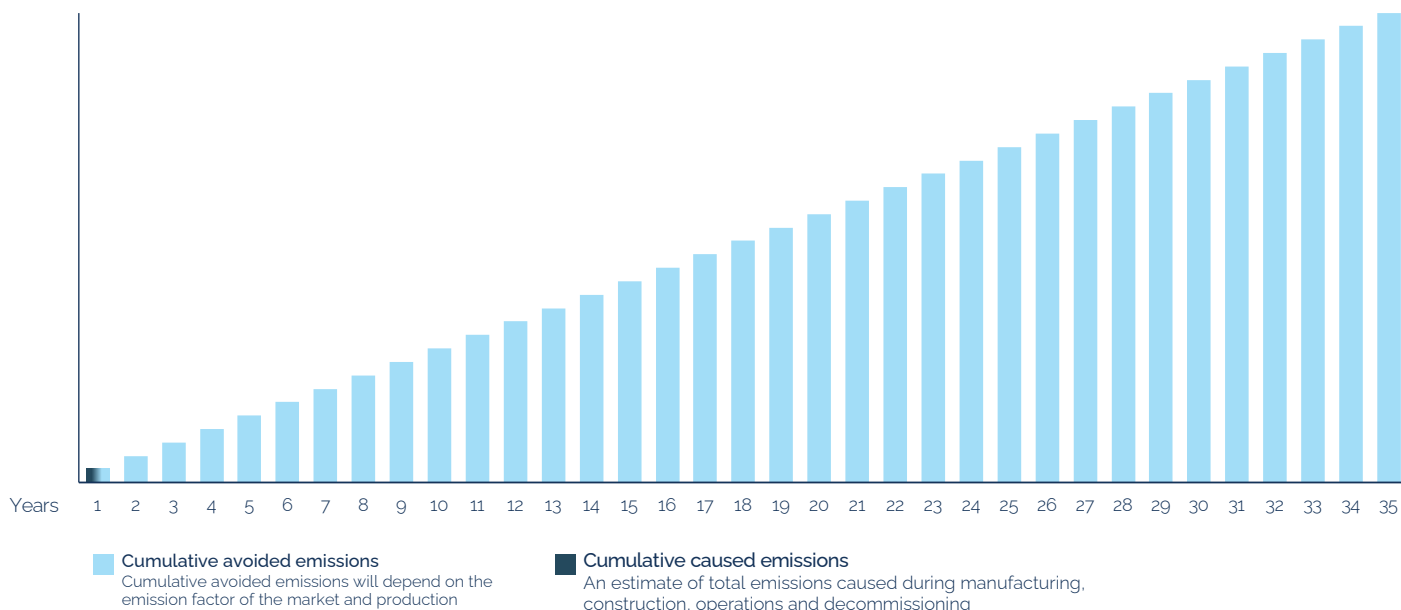
Over its lifespan, wind power can generate more than 50 times the energy needed for its construction.



Calculating the payback time based on the project's lifetime emissions caused and avoided can help us understand the effectiveness of renewable energy sources. Research and estimations have shown that generating renewable energy from wind power takes less than a year to achieve the "zero point." This means that after this point, the yearly avoided emissions exceed the lifetime emissions caused by the project. This is a significant milestone in the transition to cleaner energy. The picture on the next page illustrates this point. It is worth noting, however, that the payback period is longer for solar energy, with the "zero point" occurring between 2 to 3 years.

Lifetime avoided emissions for wind power

Payback period is less than a year



Battery energy storage:

Estimating the lifetime avoided emissions (LAE) of BESS is less straight forward than that of renewable energy production. The main challenge is that a BESS may be used for several purposes during the lifetime of the asset, all of which will produce a different outcome. For example, a battery operating in the frequency reserve market will have a different role in the system than one operating in the market arbitrage. Approaches for calculating the Lifetime Avoided Emissions (“LAE”) of a BESS operating in market arbitrage, are based on grid emission factors and the demand, consumption, and production of electricity. Hours of high electricity availability and low electricity prices are typically a result of high levels of renewable energy production. The BESS would typically be charged during these hours, while discharged during times of lower renewable energy availability, higher consumption, and higher prices. This also means that even if the BESS is a stand-alone system, the share of renewables stored in the BESS will be higher than the share of renewables in the system. This process helps to maintain grid balance and capacity, allowing for more renewables to enter the system, while also balancing the price of renewable energy.

