

**Sustainability review 2022**



**ILMATAR**



# Sustainability review 2022

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This is the sustainability review of Ilmatar Energy, which describes our sustainability work and how we focused on environmental and social responsibility in 2022. The review has been published in Finnish and English.

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## Energy we can be proud of

Our job is to create the conditions for a better world. We have worked tirelessly for more than ten years, dedicating our entire operation to the idea of producing clean and renewable energy to respond to the serious climate challenge the world is facing. The demand for electricity grows every day, due to e.g. electrification of industry and district heating and the emergence of data centres and electric vehicles.

The world is in a state of upheaval in other ways, too. With Russia's attack on Ukraine and the volatility of energy prices, energy sources and domesticity have entered public discourse, impacted decision-making and increased public interest.

The time has come to make ourselves heard and increase the visibility of our actions. With innovative solutions, a bold mindset and an unyielding attitude we can help Finland achieve energy self-sufficiency. Our dream is to help create a society that runs entirely on renewable energy.

However, Ilmatar wants to go even further. We want Finland to lead the way in the production of clean energy. When Finland becomes an exporter of renewable energy, only then have we succeeded. All the prerequisites for success are within our reach.

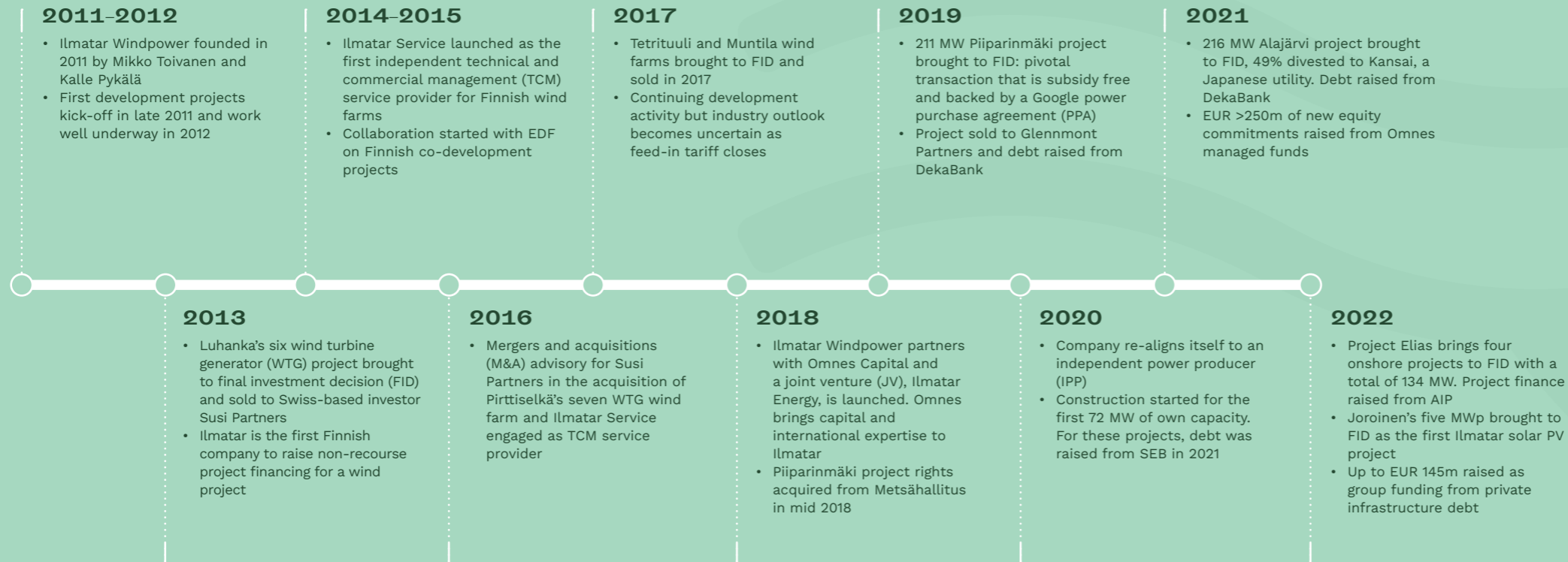




# Ilmatar in brief

Ilmatar is a Finnish energy company and an independent power producer, that focuses exclusively on renewable energy. Ilmatar was founded in 2011. Our operations range from greenfield development and construction management to operational asset management.

The wind farms of Ilmatar are built unsubsidised and Ilmatar owns the wind farms through their whole operational life.



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## CEO review

In 2022, Ilmatar saw highly positive growth towards becoming an independent energy company that develops, builds and produces renewable energy. Increasing and fluctuating electricity prices, overall economic uncertainty and post-pandemic issues in global supply chains made our operating environment somewhat unstable. Despite the instability, we achieved our expansion goals in accordance with our strategy.

I am particularly proud of our success in securing significant investments for new wind power and launching our solar power business during 2022. In terms of developing renewable energy, we took several major steps by beginning construction on wind farms in four different locations, all fully financed without power purchase agreements: at Karvia, Isojoki, Kristiinankaupunki and Somero. The total number of wind tur-

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**We want to evolve from a Finnish wind energy company into a Nordic producer of renewable energy.**  
 ”

bines will be 23 with total capacity of 131.8 MW. We also began construction on our first industrial-scale solar farm in Joroinen. The planned production capacity of the plant is 5 MWp, and once construction is finished, it will be the biggest commercial solar farm in Finland connected to a public distribution network.

Meanwhile, business operations expanded in Sweden and Åland with new Ilmatar offices. In Sweden, business operations have focused on developing solar farms, and in Åland, the goal is to create capabilities for producing offshore wind power in the coming years. The first quarter of 2023 has already seen several inspiring growth opportunities, with preparations ongoing for new wind and solar power investments in Finland and Sweden. We have started a strategic assessment for expanding our business to other sectors of renewable energy, such as electricity storage facilities and P2X business.

The year 2022 left no doubt as to the importance of renewable energy to society both now and in the future, underlining the need to increase its capacity. To help multiply our production, we took a decision to begin expanding our financial foundation. We always take a long-term mindset, conscious of the risks involved in project development

but also recognising great potential. We want to be in the right place, at the right time. We want to evolve from a Finnish wind energy company into a Nordic producer of renewable energy.

Our expanded team is another indication of our growth in 2022. By the end of the year, Ilmatar staff had extended to 73 growth enablers. As the organisation grows and evolves, we want to make sure that our company culture remains accountable, innovative and responsible. We do not give up. Together, we find solutions to even the most difficult of challenges. According to employee satisfaction surveys, Ilmatar employees are highly satisfied with their work, even with the coronavirus pandemic and the subsequent challenges with our operating environment testing our mettle from time to time. We will continue to nurture our personnel's job satisfaction.

My work as Ilmatar's new CEO started on January 1, 2023. My goal is to lead and develop Ilmatar into a significant clean energy producer in the Nordic region. With plans to multiply its goals in the Nordics, the company is now prepared for investments its future growth will require. We have positioned ourselves well in the Nordic emission-free electricity market, exhibiting strong growth especially in the onshore/offshore wind power and solar power sectors. We create capabilities for a cleaner energy future and the electrification of our society. I also want to reiterate our commitment to the UN Global Compact initiative and its ten principles regarding human rights, labour, environment and anti-corruption.

In conclusion, I would like to thank all Ilmatar employees for the great success we enjoyed in 2022.

*Juha-Pekka Weckström*  
 Chief Executive Officer

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# Our 2022 highlights

NEW LOCATIONS  
AND

# 36

NEW EMPLOYEES

International growth and opening of new operations brought in some fresh faces. In 2022, a total of 34 new employees started at Ilmatar. And by the end of the year, we had opened new offices in Helsinki, Malmö, Mariehamn, Tampere and Oulu.



## OPENING CEREMONIES FOR THE NEW PIIPARINMÄKI WIND FARM

On September 28, 2022, Ilmatar, Glenmont and Metsähallitus held opening ceremonies for the wind farm located in the Pyhäntä and Kajaani region, the largest wind power plant project in Finland. The wind farm was inaugurated by the Speaker of Parliament Matti Vanhanen. The 41 wind turbines at Piiparinmäki now produce electricity with a nominal capacity of 211 MW for the Finnish electricity grid and the Hamina Google Data Center.

## FIRST FULLY ILMATAR-OWNED WIND FARM COMPLETED CONSTRUCTION

The six-turbine 26 MW wind farm constructed by Ilmatar in Humpilla-Urjala at the border of the Pirkanmaa and Satakunta regions completed construction. It delivers approximately 60 GWh of clean, renewable energy each year. The Humpilla-Urjala wind farm, the first one constructed for Ilmatar's sole ownership that is currently in commercial production, is an important milestone in Ilmatar's journey to becoming one of the premiere energy companies in the Nordics.

## INTERNATIONAL EXPANSION AND NEW SUBSIDIARIES

In 2022, we expanded our business internationally and established subsidiaries in Sweden and Åland. Ilmatar Solar AB develops green energy production facilities in Sweden. Ilmatar Offshore plans to begin offshore wind power construction in Åland before 2030. Ilmatar's onshore and offshore wind power projects and solar power projects, at various stages of development in the Nordic countries, have a total rated capacity of 20 GW.



## UNIQUE INFORMATION ON NATURE IN THE TUTKIMUSKOTKA PROJECT

In 2022, Ilmatar had ongoing EIA procedures for 15 wind power projects. For each project, a biologist conducting an ecological survey is on the field for an average of 50 days. Therefore, Ilmatar's projects alone accounted for several years' worth of field work for biologists. Technology has played a major part in some of the projects: for instance, fitted with GPS transmitters, large birds of prey can be monitored all year round. Fitting the transmitters requires a special permit issued by the Centre for Economic Development, Transport and the Environment.



## FIRST YEAR OF TRADING IN NASDAQ

Ilmatar Energy Oy and Nasdaq Commodities, trading in power, began their cooperation in November 2021. However, 2022 marked the first year of actual trading. Ilmatar became the first Finnish and Nordic developer, power producer and electricity retailer in Nasdaq that exclusively focuses on renewable energy.

## CHRISTMAS MEAL CAMPAIGN WITH VENNER

Venner, a social enterprise, promotes equal access to nutritious food. Partnering with Venner each year, Ilmatar has helped provide a delicious Christmas meal for many Finnish families.



## THE POPULAR ILMATAR CLUB

The Ilmatar Club holds informal activities where our employees can get to know each other outside the office. For instance, we played tennis and padel in the summer and visited a Christmas market and enjoyed a Christmas concert in the winter. The Club has proven very popular and continues to evolve.

