

Scaling-up sustainably with strategic partners



Wind. It means the world to us.™

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Vestas®



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About this report

In this report, we communicate our sustainability strategy, progress, governance, and selected data for 2022.

This report is our mandatory annual statutory sustainability reporting in accordance with the Danish Financial Statements Act on 99a, 99b, 107d and the E.U. Sustainable Finance Taxonomy.

We disclose eligibility and alignment with the E.U. Sustainable Finance Taxonomy on page 87-91.

We disclose metrics in alignment with the Sustainability Accounting Standards Board (SASB) on pages 81-82.

For Task Force on Climate-related Financial Disclosures (TCFD) reporting, please see page 150 in the Annual Report.

We have restructured the contents and added new disclosures this year in preparation for the Corporate Sustainability Reporting Directive (CSRD) and the drafts of the European Sustainability Reporting Standards (ESRS).

In brief

- Emissions avoided
- History and upcoming challenges
- Executive statement
- Our sustainability strategy
- Key achievements
- Highlighted stories



1.9bn

tonnes CO₂e avoided

Green electricity is key to decarbonisation.
Over the last four decades, our aggregate fleet
of installed turbines has avoided 1,904 million
tonnes of CO₂e, compared with the average
carbon footprint of electricity generation.

Emissions avoided

Our climate impact

Vestas technology is a key enabler of the energy transition. Turbines we produce are expected to avoid nearly 50x the emissions that are emitted in our supply chain and own operations combined.

2012
163m tonnes
CO₂e avoided

2017
317m tonnes
CO₂e avoided

2021
532m tonnes
CO₂e avoided



2022

— 408m tonnes

CO₂e expected to be avoided over the lifetime
of turbines produced in 2022

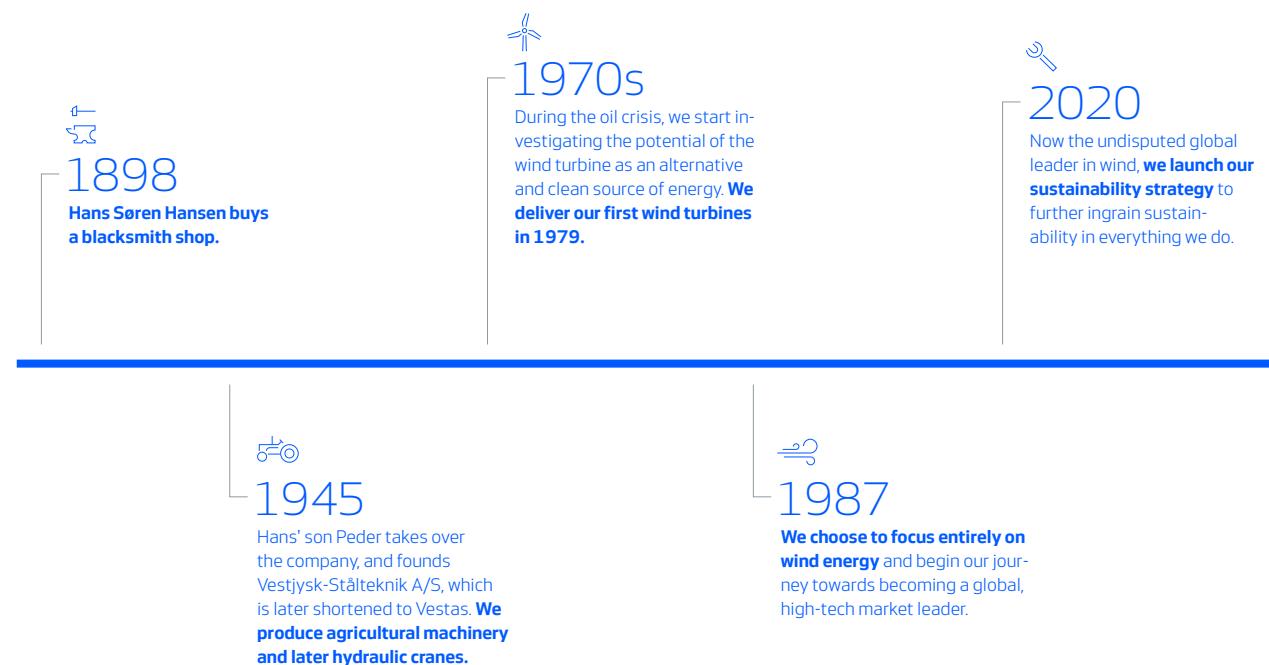


8m tonnes

In comparison, the sum total of CO₂e emissions from our own operations (Scope 1 and 2) and supply chain (Scope 3) amounted to 8.28 million tonnes CO₂e in 2022. Thus, the turbines we produced and shipped in 2022 will avoid nearly 50 times more emissions over their lifetime than were emitted in their creation.