Based on the above, the positive impact of the BESS may be calculated by comparing the hourly electricity emission intensity factor at the points in time of charging the battery and discharging the battery during the operational phase. When comparing this information with the lifetime-caused emissions, an overview of the lifetime impacts of the BESS can be achieved. However, it should be noted that this is not an all-encompassing method, as it only focuses on the emissions and some exclusions based on the materiality are done.

The strategic role of a BESS extends well beyond the achieved emission avoidances, positioning them as a pivotal component in the energy sector’s transition towards more sustainable and balanced energy systems. BESS not only support grid capacity, facilitating the incorporation of renewable energy sources but also delivers essential ancillary services vital for maintaining grid stability. It is crucial to acknowledge these multifaceted contributions alongside emission avoidance to fully appreciate the significance of utility-scale battery storage in advancing the power sector’s decarbonisation.

Sustainable Finance Disclosure Regulation

The Sustainable Finance Disclosure Regulation EU/2019/2088 ('SFDR') and its amending regulations is a significant legislative framework introduced by the European Union to support the EU Green Transition. Its primary objective is to enhance transparency in the financial market, particularly concerning sustainability risks and the environmental, social, and governance (ESG) aspects of investment products.

The SFDR sets forth specific disclosure requirements for financial market participants, including transparency on the sustainability risks and how those are integrated into their investment decision-making processes, to assess and report the adverse impacts on sustainability factors and certain product-level disclosures based on their classification.

Classification of Financial Products:

- Article 6: Products that do not promote or have sustainable investment objectives.
- Article 8: Products that promote environmental or social characteristics (commonly known as 'light green' products).
- Article 9: Products that have sustainable investment as their objective (referred to as 'dark green' products).

All Taaleri Energia funds are classified as Article 9 funds. All the funds and Taaleri Energia Funds Management ('the Manager') consider principal adverse impact indicators. The table on the next page summarises the adverse impact caused by the Manager as consolidated information from the Manager's funds. More information and regulatory tables can be found on the Manager's website www.taalerienergia.com.



Principal Adverse Impact indicators (PAI) SFDR EU/2022/1288 Appendix 1

Topic	#	Indicators	2023	2022
Climate and other environmental-related indicators				
Greenhouse gas emissions	1	Scope 1 GHG emissions, tCO ₂ e	0.0	0.0
		Scope 2 GHG emissions, tCO ₂ e	69.4	413.7
		Scope 3 GHG emissions, tCO ₂ e	22 813.9	46 286.8
		Total GHG emissions, tCO ₂ e	22 883.4	46 700.5
	2	Carbon footprint, tCO ₂ e/€M	175.5	*424.9
	3	GHG intensity tCO ₂ e/€M	14	*3 700.7
	4	Companies active in fossil fuel sectors	0.0%	0.0%
	5	Share of non-renewable energy consumption and production	0.0%	0.1%
	6	Energy consumption, GWh/€M	2.5	*2.6
Biodiversity	7	Activities negatively affecting biodiversity-sensitive areas	0.0%	0.0%
Water	8	Emissions to water ratio	0.0	0.0
Waste	9	Hazardous waste and radioactive waste ratio	0.0	0.0
Social and employee, respect for human rights, anti-corruption, and anti-bribery matters				
UNGC principles and OECD Guidelines for Multinational Enterprises	10	Violations of principles	0.0%	0.0%
	11	Lack of processes and mechanisms to monitor compliance	0.0%	0.0%
Gender equality	12	Unadjusted gender pay gap	**n/a	**n/a
Gender diversity	13	Board gender diversity	30.5%	35.0%
Controversial weapons	14	Exposure to controversial weapons	0.0%	0.0%
Additional indicators				
Emissions	15	Investments without carbon emission reduction initiatives aimed at aligning with the Paris Agreement	0.0%	0.0%
Social and employee matters	16	Rate of accidents	0.0	0.0

In comparison to the results from 2022, the Manager has three additional funds under management. However, these funds are not covered in this PAI statement, as they each contain only one or two investments, and including their fund-level information would not impact the overall information at the AIFM level. Prior to July 2024, the Manager will publish a comprehensive PAI statement on their website, encompassing all funds under management.

*Last year's results have been recalculated to match the 2023 calculation methods. 2022 reported numbers: Carbon footprint 415.1 tCO₂e/€M and GHG intensity 10247.1 tCO₂e/€M.