## FIRST SOLAR FARM CONSTRUCTED

With the construction of an industrial-scale solar power farm nearing completion in Joroinen, Ilmatar begun preparing the commissioning of its first solar farm. An exceptionally large-scale solar power project on a Finnish scale, the Joroinen farm has a capacity of 5 MWp. Ilmatar is currently developing several solar farms with capacities between 50 and 250 MWp in Finland and Sweden, with further details on investment decisions forthcoming in 2022 and 2023. Some of these projects are constructed in connection with wind farms.



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# Key figures 2022

# 140

years of full-time equivalent (FTE) created in construction

Total headcount

# 73

Company growth in headcount

# 109%

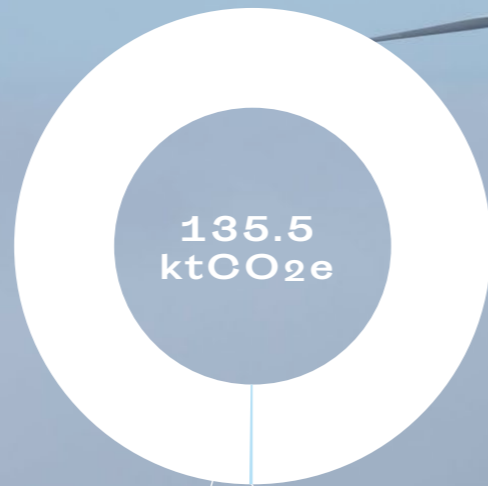
(from the previous year)

Employee turnover

# 4%

## Our target is carbon neutral Finland by 2035

Carbon footprint



Construction related emissions  
**135.4 ktCO<sub>2e</sub>**

Office related emissions  
**0.1 ktCO<sub>2e</sub>**

The positive effects on climate

# 35 ktCO<sub>2e</sub>

which covers the CO<sub>2e</sub> emissions of approximately 3,340 Finns

Renewable energy production

# 100%

Health & Safety in construction

# LTIF 4.1

(Lost Time Injury Frequency, including contractors and sub-contractors)

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# Stakeholder cooperation

Our most important stakeholders include municipal decision-makers, land owners, investors, employees, suppliers and contractors. We aim for open cooperation and communication with all our stakeholders. We maintain an active discussion with various parties and consider everyone's wishes regarding our business as widely as possible. Successful cooperation with our stakeholders is a prerequisite for our company's success.



## City restocks on well-being and vitality

Mayor Vesa Koivunen, Alajärvi

The city of Alajärvi will be home to two wind farms, Möksy and Louhukangas, that will complete construction in 2023. Vesa Koivunen was elected mayor of Alajärvi in 2012. This was also the year Ilmatar first contacted the city's officials.

"We were immediately intrigued by Ilmatar's plans. The project will generate property tax income, and I considered the resulting energy self-sufficiency an important aspect as well. It has since become even more essential than I initially thought," says Koivunen. When the wind farms are completed, they will exceed the electricity needs of all of Alajärvi.

"I appreciate the sense of community that is apparent in the way Ilmatar operates. They have been very active in involving our citizens and they genuinely listen. What's more, Ilmatar makes an effort to use local goods and services, which benefits our local economy."

Climate targets set by the EU and Finland require municipalities to take action in controlling their emissions. Wind power has an important role in this.

"We are fortunate to have Ilmatar operating in our region. We have had a wonderful shared journey, and they always have an answer to any question we have. What feels a bit unreasonable is the slow progress of complaint processing. An investment worth hundreds of millions may stall for six to seven years due to the time it takes to process complaints and building permit applications. We need a nationally approved standard procedure to speed up major projects. The world has evolved as have technologies, but this aspect remains unchanged.

The city wants to improve its citizens' well-being and vitality, and I believe that Ilmatar shares these values."



## Wind power as a pillar of local economy

Mayor Ismo Mäkeläinen, Pyhäntä

The municipality of Pyhäntä is home to Finland's largest wind farm, Piiparinmäki, part of which extends to Kajaani. Pyhäntä and Ilmatar initiated their partnership through Metsähallitus, the owner of the land. It was in charge of project development and selected Ilmatar to build and operate the wind farm.

"With the project in the hands of Metsähallitus, a state-owned enterprise, we immediately felt that Ilmatar could be fully trusted. Ilmatar actively kept in touch with us, informed us on how the project was moving forward and let us know what kind of competences and services it would require to execute the project cost-efficiently and with high-quality end results. Interaction with Ilmatar has been very good from the get-go," says mayor Ismo Mäkeläinen.

"To us, it is important that the project is managed by a company that is meticulous about environmental, safety

and quality aspects. We view Ilmatar as a reliable actor that listens to the municipality and its citizens."

The wind farm project is the largest investment at the Pyhäntä municipality, generating approximately 900,000 euros in property taxes each year. The project has benefited local contractors and other service providers, too.

"The tax income makes a big difference in the vitality and well-being of the municipality and helps, for instance, in the construction of new apartments and infrastructure. For example, the municipality has hired a caretaker to help the elderly continue to live at home and a nanny to help families with children."

"We want to promote the use of renewable energy and circular economy while contributing to the municipalities' climate goals. We are building our economy on several pillars, one of which is wind power."

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### Ilmatar is doing the right things

**Director Otto Swanljung,  
Windpower and renewables,  
Metsähallitus**

Metsähallitus manages approximately one third of Finland's land and water area. Cooperation with Ilmatar began to grow as Ilmatar acquired the building rights to Piiparinmäki wind farm from Metsähallitus following an international tender.

"The dialogue with Ilmatar is on-going and effortless, which is a requirement to move the project forward. It might be a project that will be fully constructed on government land, in which case Metsähallitus would sell the building rights and lease the land. Or a farm could be built on private land with some areas leased from Metsähallitus. We keep in touch regularly," says Otto Swanljung Director of Windpower and renewables at Metsähallitus.

"We select operators that have the required competence and capacity to enter a competitive tender. Ilmatar has demonstrated their professionalism by doing the right things.

Wind power has turned out to be a solid option for the production of renewable energy, and I see enormous growth potential there. Finland is on the right path: we produce vast quantities of renewable energy, which in turn allows us to invest in e.g. hydrogen technologies and other green transition initiatives. In my opinion, offshore wind power is a particularly potent opportunity. Wind power also has a major impact on municipal economies, as it generates property tax income."

Swanljung brings up one challenge, capacity of the main grid:

"Investments in the development of the main grid cannot keep pace with the growth of wind power, and this creates a bottleneck. Our geopolitical position is another growth-limiting factor. The majority of wind farm projects are located on the Western coast.

I see Ilmatar as a responsible company with the required agility. It has shown controlled growth in the right direction by focusing on the right things. We work in close cooperation."

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The dialogue with Ilmatar is on-going and effortless, which is a requirement to move the project forward.

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Together with Ilmatar, we can share information on energy production and emission-free life, among others.

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### Scouts and Ilmatar teach the young to be responsible

**Partnerships Coordinator, Anna  
Iso-Ahola, The Guides and  
Scouts of Finland**

Ilmatar cooperates in various ways with the Guides and Scouts of Finland, the largest youth organisation in the country. For instance, Ilmatar is the business mentor for the 'sustainable scouting' badge and partners with the Scouts in major events. Partnership comes naturally when values align. Both want to promote sustainability and educate young people on responsibility.

"Our goal is to provide more information on a sustainable lifestyle to children and young people and help make scouts carbon-neutral in the future," says Anna Iso-Ahola, Partnerships Coordinator for The Guides and Scouts of Finland.

"Together with Ilmatar, we can share information on energy

production and emission-free life, among others. The cooperation also provides us with resources and tools to reduce the emissions of our own operations. In 2022, we organised the Finnjamboree camp Kajo that hosted over 120,000 campers. With Ilmatar's support, we built a sustainable event and managed to compensate its carbon footprint by 130 tCO<sub>2</sub>e."

The cooperation began in 2021 and continues today. The scouts have already compensated their emissions by 288.8 tCO<sub>2</sub>e. The cooperation is evident in the everyday lives of scouts, too. For instance, a fund established with the help of Ilmatar allows scout groups to fund projects that reduce their carbon footprint or other harm to the environment. The funding may be used for e.g. renovations or recycling improvements.

"We have approximately 65,000 children and young people taking part in our activities. We reach quite a large group of people. Cooperation with a big, rapidly growing wind energy company enhances the impact of the work we do for sustainability and enables things that are important to us. We want to build a more sustainable world together."

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**Ilmatar is in a unique market position**

**Investment Manager  
Jonas Larsen, AIP**

“AIP invests in high-quality assets and focuses on working with major operators and public institutions that are well administered and structured. From the very beginning, we felt that Ilmatar’s and AIP’s financial instruments are a good match,” says Jonas Larsen, Investment Manager at AIP Management. “Ilmatar is in a unique market position as it delivers a combination of proven wind power development in Finland and capacity to oversee the full life cycle of a wind farm. In addition, the company has an explicit strategy for positioning itself as an independent producer of renewable energy.

Ilmatar is an established company with strong local knowledge and proof of operational excellence. This was a major factor as we started discussing a partnership. Their experienced team took care of the financing process in a very practical and professional manner. We would be happy to expand our financial cooperation with Ilmatar.

The wind power portfolio is about to enter the construction phase and the collaboration has been quite smooth so far. Ilmatar’s construction team is proactive, up-to-date on current issues and willing to listen to feedback from its creditor, AIP, and to suggest amendments where necessary.

We see Ilmatar as a strong partner with broad internal capabilities and a solid development pipeline for renewable energy. This is why we consider Ilmatar to likely have a leading position as an independent power producer in the Nordic countries, especially in Finland.

We are aware that Ilmatar has started project development in sectors adjacent to onshore wind power, recently announcing offshore wind power and solar power projects. Keeping a keen eye on these projects in the future, AIP believes that they provide attractive expansion opportunities for Ilmatar in their Nordic energy market operations.”



**Improving circular economy**

**Customer Relationship Manager  
Mikael Pitkänen, Stena Recycling Oy**

Stena Recycling Oy collects, recycles and processes materials, such as metals and waste from electrical and electronic equipment, to be sold as raw materials around the world.

“Ilmatar is making plans for responsible recycling of blades and other turbine parts that have reached their end of life, and they intend to use our recycling solution,” says Customer Relationship Manager Mikael Pitkänen of Stena Recycling.

“We transport blade materials and subject them to a process where various materials are separated and processed as requested by the client. Materials are either reused as sources of energy, sent for final deposition, or used to replace virgin materials in accordance with the principles of circular economy. Blade

metals, carbon fibre and, first and foremost, glass fibre are good candidates for the latter. Today, recycled glass fibre is mainly used as binder in concrete.”