[History and upcoming challenges](#)

Becoming the global leader in sustainable energy solutions



Current sustainability challenges



Sustainably scaling up for a mass deployment of renewables, including decarbonisation of materials and circularity of components



Respecting and promoting human rights, continuing to improve safety performance, and traceability of our materials.



Using wind to decarbonise other sectors through electrification and development of Power-to-X technologies



Siting and building wind parks in harmony with nature and local biodiversity



Executive statement

A business strategy rooted in sustainability

Dear Vestas stakeholder,

The dual threats of catastrophic climate change and energy scarcity spurred by Russia's war of aggression have revived society's focus on energy, especially the urgent need to accelerate the sustainable energy transition.

Vestas technology already plays a major part in the solution to these crises. The turbines produced and shipped by Vestas in 2022 alone will avoid 408 million tonnes of CO₂e emissions over their operational lifetime. And they will do so while reducing energy bills, driving job creation, and building energy independence. Across the world, analysts, policy-makers, and NGO's are betting that renewable energy sources, especially wind energy, will become the backbone of the green transition. In order to keep global carbon emissions in line with the Paris Agreement, wind energy installations will need to quadruple by the end of this decade.

While we are proud of the impact we have enabled so far, we remain aware of the challenges ahead. To scale our sustainable energy solutions at the pace required to meet global climate goals, we must

partner strategically with customers, suppliers, and even competitors to mature our supply chain and local manufacturing capabilities. A technology and energy transition of this magnitude leaves room for many players, and we must work strategically with key partners to be successful in our scaling ambitions.

As we collaboratively scale-up for the energy transition, we must also ensure we do so sustainably, meeting the present needs of a diverse set of stakeholders without compromising the needs of future generations. In 2020, we formalised this commitment with our first global sustainability strategy entitled "Sustainability in everything we do." This strategy includes the entire value chain, unlocking the full decarbonisation potential of wind energy while minimising its potential negative impacts on our environment and our societies.

The strategy consists of four key pillars.

First, we are committed to achieving carbon neutrality across our own operations by 2030 – without using carbon offsets, requiring that all of our offices, factories, vehicles, vessels, and other operations

Executive statement

are fully decarbonised through our own actions. At the same time, we are working to decarbonise the entire wind energy supply chain by working with strategic suppliers to lower the carbon intensity of our turbines by 45 percent by 2030. We will achieve this through changes in turbine design, procurement of materials, and decarbonising the infrastructure to transport and service our wind farms.

Second, we are committed to creating zero-waste wind turbines by 2040. Through our industry-leading Circularity Roadmap, we have outlined our pathway and interim targets towards this goal, including a commitment to create technically and commercially recyclable turbine blades, increase our material efficiency by 90 percent, decrease our supply chain waste by 50 percent, and increase our refurbished component utilisation rate to 55 percent, all by 2030.

Third, we are focused on a socially responsible energy transition. To continue our decades long emphasis on safety, we are working to further reduce our injury rate 85 percent by 2030. To build a more inclusive energy sector, we will increase the share of women in leadership positions to 30 percent by 2030. And to support the communities that are impacted by our activities, we have committed to reach 35,000 community beneficiaries through our corporate social responsibility projects by 2025.

Finally, we aim to lead the transition to a world powered by sustainable energy by electrifying new sectors, including using Power-to-X technologies, and publicly campaigning to drive sustainable change.

Despite the urgent demand for renewable energy and our pioneering sustainability strategy, we remain in an extremely challenged business environment. This year, all western OEM's producing wind turbines are doing so at a financial loss, a situation that threatens to thwart our progress towards bolstering energy security and driving decarbonisation. The systemic challenges that currently face the energy transition require systemic solutions. To build a world that runs on renewable power, energy systems must be redesigned and optimised for renewable power generation, permitting must be streamlined, and the renewable industry must be able to capture enough value to reinvest into building scale.

Through 40 years of technological innovation, pioneering spirit, and extraordinary passion, Vestas has become the global leader in sustainable energy solutions. But as we prepare for the massive scale-up required to combat climate change and secure energy independence, we will now partner with strategic customers, suppliers, and business partners who share our vision for a world powered by sustainable energy. We are already inspired by the immense support, engagement, and collaboration of our strategic partners, and aim to prioritise and strengthen these relationships moving forward. In doing so, we will collaboratively build a sustainable and resilient energy system, and a better future for our living planet.