**Investment companies do not have direct employees.

Identifying and Addressing Climate-related Risks and Opportunities

Taaleri Energia has published its first formal report on climate-related financial risks and opportunities in accordance with the Task Force on Climate-related Financial Disclosures (TCFD). Climate-related risks and opportunities can either arise from the transition to a low-carbon economy or relate to changes in policy and legal frameworks, new technologies, market responses, and reputational considerations. We have identified the potential climate-related risks and opportunities for our business. A summary of those is presented in the table below. The full report is available here: [Link \(pdf\)](#).

Addressing physical climate-related risks

In 2022, Taaleri Energia re-structured its way to address physical climate change risks arising from extreme weather phenomena to align with EU Taxonomy requirements. As a result, we can better understand how climate change may affect our investments in the short, medium, and long-term. Addressing physical climate change related risks is not just important for the environment and compliance with regulations, but it also deepens our understanding of climate change and how it may affect our investments. The physical impacts of climate change occurring acutely

Category	Overview	Risk/Opportunity
Transitional risks	Our vulnerability to the challenges posed by transitioning towards a lower carbon economy	Operational: Possible challenges in raw material usage, value chain, land usage and human rights issues relating to procurement.
		Political: Increased intervention in the energy sector could lead to unstable development and over-construction, impacting long-term asset value. In addition, extensive regulation demands have an impact.
		Market and reputational: Rising costs and scarcity of raw materials, increased competition for skilled workers and market uncertainty.
		Technology: The risk of investing in new technologies and markets that may potentially lead to write-offs and additional costs.
Transitional opportunities	Identified possibilities posed by the transition towards a lower carbon economy	Strategy: Our business model and strategy are aligned with the EU Green transition. Policy-making is likely to be in favour of our business.
		Operational: Renewable energy investments reduce carbon emissions, enhance energy security, and support sustainable economic growth, making our assets an attractive counterparty for securing power purchase agreements.
		Market and Reputational: Aligning investments with climate change mitigation goals presents a unique opportunity for impact investing, improving our reputation in the market as an employee for the best talent and counterparty for collaboration
		Regulatory: Adherence to new regulations, such as the SFDR and TCFD recommendations strengthens our commitment to sustainable practices and transparency and has the potential to attract increased capital. Regulatory changes are likely to be in favour of Paris Agreement aligned activities, while less favourable to polluting activities.

or chronically have or may have profound implications for our investments during the lifetime of the assets. By identifying and understanding these risks we may be more aware of the long-term climate impacts, have better positioning to mitigate these risks and ensure sustainable returns, and be transparent and proactive to our stakeholders about the identified risks.

To assess physical climate change-related risks, different climate change scenarios are used. RCP (Representative Concentration Pathway) scenarios range from 2.6 (representing stringent mitigation efforts) to 8.5 (high greenhouse gas emissions). The table below presents a summary of the physical climate change risks identified within our investment locations for the climate scenario RCP 4.5. We also assess our investments using the scenarios RCP 2.6, 6.0 and 8.5. RCP 4.5 is an intermediate scenario, where some mitigation actions are taken but are not as aggressive as RCP2.6. This range ensures a comprehensive understanding of potential future climates and their associated risks.

As of now, global trends in emissions and policies suggest a path somewhere between RCP4.5 and RCP8.5 scenarios, but this can change with increased

global commitment to emissions reduction, technological advances, and policy changes. To improve the probability of the lower RCP scenarios, significant and concerted global efforts in reducing greenhouse gas emissions, transitioning to renewable energy, and implementing effective climate policies are required. The Paris Agreement, for example, aims to limit global warming to well below 2°C, preferably to 1.5°C, compared to pre-industrial levels, which aligns more with the objectives of RCP2.6. However, current national pledges and policies need to be significantly strengthened to achieve these targets.

Temperature rising has been found to be the greatest threat to our investments. This may mean for example, long heat or cold waves that could have an impact on the investments' operation or battery storage assets' operational lifespan. However, we found that there are also risks relating to extreme wind and water conditions. These risks could be seen in heavy rains, storms, flooding, or the unavailability of water to keep the solar panels clean. For all of the risks identified, we have set a mitigation plan.