The cooperation began when Ilmatar wanted to be the first energy company in Finland to commit to recycling its turbine blades and to utilise Stena Recycling’s circular economy solution. Other new recycling options are also being explored. Stena Recycling is part of a project that examines how blade materials could be recycled and reused as raw materials for new blades.

“We share the same goal with Ilmatar: conserving global resources. Circular economy is based on cooperation. We focus on finding the right recycling options for our clients.”



**Shared values make work meaningful**

**Business Controller Lauri Parpala,  
Ilmatar**

“When a company’s goals and values match your own, it is easy to feel your job is truly meaningful,” says Ilmatar’s Business Controller Lauri Parpala.

“With Ilmatar, I feel it strongly. Here everyone can perform to their full ability and see how their effort impacts the success of the company.”

While a member of the financial team, Parpala considers Ilmatar employees to be a harmonious group as a whole.

“Company goals are easy to align with your work. 2022 was an exceptional year, and our industry became quite the hot topic. The importance of the energy sector is now more widely recognised in the society. It is great to be involved in a company that will improve the conditions for self-sufficiency in Finland in the production of clean energy.”

“Ilmatar has a very open culture that encourages dialogue. We have had broad-ranging discussions about the global situation and Ilmatar’s ability to make an impact. Company goals are openly brought forward across the organisation. And you can always talk to anyone, regardless of their position in the company. Management regularly organises events where you can ask questions either anonymously or directly. I think this is an excellent example of how to make employees more active.

The dialogue extends to everyday life, within our various teams and in connection with strategic work, for instance. These are great ways to engage personnel. We also organise team lunches and meet outside work with all kinds of activities employees get to choose.”

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# Business operations and environment

For Ilmatar, 2022 was a year of major expansion and value creation. We were able to respond to exceptional challenges in our business environment on an operational level, and robust improvements in our business were evident with successes both in Finland and Sweden. Future growth is supported by investment decisions secured with our proven track record.

In 2022, the energy market was in a state of chaos as Russia launched an attack on Ukraine. It had a major impact on the European energy industry and commerce in general, evoking overall uncertainty in Ilmatar's business environment. With the energy crisis and eventual increase in prices, energy industry and self-sufficiency became hot topics as European countries quickly began to look for alternative means and channels for energy production.

## Forerunner and unique renewable energy company

For Ilmatar, 2022 was a period of strong expansion. Finland has set a national energy and climate target, striving to increase the share of renewable energy to 51 percent of total consumption by 2030, meaning that demand of renewable energy will increase even further. The diversification of Ilmatar's energy sources progressed extensively as planned: in addition to onshore wind power



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projects, we launched several offshore wind power and solar power projects.

Last year, Ilmatar transformed in accordance with its strategy as we reinforced both our operations as an energy company and our financial standing.

In addition to our project development, we produce and sell emission-free energy and build our own power plants and retain their ownership. For an energy company, our operating model is unique in Finland and the Nordic countries. Our internationalisation began in earnest last year as we expanded our operation to Sweden and Åland.

### Business operations in 2022

Even though 2022 was challenging for our business environment, Ilmatar achieved its annual targets as planned. Our projects remained on schedule despite the uncertainties in our supply chains and the hefty material price hikes which altered the cost structure of our investments. The investment decisions we received during the year continue to create a solid foundation for our future growth. As the projects move forward, we continue our steadfast progress towards a new scale of operations.

We reinforced our operating capacity as an energy company and developed and established our capabilities to grow and become more international. Our financial standing was strengthened with both increased number of investors and new financing where visible achievements building on our prior work helped our case.

These included the wind farms completed during the year, with Piiparinmäki being the largest in Finland at the time of completion. Our reputation in the market, the growing renewable energy industry and the increased interest in Europe contributed positively to new investment decisions which lay a foundation for our future growth. In terms of



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In 2022, we were able to commence 11 new zoning procedures for wind power projects.

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becoming more international, we reached a milestone as our solar power project was launched in Sweden.

Our work is done by our top-class experts. In 2022, we nearly doubled our number of employees. This had a profound impact on all internal processes at Ilmatar. According to employee satisfaction surveys, we succeeded well as employers, too. Siqni's Future Workplaces survey placed us among the best workplaces in Finland between the companies that took the survey.

### Projects in 2022

In 2022, we were able to commence 11 new zoning procedures for wind power projects. For projects in development, four received an investment decision and proceeded to construction. At the end of 2022, Ilmatar had 26 projects at the permit process stage with their total rated capacity exceeding 2,500 MW. The public portfolio for project development increased by 1,000 MW during the year, even after a total of 134 MW was moved into the construction phase. In 2022, Ilmatar had 26 public projects in the development stage in various municipalities or cities in eight Finnish regions.

In addition to projects that progressed to land-use planning stage, Ilmatar had new projects with capacity of approximately 4,900 MW in preliminary investigation phase at the



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end of 2022. During the year, the preliminary investigation phase portfolio increased by approximately 800 MW which reflects our active efforts in identifying prospective projects. Although many of the projects in preliminary investigation phase were interrupted during the year due to, for instance, the Defence Forces taking a negative stance or insufficient profitability based on technical and/or financial investigations, the sheer increase in the number of projects in preliminary investigation phase allows us to launch a good deal of onshore wind power projects in the next two years.

Our wind power projects take a long time to prepare due to various time-consuming factors, such as identifying suitable areas, land-use planning along with permit processes and EIA procedures. For instance, planning for the Rasakangas wind farm began in 2009 but its construction did not commence until late 2020. Construction was finished in 2022 and deployment takes place in 2023.

The process for solar power projects is distinctively quicker. For instance, our Joroinen solar farm received the required permits in the first quarter of 2022, investment decision for the farm was made in the second quarter, and construction began in the third quarter. The farm will be completed in the spring of 2023.

### Ilmatar in the energy market

The energy market became increasingly competitive in 2022. The amount of industry players increased as a number of energy companies began to expand their operations with renewable energy.

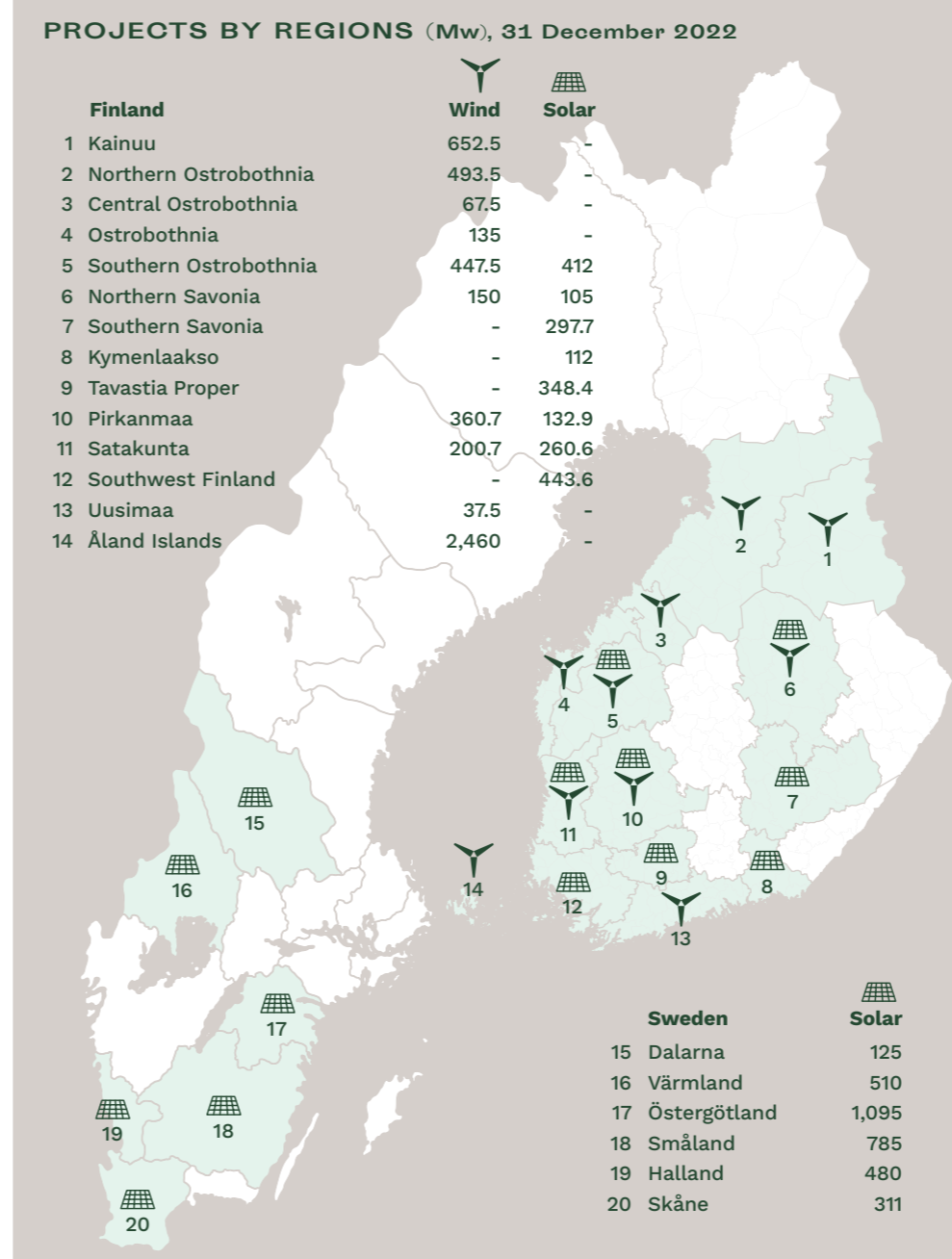
Ilmatar's unique strategic alignment has focused on the production of emission-free energy from the very beginning. Our market position is exceptional: we are the only producer of renewable energy in Finland that is solely responsible for the entire production

value chain from project development to electricity sales.

In addition to wind power, the year 2022 saw us focus on the diversification of energy sources. We may have started off as an onshore wind power company, but offshore wind power and solar power are becoming increasingly important to our portfolio.

In the investment market for renewable energy sources, Ilmatar is uniquely positioned. Our strengths include our own project development and solid expertise in renewable energy. Ilmatar developed a commercial wind farm in Luhanka's Latamäki with project financing – a first of its kind in Finland. It means that we have the required experience and capabilities, along with knowledge on the unique Nordic energy production landscape.

” We may have started off as an onshore wind power company, but offshore wind power and solar power are becoming increasingly important to our portfolio.