Sincerely,
Vestas Executive Management team

Henrik Andersen
Group President, CEO

Anders Nielsen
Power Solutions, CTO

Javier Rodriguez Diez
Sales, CSO

Kerstin Knapp
People & Culture, CPCO

Hans Martin Smith
Finance, CFO

Tommy Rahbek Nielsen
Manufacturing & Global Procurement, COO

Christian Venderby
Service, CSO

Thomas Alsbjerg
Digital Solutions & Development

[Our sustainability strategy](#)

Sustainability targets and performance

Our sustainability strategy, "Sustainability in everything we do," consists of four key pillars, and is based on a materiality assessment of critical issues for our stakeholders.

We continue to make incremental improvements for all but one strategic target. Our decarbonisation journey for our own operations and supply chain continues as planned, and we have continued to improve our material efficiency and recycling rates. We are also on target for increasing our share of women in leadership positions. However, in some cases, we must renew our efforts to ensure steady

progress towards long-term targets. For example, while we have successfully reduced our TRIR by 69 percent over the last 10 years, the TRIR over the last three years has plateaued. We must find innovative new ways to continue our safety journey if we are to remain on target for 2025 goals.



Carbon neutral company by 2030 – without using carbon offsets

Own operations Scope 1 & 2 emission

Absolute numbers



Supply chain Scope 3 emissions
kg/MWh generated



Producing zero waste turbines by 2040

Material efficiency rate

2022

1.6

2030 target: 0.2

Refurbished component utilisation

2022:

17%

2030 target: 55%



The safest, most inclusive and socially responsible company in the energy industry

Share of women in leadership positions

2022

23%

2030 target: 30%

Injury rate

TRIR

2022

3.3

2030 target: 0.6



Leading the transition towards a world powered by sustainable energy

- Invested EUR 514 m in green energy R&D
- Hosted the North Sea Summit where four Baltic countries and the EU Commission announced coordinated plans to accelerate offshore wind development in the North Sea
- Committed to procure at least 10 percent near-zero emissions steel by 2030, as part of World Economic Forum's First Movers Coalition

Overview of strategic sustainability initiatives



Carbon neutrality

Green electricity

Source electricity from renewable sources

Green service fleet

Transition of benefit cars, service vehicles, and offshore vessels to run on renewable electricity or sustainable fuels

Industrial heating

Transition to electricity, district heating, or biofuels

Emission-reduced steel

Focus on accelerating the decarbonisation of steel used in our turbines

Suppliers

Help decarbonise our supply chain by setting targets and sharing knowledge



Zero waste

Circular blades

Scale up recycling solutions and design circular blades

Internal waste

Increase the material efficiency of our manufacturing operations and cease landfilling and incineration

Component repair and refurbishment

Expand and regionalise our repair and refurbishment infrastructure

Suppliers

Reduce supply chain waste by setting targets and sharing knowledge



Social responsibility

Safety

Decrease our lost time and recordable injury rates and avoid all fatalities

Diversity, equity, inclusion and belonging

Increase the percent of women in leadership and foster inclusion for people of all social identities

Affected communities

Increase the number of community beneficiaries reached through engagement initiatives in areas impacted by our activities



Leading the transition

Electrification

Increase the share of global energy demand met by electricity, including the expansion of decarbonised transportation through EV's and Power-to-X technology

Sustainable policy

Campaign for a sustainable scale-up of renewable energy by aligning climate and sustainability commitments with effective policy



1. Net zero emissions

Carbon neutrality of our own operations (Scope 1 and 2 emissions) by 2030

- without using carbon offsets

- We pioneered the first hydrogen-powered vessel in the offshore wind industry, building experience for the larger transition of our offshore fleet in the coming years.
- 872 of our company cars, including delivered and ordered, are now (PHE)EVs, and we have added 76 sustainably-fueled vehicles to our service fleet.
- We installed an EV charging battery solution, enabling our employees and local community residents to charge EV's using synchronously-sourced renewable electricity.
- We continued to source 100 percent of our electricity from renewable sources.
- We transitioned industrial heating systems in Daimiel and Taranto to run on biomass, rather than natural gas

Reducing the emissions intensity of our supply chain (Scope 3 Emissions) by 45 percent by 2030

- We secured commitments from 46 of our strategic suppliers in setting emissions reductions targets for their own operations and suppliers.
- We launched a state-of-the-art sustainability data system, incorporating our master data, supplier data, and artificial intelligence to make informed design and procurement choices.
- We joined the First Movers Coalition of the World Economic Forum, committing to procure at least 10 percent near zero emissions steel by 2030, and engaged directly with our steel suppliers to incentivise the production of emissions-reduced and near zero-emissions steel
- We continued to support Modvion™ as they tested the first 100 meter wooden-based tower.