Location	Total capacity / Funds' ownership capacity*	Relevant physical climate risks, RCP4.5							
		Temperature		Wind		Water		Solid mass	
		Acute	Chronic	Acute	Chronic	Acute	Chronic	Acute	Chronic
Finland	561 MW / 481 MW	Low	High	Low	Medium	Low	Medium	Low	Low
Sweden	38 MW / 38 MW	Low	Medium	Low	Medium	Low	Medium	Low	Medium
Norway	34 MW / 34 MW	Low	Medium	Low	Medium	Low	Medium	Low	Medium
Lithuania	186 MW / 106 MW	Low	Medium	Low	Medium	Low	Medium	Low	Medium
Poland	51 MW / 26 MW	Low	Medium	Low	Medium	Low	Medium	Low	Medium
Serbia	158 MW / 34 MW	Medium	High	Low	Medium	Low	Medium	Low	Medium
Croatia	111 MW / 55 MW	Medium	High	Low	Medium	Low	Medium	Low	Medium
Spain	50 MW / 50 MW	Medium	High	Low	Low	Medium	High	Low	Low
Jordan	248 MW / 74 MW	Medium	High	Low	Low	Medium	High	Low	Low
USA - Texas	336 MW / 124 MW	Medium	High	Medium	High	Low	Medium	Low	Low

* under construction or operational

ESG Team Biographies



Jenny-Li Holmström

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Jenny-Li is Head of ESG, Investment Manager and Senior Legal Counsel at Taaleri Energia. She has worked as a lawyer at Taaleri since 2014, during which time she has also for several years acted as the secretary of the board, been Head of Risk Management, as well as the project manager for the establishment of several private equity funds. Jenny-Li has extensive experience in the wind power industry, ranging from permitting and financing, corporate governance, structuring and transactions. She is currently the Vice Chairperson of the Board of the Finnish Wind Power Association, where she has actively been promoting sound wind industry regulation and practices since 2013. In addition, Jenny-Li works on wind transactions, including development, in the Balkans and is responsible for ESG matters within the investment team. Prior to joining Taaleri she was an associate at HPP Attorneys Ltd.'s environmental team.

Jenny-Li holds an LL.M from University of Helsinki.



Laura Tiainen

Sustainability Specialist
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Laura is a Sustainability Specialist at Taaleri Energia, where she manages and develops the sustainability aspects of investments, funds, and the company at large. In her multifaceted role, she is tasked with implementing the ESG strategy and policy, keeping the grievance mechanism current, monitoring regulatory changes and advancements in sustainability, and collaborating with her team to ensure and manage sustainable asset management. Laura is also responsible for thorough sustainability reporting and maintaining robust data processes to meet stakeholder and regulatory requirements. Her expertise spans various reporting frameworks, such as the Sustainable Finance Regulation, EU Taxonomy, TCFD, and GRI, which she adeptly applies to her work. Laura is a member of the Sustainability Working Group of the Finnish Wind Power Association. Before Taaleri, Laura worked as a Sustainability Consultant at Deloitte.

Laura holds an M.Sc. (Tech.) from Aalto University.