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# Sustainability at Ilmatar

Ilmatar's industry lays the foundation for its sustainability. By constructing production facilities for renewable energy, we support both the green transition and Finland's energy self-sufficiency while helping mitigate climate change.

Our sustainability measures cover the entire life cycle of a power plant: planning, construction, production and dismantling. In addition to the environment, we are committed to financial and social responsibility, including good governance and personnel well-being.

We ensure sustainability throughout the power plant life cycle and aim to extend our sustainability impact beyond our organisation. We strive to constantly reduce emission in our operations, and we expect the same from our partners. We actively monitor the sustainability measures of our stakeholders. We conduct ESG assessments, requesting our stakeholders to report on the impact of their actions. We also perform auditing and engage in active dialogue with our subcontractors. Ilmatar only works with partners who are compliant with our sustainability requirements and commit to Ilmatar's Code of Conduct.

For its carbon emissions, Ilmatar strives to make a positive impact that, already in the short term, outweighs the carbon footprint

produced. In our operations, nearly all carbon emissions are due to power plant construction as it requires e.g. steel and concrete, both highly emission-intensive to produce. Because construction-stage emissions do not directly fall under the umbrella of our operations, it is important that we operate in close cooperation with our contractors.

We identify the emission challenges related to construction of materials and continue to keep a close watch for future technological breakthroughs. In terms of application of materials, however, we cannot become early implementers of new technologies as the construction of power plants requires materials of proven quality. For safety, security of supply, and the entire Finnish economy, it is imperative that power plants can withstand



**Good Health and Well-Being.** We take good care of our employees' health, safety and well-being. We bring significant regional economic benefits to our project localities.



**Affordable and Clean Energy.** We produce renewable energy and increase the availability of renewably sourced electricity in the market.



**Decent Work and Economic Growth.** We take good care of our employees, and we grow responsibly. We strive to boost economic growth spurred by renewable energy.



**Industry, Innovation, and Infrastructure.** We use the latest technology at our power plants and ensure long service life and continuous energy production. We build new energy infrastructure in Finland.



**Responsible Consumption and Production.** We conserve and recycle materials wherever possible. We provide our customers opportunities to consume sustainable and renewably sourced electricity.



**Climate Action.** By producing renewable energy and supporting the green transition, we take significant climate action and reduce both our and our customers' emissions.



**Life Below Water.** We take seafloor, ocean health and marine biodiversity into consideration when planning offshore wind power.



**Life on Land.** We take care of people and the environment. Preserving biodiversity is at the core of our sustainability efforts in both wind and solar power projects.



**Partnerships.** With our partners, we make innovation possible and support the green transition in the Nordics. We invest in developmental cooperation with the government, municipalities and educational institutes. We are a responsible partner and expect the same commitment from our stakeholders.



heavy loads and constant wear caused by continuous production. Careful planning and construction of power plants and ensuring long service life are key to keeping emissions to a minimum in Ilmatar's operations.

We constantly identify key areas in our operations where we could improve resource efficiency or reduce emissions. Construction-stage emissions are compensated in the long term as the power plants we build produce renewable energy and drive progress in our society's energy production system.

Ilmatar is committed to the UN Global Compact initiative and its principles regarding human rights, labour, environment and anti-corruption. Global Compact is designed to advance and develop environmental, social and financial responsibility of businesses and communities. In our daily operations, we are also committed to UN's Sustainable

Development Goals (SDG), and we have identified the goals that are most relevant to our industry.

### Sustainability across the entire life cycle

Ilmatar's sustainability efforts continue throughout the life cycle of our power plants. Sustainability is incorporated at the earliest stages of project development with a diligent, resource-efficient and legally compliant planning process. It continues all the way to the recycling of power plant construction materials.

As a developer of renewable energy, Ilmatar's efforts in sustainability are further consolidated by the fact that the power plants we build often remain under our ownership, ensuring safe and efficient use throughout their life cycle. Our subsidiary Ilmatar Service Oy is tasked with servicing the power plants

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and monitoring and optimising production. Ilmatar Service has been awarded the ISO 14001 certificate, the #1 internationally recognised environmental systems standard, along with the ISO 9001 quality control certificate.

Power plants and their electricity production are monitored around the clock, enabling immediate detection of any interruptions or issues and addressing them accordingly.

Optimising production is essential for sustainability. Whenever possible, power plant maintenance is scheduled for optimal timing, conducted during, for instance, windless weather. This keeps maintenance-related production losses to a minimum while maximising both safety and the amount of electricity produced. When the power plants we build operate as sustainably and efficiently as possible, both electricity consumers and Ilmatar benefit.

While manufacturers typically guarantee a 35-year service life for our power plants, we have already planned for the recycling of power plant materials for the end of their life cycle. In 2022, we began cooperation with Stena Recycling Oy for the purpose of recycling wind turbine blades. Various high-value materials, such as copper and steel used in power plant construction, can also be recycled at the end of life and consequently reused.

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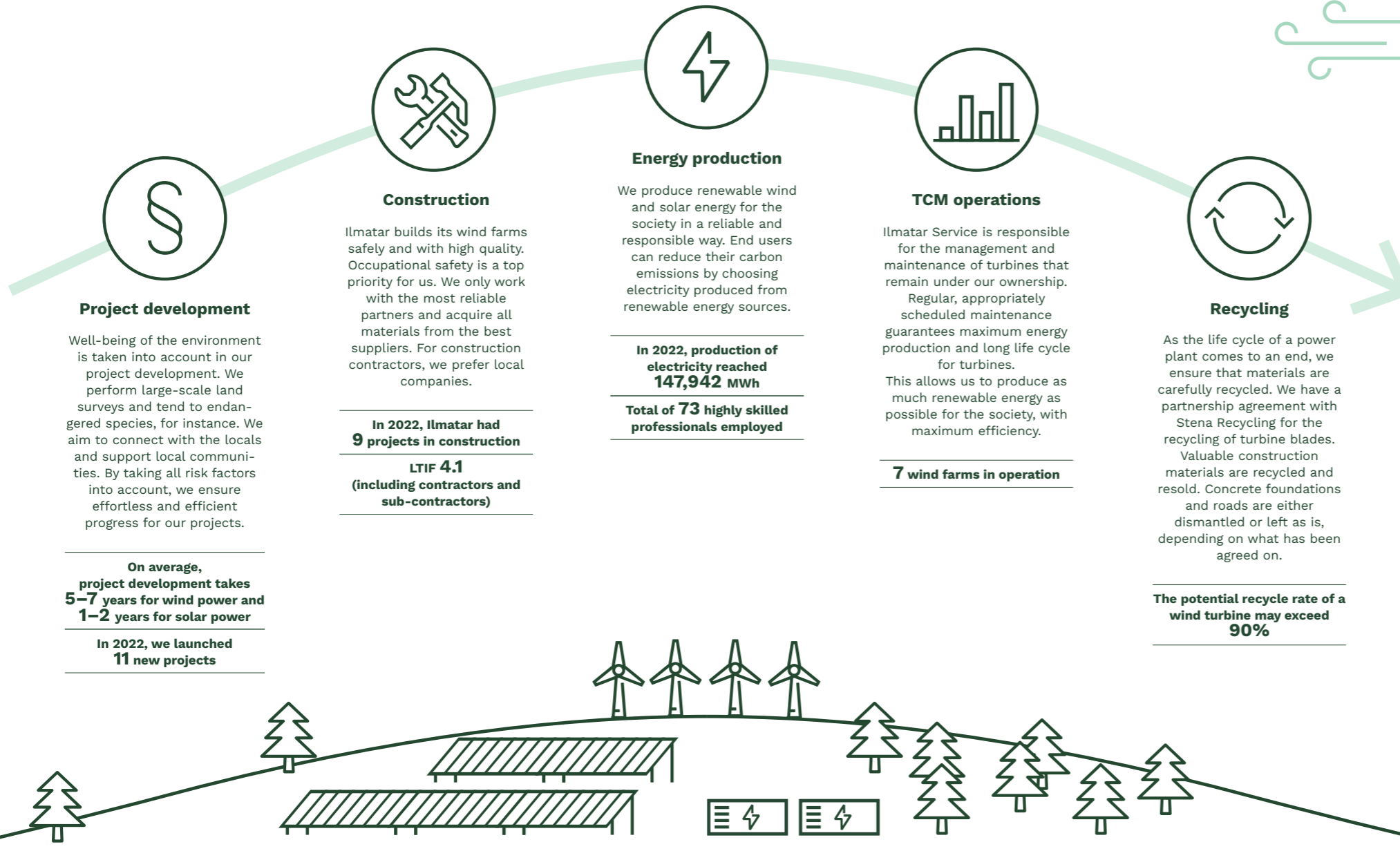
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# Value chain



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# Sustainability management

Ilmatar's values of accountability, expertise, sustainability, and being a forerunner guide all our operations. We constantly improve our sustainability, sustainability management and related reporting. We strive to fully comply with any sustainability requirements bestowed upon us by our investors.

The Board of Directors is the supreme body accountable for sustainability at Ilmatar. The Executive Team is responsible for Ilmatar's operational business, and the company's General Counsel and HR Director, part of the Team, manages compliance and sustainability. Meanwhile, our ESG Manager is responsible for the practical implementation of sustainability and any related reporting and communications. Our sustainability work is included in our day-to-day duties, every employee contributes to our sustainability efforts.

## Internal policies governing sustainability

Our Code of Conduct is the foundation for sustainability management, with full commitment by the entire personnel and the board.

The Code of Conduct is a public document available at our website, and it is also attached to all our contracts. It outlines the set of rules that specify our commitment to e.g. human rights, anti-corruption and legal compliance in our operations. The set of rules is reviewed and updated regularly as our company grows and evolves. The on-boarding materials and the updated version are made available to our employees internally. Our goal is to more widely adopt these revised set of rules in our supply chains in the future.

In addition to the Code of Conduct, our operations are also guided by Ilmatar's Environmental Policy. The Environmental Policy covers the principles of our operations, to which all our employees are committed. We also require that our partners comply with our Environmental Policy principles in all our



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projects, particularly in planning and construction.

In 2022, we implemented our equality plan which includes goals related to e.g. equality in compensation, recognising the importance of diversity, and reinforcement of best practices. In our efforts to meet these goals, we e.g. conducted pay surveys and assessed them from the perspective of equality, reported on the number of men and women in the organisation and on gender representation at different positions, and held regular co-operation committee meetings. Ilmatar consistently takes the temperature of its organisation and adjusts its practices accordingly. Continuing development of HR and HR guidelines and models contribute to a more equal organisation.