Key achievements



2. Producing zero-waste wind turbines by 2040

- We innovated a break-through in blade recycling technology, and began the process of industrialising the solution with our collaborative business partners.
- We recycled an additional 475 end-of-life legacy blades, ensuring that existing blades do not end-up in landfill.
- We secured commitment from 40 strategic suppliers to reduce 50 percent of the waste from products delivered to Vestas by 2030, while also setting waste reduction targets for their own suppliers.
- We increased our refurbished component utilisation rate to 17 percent by continuing to expand and regionalise our repair and refurbishment infrastructure.
- We improved our material efficiency by 20 percent by optimising our production processes, ensuring production waste is recyclable, and establishing year-on-year recycling targets for each factory.



3. Safest, most inclusive, and most socially responsible company in the energy industry

- We achieved a total recordable injury rate of 3.3.
- We increased the share of women in leadership positions to 23 percent, and launched initiatives to increase the diversity in the ethnicity and nationality of our workforce in regional cultural contexts.
- We refreshed our Human Rights Assessment to identify and assess risks and impacts and integrate findings into business practices, and reached 7,572 community beneficiaries through our community engagement efforts.



4. Leading the transition to a world powered by renewable energy

- We continue to support electrification of energy sources through the transition to electric vehicles, build-out of charging infrastructure, and sponsorship of a championship winning Formula E team to celebrate the extreme performance capabilities of vehicles powered by renewable electricity.
- We hosted the North Sea summit in Esbjerg, where leaders from the EU, Germany, Denmark, Belgium, and the Netherlands committed to a target for offshore wind of at least 65 GW by 2030 & 150 GW by 2050 in the North Sea, with Energy Islands and 20 GW of green hydrogen production capacity by 2030.

Briefing from head of sustainability

2022 marks a year of incredible recognition as our sustainability ratings and rankings continued to improve. Our Circularity Roadmap received the highest prize from our industry association in Denmark. We were added to the Dow Jones Sustainability World Index and awarded an A score in climate by CDP. In January 2023, we were ranked the most sustainable energy company, and the second most sustainable company in the world, by Corporate Knights' Global 100.

But our sustainability journey is far from complete. A wave of legislation, tender requirements, and investor enquiries necessitate that we continually update our sustainability disclosures in line with evolving stakeholder expectations. Some of these shifts are fairly technical, such as national recycling targets or individual customer specifications, but others are more transformative to our company and industry.

To maintain our position as a leader in sustainability, we must ensure our business activities are aligned with science-based physical boundaries. Our first experience with this way of thinking was accomplished when we received validation by the Science-based Targets initiative (SBTi) that our net-zero trajectory was in-line with a 1.5 degree warming scenario. This year, we have concretely segregated and screened all our business activities as aligned with the EU taxonomy for sustainable activities (see pages 87-91).

While we support the wave of increasing regulation regarding sustainability disclosures, we will maintain our primary focus on concretely progressing in the areas which are most material for our business and stakeholders. This includes an alignment of our impacts with science-based boundaries to ensure that when we do have an impact on the environment or society, it is neutral or positive in nature.

As we advance our strategy towards "Neutral or positive impact," we aim to transform our impact from shareholder to stakeholder value. In doing so, our sustainability efforts will evolve from providing a competitive edge as a company to holistically generating value for the climate system, for the biosphere, for prosperous and resilient societies, and for our customers, shareholders, and employees. This is the ultimate ambition of "Sustainability in everything we do," and essential for securing our place as the global leader in sustainable energy solutions.



Lisa Ekstrand
VP, Sustainability

"We aim to transform our impact from shareholder to stakeholder value. In doing so, our sustainability efforts can ensure that we holistically generate value for the climate system, for the biosphere, for prosperous and resilient societies, and for our customers, shareholders, and employees."