Appendix 1. Methodology and terminology

Summary of the Sustainability Indicators used	
Renewable energy capacity (MW)	The reported number is based on installed capacity at the end of the reporting period. The reported number is the nominal capacity, reflecting what the power plant would produce if it ran 100% of the time, in optimal conditions. The commercial operations date must have been reached and the facility must have the capability of producing electricity for consumption for the facility to be reported under this metric.
Renewable energy produced (MWh)	The reported number is the number of MWh produced by the assets during the reporting period.
Number of households supplied with energy	The reported figure indicates the number of households' electricity demand the quantity of renewable energy generated during the reporting period would have the potential to cover. This metric is derived by applying country-specific average household electricity consumption rates to the MWh produced by the assets within the reporting period. Country specific consumption rates are available each country's website. For example, Finland's factors are available at Motiva's website.
Greenhouse Gas reductions or avoidance (tCO ₂ e)	CO ₂ reduction or avoidance is calculated according to the European Investment Bank's ('EIB') methodology . The methodology evaluates a project's net emissions, termed "Relative emissions," which can be either positive or negative. Negative relative emissions indicate a decrease in GHG emissions compared to a baseline, whereas positive emissions indicate an increase. These are determined by subtracting the project's baseline emissions from its absolute emissions. Absolute emissions refer to those generated in a typical year of operation and are initially considered zero. As according to EIB's methodology, the project's absolute emissions will be quantified and included in the footprint if the emissions are greater than positive or negative 20,000 tonnes of CO ₂ e/year. Baseline emissions represent the scenario of what would happen without the project in the specific location. <ul style="list-style-type: none"> • Baseline emissions = electricity generated by the project x emission factor • Emission factors will change together with renewable energy capacity increase in the grid • Please find a table of the used emission factors below
Times renewable energy is transferred into high-demand hours	The number indicates the duration in hours that the battery storage system shifts renewable energy to periods of high demand. This metric is derived from the variation in the grid's renewable energy concentration during the times when the battery is charged and when it is discharged.
Hours of electricity grid balancing supplied	The number represents the number of hours during which the battery storage asset balanced the grid. It reflects the cumulative duration the battery was discharging energy throughout the reporting period.
Renewable energy capacity developed (MW)	The total amount of planned nominal capacity of the projects under development, where the project rights are exclusively held.
Environmental incidents	The number is based on on-site incidents as reported from all projects separately on a monthly basis.
Breaches of environmental permits	The number is based on annual project specific reporting results. The term "environmental permit" is interpreted widely to cover environmental obligations posed by a competent authority, despite most of the facilities operating without obligation to procure an environmental permit due to the non-polluting nature of the activity
Hours worked (during the construction phases)	On-site hours worked by any contractor during the construction phase in the reporting period.
Health and Safety – Fatalities	On-site fatalities during the reporting period.
Health and Safety – Loss Time Incidents	On-site lost time incidents, i.e. accidents that occur when a worker sustains an injury that results in time off from work, or loss of productive work (absenteeism or delays) during the reporting period.
Community fund contributions	The total amount (€, round to nearest thousands) of community contributions given by the fund projects' during the reporting period.
Received grievances through grievance mechanism procedures	The number of received grievances through the project specific grievance mechanism procedures during the reporting period.

Appendix 2. Emission factors

The [EIB carbon footprint methodology](#) offers emission factors to calculate GHG emissions avoided or reduced, sourced from reputable international guidelines like the WRI/WBCSD's GHG Protocol and IPCC National GHG Inventories. When using these factors, the impact of non-CO₂ GHGs is negligible. For calculation purposes, the factors below can be considered as CO₂e.

Country	CO ₂ tonnes offset per GWh
Serbia	933
Poland	717
Jordan	474
USA	352
Spain	329
Croatia	247
Finland	209
Lithuania	170
Sweden	52
Norway	36

Summary of the GHG emissions caused:

Our activities may cause direct GHG emissions or indirect emissions. To measure and calculate our caused emissions, we use Greenhouse Gas Protocol. The GHG Protocol is the world's most widely used greenhouse gas accounting standards and it is designed to provide a framework for businesses, governments, and other entities to measure and report their greenhouse gas emissions. The GHG Protocol divides emissions into direct and indirect emissions. Those are defined as follows:

- Direct GHG emissions are emissions from sources that are owned or controlled by the reporting entity.
- Indirect GHG emissions are emissions that are a consequence of the activities of the reporting entity but occur at sources owned or controlled by another entity.

These categories are further divided into three broad scopes:

- Scope 1: All direct GHG emissions.
- Scope 2: Indirect GHG emissions from consumption of purchased electricity, heat, or steam.
- Scope 3: Other indirect emissions, such as the extraction and production of purchased materials and fuels, transport-related activities in vehicles not owned or controlled by the reporting entity, electricity-related activities (e.g. T&D losses) not covered in Scope 2, outsourced activities, waste disposal, etc.

GHG Protocol is not a reporting program and does not require verification. We report our emissions according to the Sustainable Finance Disclosure Regulation (EU/2019/2088 and EU/2022/1288).

The majority of our emissions stem from the emissions associated with our fund's investments. We have determined that our investments' Scope 1 emissions are effectively zero, as the investments neither own nor control any direct emission sources. Scope 2 emissions are related to the energy consumed by the investment. Scope 3 emissions,

encompassing both upstream and downstream impacts as well as those induced by investment activities, form our broadest emissions category. For our wind and solar projects, we employ Life Cycle Assessments (LCA) to calculate Scope 3 emissions. These LCAs provide a calculated estimate that takes into account the project's capacity and its lifecycle stages, offering a comprehensive view of emissions from manufacturing through operation to project end-of-life. For battery storage projects, which are new in our strategy and currently in the construction phase, LCA analyses are still underway. Due to this, we've relied on actual data collected during construction to calculate Scope 3 emissions for these projects. It's important to note that our Scope 3 emissions calculations for battery projects, reported in 2023, do not include emissions associated with manufacturing and transporting the batteries to Finland, as they are based on the data available for the reporting period and the current project phase. This approach ensures that our emissions reporting is both accurate and reflective of the project's specific context and progress.