Ilmatar and its group companies respect the privacy of all their customers and partners and comply with the current data protection legislation. We updated our privacy policy in 2022. The policy is applied each time a customer uses our services or interacts with us. Ilmatar also has up-to-date data protection and cyber security policies in force.

### Sustainable construction and contracting

In Finland, wind power construction for wind farms with capacity exceeding 45 MW or with more than 10 turbines is governed by the Environmental Impact Assessment (EIA) procedure. The procedure helps better assess environmental impact and improve consistency in how environmental impact is taken into consideration in planning and decision-making. This means that any potential project area is subjected to a comprehensive ecological survey before the project advances, which also enables smoother progress at the construction stage.



We monitor subcontractor compliance as stipulated in the Contractor's Liability Act. We employ the services of Vastuu Group for monitoring contractor liability. Our contract agreements include requirements on monthly follow-up on occupational safety, reporting on construction materials, measuring fuel and electricity consumption, and waste disposal. We provide our contractors with initial data tables for entering relevant quantities. Our agreements state that any services rendered must be legally compliant, particularly in regard to regulations on bribery, money laundering and other unethical activities, along with applicable labour legislation.

Contractors are required to ensure that their subcontractors and other parties operating on their behalf comply with export control legislation, mandatory rules and guidelines, and any economic or other sanctions imposed on account of the aforemen-

tioned. Furthermore, contractors assure that they or their subcontractors or other parties operating on their behalf, if any, are not subject to aforementioned sanctions.

### Stakeholder cooperation

We aim to contribute to public discourse by way of communication and advocacy. The Ilmatar Virta online channel publishes content related to renewable energy and shares information on sustainability. We engage in dialogue with legislators, provide expert opinions and actively participate in the activities of associations most relevant to our operations.

Ilmatar is a member of the Finnish Wind Power Association. In 2022, the Vice President of Projects at Ilmatar was involved in making decisions in the association's Board of Directors and continues to do so in 2023. The Finnish Wind Power Association supports

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Ilmatar consistently takes the temperature of its organisation and adjusts its practices accordingly.

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the development of Finnish wind power and helps strengthen its position in the energy mix. We want to be actively involved in their activities. As a member of the Finnish Wind Power Association, we have been involved in e.g. surveys related to environmental emissions and wind power impact.

In 2022, we became full members of the Finnish Energy trade association. We are involved in the BotH2nia network which aims to build a robust hydrogen industry around the Gulf of Bothnia. We are also a member of FIBS, the largest corporate responsibility network in the Nordics.

### Development of sustainability

For sustainability reporting, we actively monitor developments in related EU regulations. We have taken an early start to our development work to fully and efficiently meet the specific numerical reporting and data collection requirements of future legislation. We continue to develop these capabilities.

In 2022, we established a separate procurement function, tasked with improving transparency in the supply chain and build closer relationships with suppliers and subcontractors. This enables us to operate with maximum sustainability across the entire supply chain.

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## Economic responsibility

Profitable business with an outlook far into the future forms the foundation for Ilmatar's economic responsibility. Our operations impact the society directly and positively in various ways. Power plant projects generate tax revenue and create jobs. By supporting the green transition, we create new technological opportunities for the Finnish society.

Wind power construction can provide a considerable boost to local economies. Ilmatar pays property tax to municipalities, calculated with a legislation-stipulated formula based on wind power plant construction costs. Property tax revenue amounts to significant earnings for municipalities. According to estimates by the Finnish Wind Power Association, a wind farm with ten turbines generates a single municipality 250,000 to 300,000 euros in annual property taxes. Our goal in the upcoming strategy period is to significantly increase our production capacity, which consequently increases the amount we pay in property taxes.

In addition to property tax, Ilmatar is liable to corporate tax with a rate of 20% for all wind power constructed. The taxing municipality is determined by where the company has the most personnel. Due to construction stage investment costs, depreciations are

high during the first years of the project. This is why the bulk of corporate tax accumulates towards the end of our projects. Manufacturer promises a service life of 35 years for Ilmatar's power plants, which guarantees that corporate tax revenue is generated.

Landowners always retain ownership of any trees felled during a wind power project. Land use also generates rent income for landowners, and what is a boon to landowners is a boon to the vitality of the municipalities. In 2022, Ilmatar paid rent to landowners for tens of thousands of hectares.

### Jobs and vitality

Wind power plants provide wide-ranging employment opportunities to the region where the project takes place. Last year, our impact on employment creation amounted to 140 Full-Time Equivalent jobs (140 FTE), in



construction alone. When selecting subcontractors, we favour local operators. As the ventures bring in professionals from elsewhere, too, a small municipality may see its population double during a wind power project. People involved in the project make use of local services, including accommodation and restaurant services. What's more, the effect on employment persists once construction is completed, because power plants and roads require maintenance. Also, the availability of renewable energy may increase opportunities to develop the regional economy with industrial projects, for instance.

Our projects are growing both in scale and in numbers. In the future, we will be building several farms simultaneously, increasing the diversification of our projects. This also helps spread out their economic impact.

For us, 2022 was a year of geographical expansion. We established Ilmatar Offshore, a subsidiary, to develop offshore wind power in Åland. Meanwhile, another subsidiary, Ilmatar Solar AB, opened offices in Malmö where a 450 MW solar farm is under development. We have recruited 11 professionals for project development in these project regions, and as the projects move forward, we provide major employment opportunities for the local population in Åland and Southern Sweden.

Ilmatar continues on its rapid growth trajectory, meaning that we will also be hiring more in our own organisation as well. Ilmatar has been steadily recruiting since becoming an Independent Power Producer (IPP). The Ilmatar group employed 73 people at the end of 2022, and the number keeps growing.

### Our eyes are fixed on the future

With persistent planning, construction and promotion of renewable energy sources, Ilmatar has successfully attracted foreign investments to Finland. This is one of the

cornerstones of Ilmatar's economic responsibility. The more international investors see Finland as a potential leader in green energy, the more they want to invest in Finland. And investments bring jobs and well-being. We want Finland to be an exporter of renewable electricity in the future. For a country historically dependent on foreign energy, this would be an important step forward with a major impact for the future.

However, we also look to broaden our horizons in the future. Geographical dispersion is part of our strategy. It is important for our economic responsibility, because it mitigates our risks and stabilises the expected return. Our presence in various electricity markets helps us balance the return from our power plants and bolster our operating margin. Developing the financing options for renewable energy is one of the pillars of our strategy.

### We develop measures for economic responsibility

In the coming years, we will develop the measurement and monitoring of our economic impact because we want to make a wider variety of information available to owners, investors and customers. We conduct detailed internal monitoring of our projects and budgets to ensure our operations are as productive and forward-looking as possible. We want to broaden our calculations and develop reporting in the future to cover more of the economic impacts on our stakeholders. In 2022, we conducted a regional economic analysis providing a more wide-ranging view on the impact of wind power in Ostrobothnian municipalities. Based on the analysis, wind power has a more far-reaching economic impact on municipalities and the Finnish gross national product than what was previously understood.



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# Environmental responsibility

Ilmatar's business is geared towards accelerating the green transition. By building renewable energy, we reduce dependency on fossil fuels, mitigate climate change and help create a better world for future generations. We take biodiversity into account on many fronts in the project development of all forms of renewable energy.

Calculation of carbon emissions is an important tool for environmental responsibility at Ilmatar. We have been calculating the carbon footprint of our operations since 2021. The results are based on calculations conducted by a third party, AFRY, in accordance with the GHG Protocol guidelines.

In 2022, nearly all of Ilmatar's emissions were caused by power plant construction and, in particular, production of the required construction materials. The foundations and structures of wind power plants require steel and concrete, and production of both is currently highly emission-intensive. Construction-stage carbon emissions are also dependent on project locations, as material and transport costs increase in areas that are difficult to access. Onshore wind power development is also becoming increasingly

difficult because all obvious locations have already been zoned.

In 2022, Ilmatar's total carbon emissions amounted to 135.5 kilotonnes, of which 99.9 percent was attributed to construction. Majority of the emissions were generated by our Louhukangas and Möksy wind power projects in Alajärvi.

In 2022, our own operations generated 148 tonnes in emissions, the equivalent of approximately one per mille of our total emissions. The primary sources were travel and procurement of various equipment required in our work. Even though emissions generated by our own operations are insignificant compared to the construction-stage emissions, we want to take them seriously. For instance, we strive to reduce travel-related emissions with the help of electric car sharing.



For carbon emissions, we aim for net positive, with the idea of Ilmatar's positive impact outweighing the carbon emissions of our operations. In 2022, we had a total positive impact of 34.8 kt. This is equal to emissions generated by 3,340 Finns.

**We cherish biodiversity**

Considerations for biodiversity are incorporated into Ilmatar's projects at early stages of

project development. We prepare a comprehensive baseline report for every project. We leave identified sites of high nature value outside the scope of our planning and label any such sites in the vicinity of our project area in the terrain. We conduct comprehensive ecological surveys at the land use planning stage, before planning for construction. The required environmental monitoring programmes for construction and production stages are determined on a project-by-project basis.

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**We also require that our partners comply with our Environmental Policy principles in all our projects.**  
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Once a decision is made to progress towards wind power plant construction, the impact on the area's biodiversity is comprehensively investigated in connection with the project's environmental impact assessment (EIA). The EIA procedure includes a species-specific evaluation of risks and allows for the public to voice their opinion. In 2022, Ilmatar had EIA procedures ongoing for 15 wind power projects.

Once the environmental impact assessment procedure is completed, the focus of our investigations turns to the quality of the land. In large project areas, field investigations typically take several months. In 2022, we commissioned ecological surveys for over one million euros. If a survey identifies endangered species, for instance, we can reduce the size of the wind farm area and shift turbine locations to avoid causing any harm. If no resource-efficient way to reduce negative impact is found, project development is terminated and we focus our efforts on other sites.

We have a long history of conducting ecological surveys for onshore wind power. In 2022, we commenced with our first offshore ecological surveys. The surveys are conducted by the Ramboll consultation company together with Arctia, a company specialised in seafloor research. The surveys cover 550 square meters of seafloor in the waters north of Åland. We similarly want to incorporate environmental values from the very beginning in our offshore wind power projects.

Thorough understanding of an area's natural values is critically important for us in both offshore and onshore projects for two reasons. First, we want to avoid causing unreasonable stress to the environment and ensure the preservation of important natural values in the area. Second, it is essential that we are aware of any risks beforehand and avoid unexpected developments during the project stage. By conducting diligent surveys

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and investigations, we save time and money and help generate more electricity for the Finnish society.

**We implement environmental impact mitigation hierarchy**

Ilmatar implements the environmental impact mitigation hierarchy, a widely accepted principle for preserving biodiversity, used at e.g. the EU level. In the hierarchy, priority is given to avoiding negative environmental impacts and, where not possible, to mitigating them. The final option is to offset the negative impact at the site or compensate for it elsewhere.

In addition to careful land use planning, avoidance means careful selection of where structures are placed. For instance, locations of roads, power lines and turbines can be moved and adjusted to avoid causing harm to nature. The roads, the wind turbines and the wind turbine lifting areas typically claim about two percent of the wind power production area. The rest of the land retains its original purpose.

We cannot, however, fully avoid all negative impact. In such cases we aim to minimise the impact of our operations. In the Alajärvi hybrid farm project, for instance, we cultivate meadows between wind and solar power plants, creating habitats suitable for micro-organisms and insects. Thus, the construction of Finland's largest renewable energy hybrid farm actually helps us preserve species that intensive forestry has left in dire straits. In the construction process, impact can also be minimised by scheduling construction work outside important nesting seasons. In wolf territories, for instance, we suspend construction for several months in the spring to allow for wolves to breed in peace.

We have strived to compensate for any trees felled in our projects through our

partnership with, for instance, the Istutapuita.fi service. The partnership is based on a rental model, enabling us to verify that trees are actually planted and allowed to grow unobstructed. Istutapuita.fi replaces the forest felled in our wind power construction by planting an equal number of trees in former peatland production areas in Kohiseva, Sonkajärvi. Functioning as carbon sinks, the trees planted will capture nearly 7,000 tonnes of carbon dioxide in total.

**Recycling as a guiding principle**

While our wind power plants are young and the majority of their life cycle is still ahead of them, we have already mapped out a plan for the end of their service life. In 2022, we began cooperation with Stena Recycling Oy for the purpose of recycling wind turbine blades. For instance, fibre glass in the blades can be reused as raw material in cement production.

Other valuable construction materials, such as iron and copper, are resold. As for the roads built for the farm, we can have them remain in place or remove the rubble and replace it with backfill, depending on what the landowner prefers. We take a similar approach to concrete foundations. Foundations for our wind turbines are made of steel-reinforced concrete, the same material used in drinking water wells, for example. Current research suggests that leaving the underground components of foundations in place is the least harmful option. With this approach, there is no need to haul the concrete away.

Actual recycling measures are not yet relevant as the manufacturer has promised a service life of up to 35 years for our power plants. The long service life combined with careful and diligent maintenance during production is integral to our sustainability efforts. As our power plants are in service for

a long time and in constant production, we can maximise their positive impact on the climate and the environment.

**Wind power has the lowest emissions**

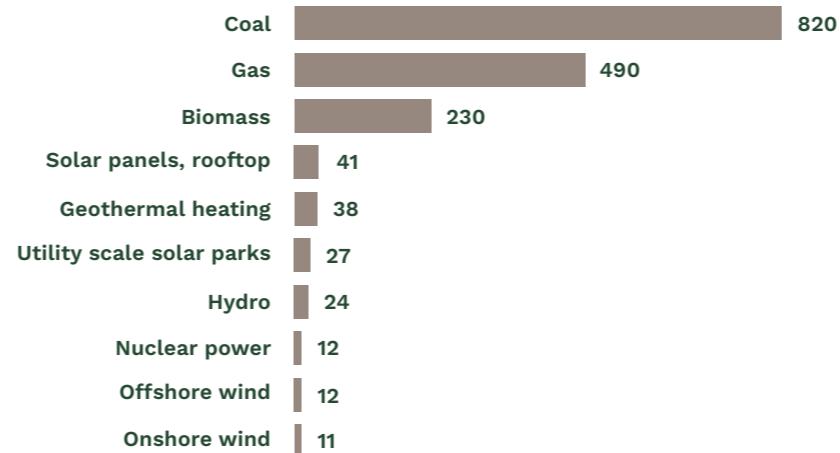
Wind power's own carbon dioxide emissions are around 7–11 g/kWh and they mainly consist of emissions caused by the construction, transport and maintenance of wind turbines. Due to modern technology, wind power is also proven to be the most cost-efficient way to produce electricity.

Wind turbines produce energy with virtually no emissions. However, there are environmental impacts associated with their manufacture, installation, and end of life. The energy payback period for 2MW wind turbines is around six months in studies.

Building new, additional wind power also reduces the overall CO<sub>2</sub> emissions of energy production by replacing fossil fuels from the market.

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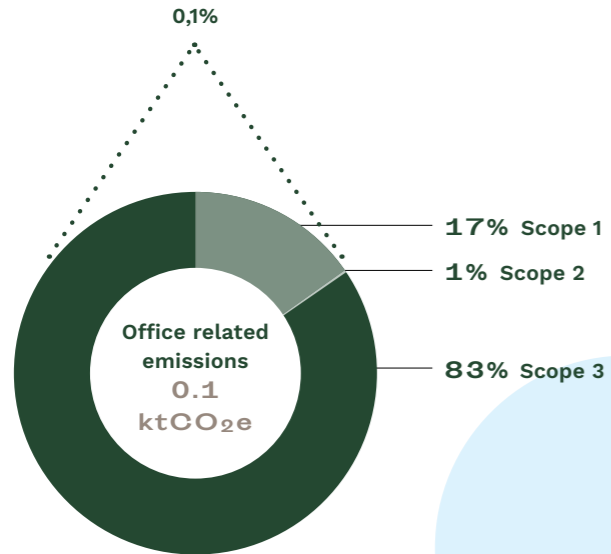
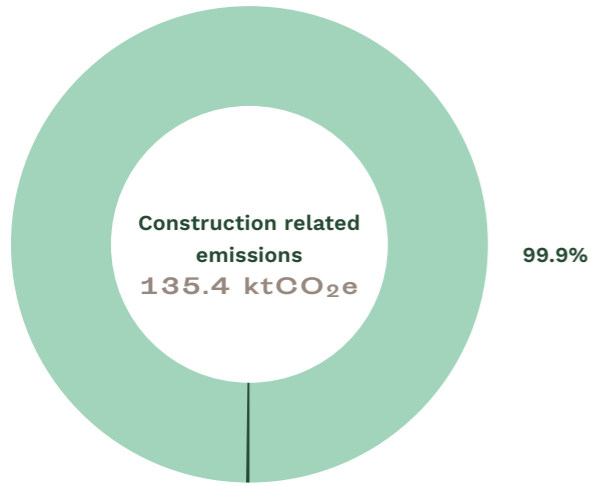
**CO<sub>2</sub>E EMISSIONS (G/KWH) OF ELECTRICITY PRODUCTION**



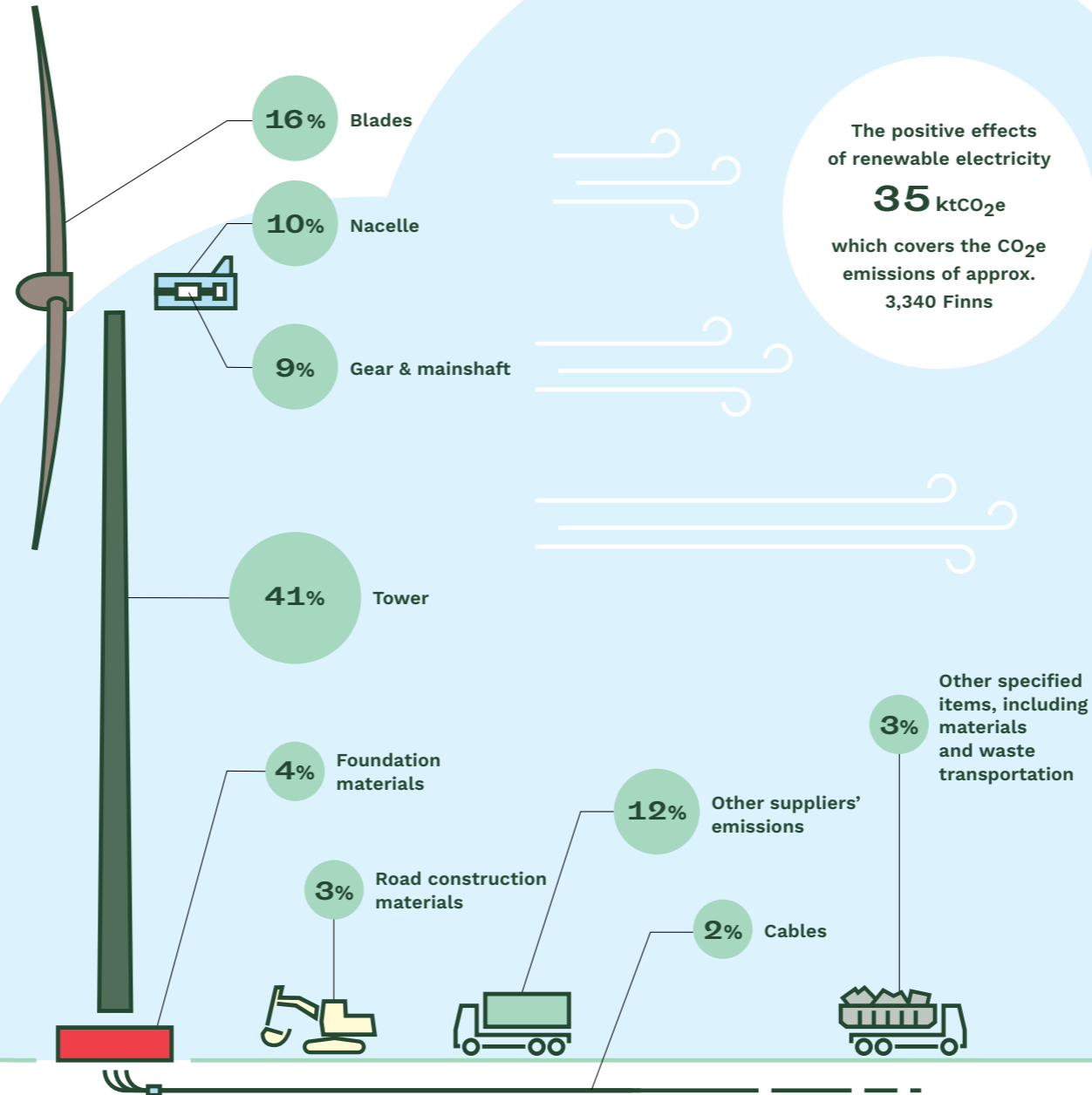
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### CARBON FOOTPRINT OF ILMATAR 135.5 ktCO<sub>2</sub>e



### CARBON FOOTPRINT SOURCES OF WINDFARM



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# Social responsibility

We bear responsibility for all our stakeholders and make sure that our impact on the society is positive, from municipal to state government level. We want to help ensure that Finland is a good place to live – now and in the future.