Scope 1

To calculate Scope 1 emissions, we measure the direct greenhouse gas emissions from sources that our investments owns or controls, such as emissions from combustion in owned or controlled boilers, furnaces, vehicles, and from chemical production in owned or controlled process equipment.

Scope 2

Scope 2 emissions are calculated following the GHG Protocol, which involves multiplying the energy consumed by the emission factor, using either a location-based or market-based method.

- Location-based method applies regional or grid-average emission factors to the electricity consumed, reflecting the average energy mix of the location where the consumption occurs.
- Market-based method utilises emission factors that reflect the specific energy sources contracted or purchased by a company, such as renewable energy certificates and Guarantees of Origins, to account for the environmental impact of the chosen energy supply more accurately.

Scope 3

Wind and solar: Our Scope 3 emissions analysis leverages Life Cycle Assessment (LCA) data, revealing that wind energy generates approximately 9 kg of CO₂e per MWh, and solar energy about 35 kg of CO₂e per MWh. Integrating this data with project capacities allows for a detailed estimate of lifetime emissions over a projected 35-year span, segmented by phase: construction (86% of emissions), operation (9%), and decommissioning (5%). This methodological approach ensures a comprehensive and professional assessment of the environmental impact across different project stages.

Calculation example: In our example, a 20 MW project with an annual yield of 61,320 MWh, results in a cumulative generation of 1,533,000 MWh over the project's 35-year lifespan. By assessing the total lifetime emissions of 13,797 tCO₂e and allocating these based on the project's phases—construction, operation, and decommissioning—we derive a detailed breakdown of Scope 3 emissions. Then by dividing the project phase emissions by phase duration, we may have the annual scope 3 emissions caused per the reporting period.

Battery: As mentioned, the LCA for our battery asset is ongoing. In the interim, we've relied on actual data from the construction phase of the asset, using specific emission factors for example materials used, fuels consumed, and waste generated. While acknowledging potential data gaps, we've focused on calculating emissions from the most significant sources for this period.

We do not include Taaleri Energia's GHG emissions in our calculations as those emissions are considered in the Taaleri Plc GHG emission calculations.

Appendix 3. Policies, publications, and sources

Website:

- Taaleri Energia's website: <https://www.taalerienergia.com/>
- Sustainability at Taaleri Energia: <https://www.taalerienergia.com/en/sustainability>
- Taaleri Energia's Strategy: <https://www.taalerienergia.com/en/strategy>
- Taaleri Energia's Team: <https://www.taalerienergia.com/en/our-team>

Fund-specific information:

- Wind Power Fund II: <https://www.taalerienergia.com/en/funds/wind-power-fund-ii>
- Wind Power Fund III: <https://www.taalerienergia.com/en/funds/wind-power-fund-III>
- SolarWind I: <https://www.taalerienergia.com/en/funds/solarwind-i-1>
- SolarWind II: <https://www.taalerienergia.com/en/funds/solarwind-ii>
- SolarWind III: <https://www.taalerienergia.com/en/funds/solarwind-iii>

Policies and publications:

- Taaleri Energia's Partner Code of Conduct: https://www.taalerienergia.com/download_file/2958/0
- Taaleri Energia's ESG Policy: http://www.taalerienergia.com/download_file/2957/0
- Taaleri Energia's Task Force on Climate-related Financial Disclosures (TCFD) 2023 report: https://www.taalerienergia.com/download_file/view/3224/4981

Other:

- UN Sustainable Development Goals: <https://sdgs.un.org/>
- European Investment Bank (EIB) Project Carbon Footprint Methodologies: https://www.eib.org/attachments/lucalli/eib_project_carbon_footprint_methodologies_2023_en.pdf
- Vestas. Energy Payback & Return on Energy: <https://www.vestas.com/en/sustainability/environment/energy-payback>