As an expert organisation, inspired and thriving employees are Ilmatar's most important asset. This is why Ilmatar continuously invests in the development of its supervisors' management skills, with a high standard level. For example, all our supervisors undergo training tailored specifically for Ilmatar and provided by an external consultant. In addition to shared meetings and training events, our learning sessions include e.g. one-on-one discussions with the trainer.

Training supervisors and constantly developing their management skills has far-ranging impact on personnel comfort and well-being. Our supervisors help employees improve their work-life balance and look after their personal resources. They also keep watch on equality in the workplace. Value-based leadership and meaningful work are important for Ilmatar. We want people to feel appreciated and want to keep them with us long term.

Ilmatar provides extensive occupational health care to its employees. We also have

our own Ilmatar Club that organises various joint activities once a month or so. For instance, we have played tennis and padel and arranged yoga classes and afterwork meetings. The Club is a way for us to spend time together and get to know each other outside the workplace.

## Surveys provide valuable information

In 2022, we began to conduct Siqni employee surveys. The first survey took place in May, with a follow-up survey later in the year. Based on the surveys, we were awarded the Future Workplaces certificate, indicating a workplace characterised by boldness, passion and human values.

Our results were excellent in several areas. For instance, our eNPS score (Employee Net Promoter Score) was 64. It means that our employees are very likely to recommend Ilmatar as a workplace to their friends and colleagues. According to the surveys, our



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employees also feel that Ilmatar has an inspiring goal and purpose.

Employee survey results are a valuable tool for us in the continuing development of our workplace. We will continue to conduct them every year and remain committed to making improvements based on their results.

Ilmatar's whistleblowing channel enables anonymous reporting of issues, abuse and violations. The channel serves as a low threshold reporting solution for everyone from employees and subcontractors to local residents. In 2022, no issues were submitted on the channel.

### Social responsibility extends outside our organisation

In our project development, we aim to make a positive impact on our project localities and the well-being of local residents, even after the construction and deployment stages. We want to become long-term members of the communities at our project localities. For instance, we aim to identify local non-profits that we can support. In Seinäjoki, for instance, we sponsor the local football club, SJK, by rewarding a player that best demonstrates a positive attitude each year. In Iijoki, we have been supporting habitat restoration for diadromous fish in the Iijoki river.

We look to connect with local residents by organising various events. For instance, the concept of wind power may evoke certain fears or concerns in the public that we can help mitigate by engaging in dialogue. In addition to statutory public events, we make an effort to organise voluntary townhall meetings open to everyone, along with briefings for local landowners. These events give us an opportunity to hear people's concerns. In our project development, we make sure to respect local residents and to avoid damaging their source of livelihood in any way.



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Legislation lays down a strict framework that regulates our operations. For example, legislation stipulates that wind power shall not pose a health hazard, ruin livelihoods, cause real estate value to plummet, or excessively compromise the living environ-

ment. We listen to stakeholders and strive to identify any adverse effects beforehand. Assessing and understanding risks at the project development stage is also key for our financial responsibility, enabling us to avoid expensive and unnecessary setbacks as the project moves forward.

We build roads during wind power projects and continue to maintain them after the construction stage. The roads will be publicly available and will make the terrain more accessible, providing locals better opportunities to maintain their forests and increasing recreational use, such as picking berries and mushrooms. At Piiparinmäki, we have built a visitor centre where visitors can learn about wind power. Visitor centres can also serve an educational purpose.

In our construction efforts, we make sure to not support any illicit work. We ensure the

occupational safety of our employees and that of our subcontractors. Lost time incident frequency is an important indicator for social responsibility, which we monitor and report monthly to the management team and the board. Occupational safety is also a key performance indicator for management level remuneration, which includes not only our own employees on jobsites, but also contractors and subcontractors. We also require that our partners follow Ilmatar's Code of Conduct. In monitoring contractor liability, we rely on the services of Vastuu Group.

Ensuring confidentiality when processing personal information and ensuring the integrity of data security are also part of our social responsibility. Ilmatar's client information system is protected with latest best practices. We updated our privacy policy in 2022.

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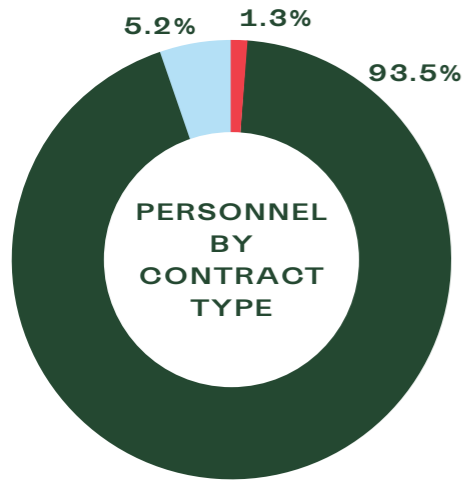
Sustainability management

Economic responsibility

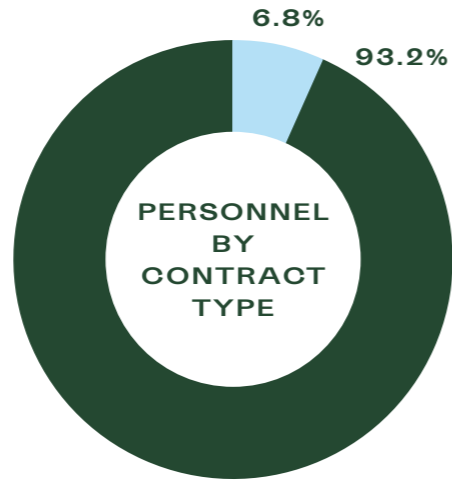
Environmental responsibility

### ► Social responsibility

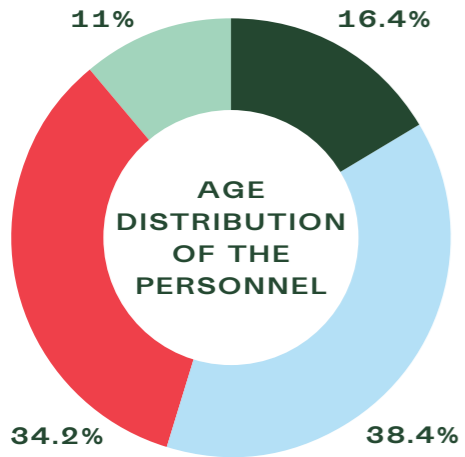
Governance at Ilmatar



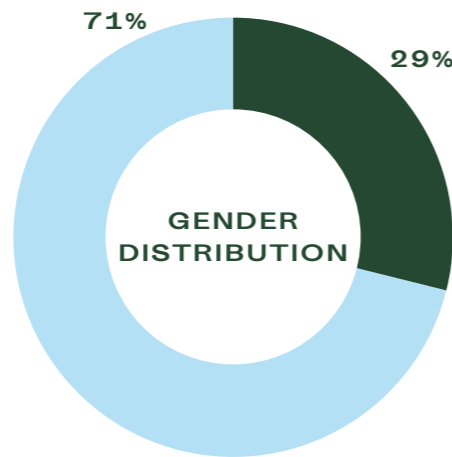
- Permanent contract
- Trainee/student
- Temporary contract



- Full time
- Part-time



- <30
- 30-39
- 40-49
- ≥50



- Women
- Men

### JOBS CREATED IN CONSTRUCTION

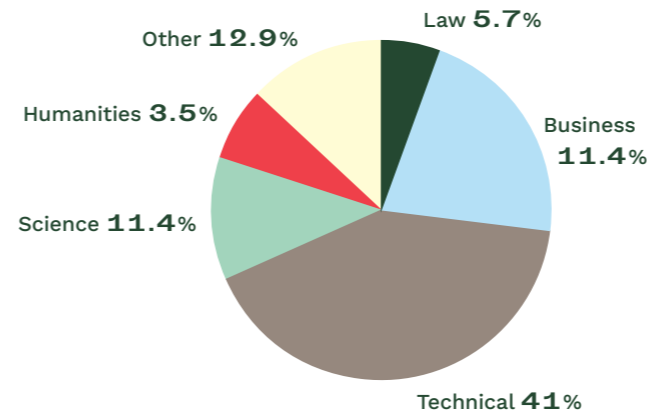
**140**

full-time equivalent (FTE)

### PERSONNEL TURNOVER

	persons
New employees	36
Average number of employees	56
Turnover rate	4%

### EDUCATIONAL BACKGROUND OF THE EMPLOYEES



### HEALTH & SAFETY IN CONSTRUCTION

**LTIF 4.1**

(including contractors and sub-contractors)

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# Governance at Ilmatar

## Corporate Governance and General Meeting of Shareholders

The parent company for the Ilmatar group is Ilmatar Energy Oy (below 'Ilmatar' or 'company') which is governed by the Annual General Meeting of Shareholders, the Board of Directors and its Remuneration Committee and the Chief Executive Officer, supported by the Executive Team.

The Annual General Meeting of Shareholders is the highest decision-making body. According to the articles of association, the Annual General Meeting of Shareholders shall be held annually within six months of the end of the financial year. The time and location of the Annual General Meeting of Shareholders as well as of any Extraordinary General Meetings is determined by the Board of Directors. The Annual General Meeting of Shareholders shall decide on the adoption of the financial statements, on the use of the profit shown on the balance sheet and on the discharge from liability for the members of the Board of Directors and the Chief

Executive Officer. If required, the Annual General Meeting of Shareholders shall elect the members of the Board of Directors and the auditor.

In addition to the Annual General Meeting of Shareholders held on June 17, 2022, there were three shareholder decisions at Ilmatar Energy Oy during the financial year that ended on December 31, 2022.

## Board of Directors

The Board of Directors shall see to the administration of the company and the appropriate organisation of its operations in accordance with the Limited Liability Companies Act and the articles of association, and it shall also comply with the shareholders' agreement by which the company is bound. According to Ilmatar's articles of association, the Board of Directors shall consist of one to five full members and a minimum of one substitute if less than three full members are elected to the Board. The Board of Directors



has prepared Rules of Procedure that specify its requisite duties and policies.

For the financial year that ended on December 31, 2022, the Board of Directors consisted of four members. Members of the Board are determined by a mutual shareholder agreement for a non-fixed term. Kalle Pykälä of IWP Partners Oyj is the Chairman of the Board. Other members of the Board are Serge Savasta, Michael Pollan and Laurent Perret of Omnes Capital. During the financial year that ended December 31, 2022, the Board had no members that were independent from shareholders. Current information about our board of directors can be found on our website.

With the exception of the Chairman, members of the Board have not received any compensation for their work in the Board nor have they benefited from any financial incentives or bonuses thereof. Secretary duties for the Board were assigned to the General Counsel and HR Director of the company.

In 2022, Ilmatar's Board of Directors convened 30 times of which 10 were full meetings, conducted either physically or via remote connections, and 20 were various per capsulam decisions regarding matters requiring decision-making by the Board. Board decisions were focused on significant investments, such as investing in new farms, on financing said farms, on starting our offshore business and our operations in Sweden and on the volatility of market prices for electricity which has, among other things, had an impact on the need to review and decide on protective policies and the sales of produced electricity.

### Chief Executive Officer and Executive Team

The Board of Directors appoints a Chief Executive Officer whose employment conditions are laid out in writing in a CEO agree-

ment. Juha Sarsama served as CEO in the previous financial year, and Juha-Pekka Weckström took over the duties on January 1, 2023.

The Executive Team provides support for the CEO. In 2022, the Executive Team consisted of the CEO himself, Petri Ainonen (Construction), Joonas Ekholm (Finances), Antti Keskinen (Business Development), Anna-Maria Palmroos (General Counsel, HR and ESG), Rami Rajala (Generation and TCM Business), Erkka Saario (Project Business) and Mikko Toivanen (Offshore Power and Solar Power in Sweden). In December 2022, Antti-Jussi Lehtinen (Acquisitions) was appointed to the team.

In principle, the Executive Team convenes twice a month. In addition, a separate Operative Executive Team (consisting of Sarsama, Ekholm, Rajala, Palmroos and Toivanen) makes decisions on operative matters. With regards to investments, Mr. Saario leads a separate workgroup focused solely on investing. At the turn of the year, Antti Sallila was appointed the new Chief Financial Officer. Since the start of 2023, the Executive Team has consisted of Ainonen, Keskinen, Palmroos, Rajala, Sallila and Weckström. Current information about our executive team can be found on our website.

### Key financing projects

In 2022, Ilmatar financed a group of four wind farm projects with the help of debt capital from Danish AIP Management. The total investment for these projects amounts to 200 million euros, of which AIP contributes 135 million. Capacity of the four wind farms totals 131.8 MW. In 2022, Ilmatar also secured a loan agreement for the entire group from a major European financier focused on infrastructure. The maximum value of the loan is 144.5 million euros.

### Ownership and stocks

Ilmatar is owned by IWP Partners Oyj (previously Ilmatar Windpower Oyj) and by Omnes Capital-governed funds. Based in Paris, France, Omnes Capital is a leading European institutional investor, focusing on capital and infrastructure investments with approximately five billion euros of assets under management.

IWP Partners Oyj represents Ilmatar's founders and other private investors. Cooperation between Omnes and the Finnish founders and investors began in 2018 when Ilmatar Energy Oy was established as a joint venture.

The company's ownership structure as of December 31, 2022:

	Number of shares	Equity ownership, %
FPCI Capenergie 3	75,646	27.02
IWP Partners Oyj	30,000	10.72
FPCI Capenergie 4	7,897	2.82
SLP Capenergie 4	61,393	21.93
Omnes Co-Invest Ilmatar SLP	105,018	37.51
	279,954	100

In 2022, the company's financial foundation for future investments was strengthened through two private placements to existing shareholders, on February 25 and on December 21. In these two private placements, funds managed by Omnes Capital subscribed for a total of 30,863 new shares. Furthermore, a two-part private placement that started on November 29, 2021 saw the second placement take place on January 14, 2022, with Omnes Co-Investment Ilmatar SLP subscribing for 5,060 shares. As of December 31, 2022, the number of shares totalled

279,954 and the share capital of the company totalled 2,500 euros.

Ilmatar Energy Oy has one share class, and each share has equal right to dividend. In the Annual General Meeting of Shareholders, one share equals one vote. The company did not own any of its shares during the financial year that ended on December 31, 2022. As a high growth company, Ilmatar has not paid nor planned to pay any dividend during or for 2022.

On December 31, 2022, the company had 56 direct and indirect subsidiaries in Finland and 13 indirect subsidiaries in Sweden. Within the corporation, Ilmatar Service Oy is in charge of technical and commercial administration, Ilmatar Offshore Ab develops offshore wind power in Åland, and Ilmatar Solar Ab operates as a parent company for solar power projects in Sweden.

As a principle, Ilmatar Group establishes a separate project company for each project. Due to the funding structure of the projects, the subsidiaries also include a few holding companies that own Ilmatar companies that are in the same industry or at the same development stage.

Three of the Ilmatar subsidiaries are partially under outside ownership. The Alajärvi wind farm project is owned by Ilmatar Alajärvi-Louhukangas Oy and Ilmatar Alajärvi-Mökösy Oy, joint ventures of Ilmatar Energy Oy (equity ownership 51%), and Japan-based Kansai (KE Alajarvi HoldCo B.V) (49%). Perhon Tuuli Oy, a new company registered on December 19, 2022, is a joint venture of Ilmatar Energy Oy (50%) and Pohjan Voima Oy (50%), focusing on a wind power development project located in the municipality of Perho.

### Risk management

In 2022, Ilmatar continued with the documented risk management process it first applied in 2021. It involves updating and

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mapping out the company's risk framework twice a year, integral to which are reporting by the Board of Directors and mitigating risks with designated people in charge. Ilmatar received help in the reporting and risk management workshops from Howden, Ilmatar's insurance broker. Ilmatar also conducted a separate risk management process related to its production protection level and other protective measures.

Ilmatar's risk management process lists the most notable risks for the company as follows: limited supplier chain, increases in material and component prices, funding availability, permit processes for wind and solar power, general availability of employees, increases in electricity prices (including a growing need for protection guarantees), ESG risks in supplier chains and cyber risks in terms of disruptions to production and construction of the farms. In late 2022, political risks also became elevated. For the notable risks above, Ilmatar considers them to be at a normal level for the industry. Should the most notable risks materialise, however, they may have a significant impact on the growth potential, business operations and results of the company in the next financial year.

The attack by the Russian armed forces on Ukraine that began in February 2022 has impacted the pricing of raw materials and electricity and led to, among other things, increased pressure to raise prices of wind turbines. On the other hand, market prices have also risen. The war is also thought to accelerate the green transition both in Finland and across the rest of Europe, as countries look to be less dependent on Russian energy supply.

## Audit

For the financial year that ended on December 31, 2022, PricewaterhouseCoopers Oy Auditing Entity was the auditor for the com-

pany, with KHT Markku Launis as its appointed lead auditor. The auditor's term ends at the conclusion of the next Annual General Meeting of Shareholders. Ilmatar Energy Oy's audits have been performed by PricewaterhouseCoopers Oy since the company was founded (2018).

## Personnel, goals and benefits

For salaried employees and senior salaried employees, the company adheres to the universal collective agreements for salaried employees and senior salaried employees in the energy industries. On September 28, 2022, Ilmatar Energy Oy became a member of Finnish Energy (sales and production of electricity), thus directly committing to the collective agreements thereof. Other association memberships of note include the Finnish Wind Power Association, the FIBS (Finnish Business & Society) corporate responsibility network and the United Nations Global Compact initiative.

Lauri Parpala (senior salaried employees) and Joonas Pernu (salaried employees) were the employee representatives for 2022, as voted by personnel. Corporate representatives and the employee representatives conducted cooperation negotiations regularly. During 2022, specific emphasis was placed on creating an employee development plan and an equality plan along with a related pay survey, and on employment contracts with flexible working hours and newly acquired Internet-based solutions for tracking working hours.

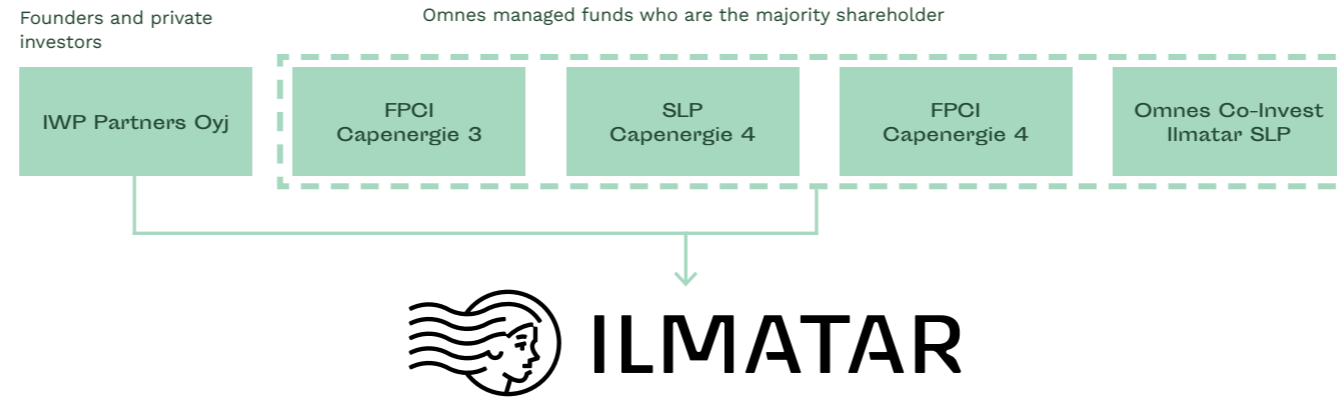
In 2022, both Ilmatar Energy Oy and Ilmatar Service Oy utilized an employee bonus programme approved by the Board of Directors with respective KPIs for specific units. In addition to specific numeric goals for development projects and production, the goals took into account various ESG indicators, including occupational safety on construction sites, personnel's measured job satisfaction, ESG reporting and carbon footprint calculation as well as creation of various processes.

We successfully made progress towards attaining these goals in 2022.

## Processes

In December 2022, Ilmatar deployed an official whistleblowing channel, accessible via Ilmatar's website, for anonymous reporting of any incidents of abuse or suspicions thereof. Before the channel was launched, reports were submitted to Ilmatar's compliance e-mail address which was under the responsibility of the legal team. Not a single such report was submitted during 2022. In 2022, specific emphasis was also placed on the company's REMIT process implementation, e.g. by providing training for all employees regarding the EU's regulation (1227/2011) on wholesale energy market integrity and transparency and its specific obligations concerning the prevention of market abuse, the company's ethical guidance (Code of Conduct) and its information security and privacy guidelines.

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