Highlighted stories from the year

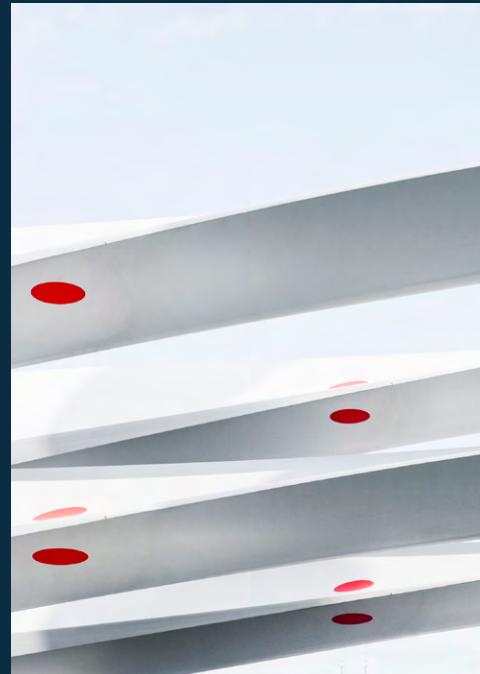
Launching the first hydrogen-powered offshore service vessel in the world



Decarbonising our materials and accelerating the transition to emissions-reduced steel



Building a circular economy for turbine blades through strategic partnerships



Issuing the first sustainability-linked bonds in Denmark



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In focus

Launching the first hydrogen-powered offshore service vessel in the world

A key milestone towards our target of carbon neutrality of own operations by 2030 was achieved in our offshore business this year.

In collaboration with long-term supplier Windcat Workboats, we launched a pilot programme to explore how the world's first hydrogen-powered crew transfer vessel (CTV) can help reduce carbon emissions from our offshore service operations.

The CTV is powered by a dual-fuel solution, capable of being powered by hydrogen in a combination with marine gas oil. Hydrogen fuel contains no carbon, enabling a significant reduction in carbon emissions while maintaining the same power output. The solution will be tested as part of a pilot programme at the Norther Wind Farm. Launched from July to December 2022, the programme allowed us to explore a scalable approach of incorporating hydrogen into our operational setup, while collecting insights on the opportunities and limitations of hydrogen-powered vessels in daily operations.

Over the full trial period, the new CTV generated a CO₂e saving of 9.3 tonnes compared to a traditional

vessel. The vessel was powered primarily by grey hydrogen due to a lack of available green hydrogen in the amounts needed. Through the pilot and subsequent scale-up, we aim to mature a pathway for green hydrogen in our offshore operations, that can be leveraged once green hydrogen has reached the required level of maturity.

"Hard-to-abate sectors, such as shipping, will be the final frontier in our global journey towards decarbonisation. Hydrogen is a crucial technology to advance this journey, which is why we are eager to test its potential to reduce emissions from our service operations and proud to be driving this pilot," says Christian Venderby, Executive Vice President, Service, Vestas.

"This vessel, developed with our sister company CMB.TECH, offers the industry a cost-effective solution to significantly reduce carbon emissions from service vessels. By using dual fuel combustion



engines, we can make hydrogen technology operational in the industry and kick-start further development of the technology, regulation, and supply chain. Collaborations like these are needed in order to scale this technology further. We thank Vestas for taking this first step," says Willem van der Wel, Managing Director of Windcat Workboats.

"The operation of a CTV in the North Sea that also runs on hydrogen will create the necessary demand for investments in hydrogen supply. Norther is honoured that Vestas is bootstrapping this value chain and pleased that we are contributing to the reduction of emissions." says Christophe De Schryver, Executive Manager, Norther Wind Farm. ●

In focus

Decarbonising steel production

Accelerating the decarbonisation of the steel industry is our single greatest carbon reduction challenge.

Steel and iron make up between 80 and 90 percent of a wind turbine's material mass, and comprise around 50 percent of our Scope 3 emissions. While the lifecycle CO₂e emissions of electricity from wind generation are extremely small compared to other generating sources, we nonetheless seek to reduce our carbon footprint to net-zero, and this means finding ways to decarbonise the emissions produced during the raw material extraction and refinement of steel.

We occupy a unique position in the transformation of the steel sector, since we not only consume the material but also provide cost-competitive renewable energy solutions. Renewable energy can be

used to help decarbonise many hard to abate sectors using green hydrogen, including steel production. By collaborating with our suppliers and customers, we can use emissions-reduced steel to achieve our own Scope 3 emissions reduction target while helping decarbonise the wider steel industry with our sustainable energy solutions.

Worryingly, despite mounting public pressure and the increasing certainty of climate science, the carbon intensity of steel production has remained unchanged over the last two decades. Most projections indicate that progress is not being made fast enough or at the scale necessary to achieve a net-zero scenario.

While we are pushing to accelerate the decarbonisation of steel, further collaboration with the steel industry and increased incentives for green steel production will be critical to achieving our goals. To help decarbonise steel production, we:

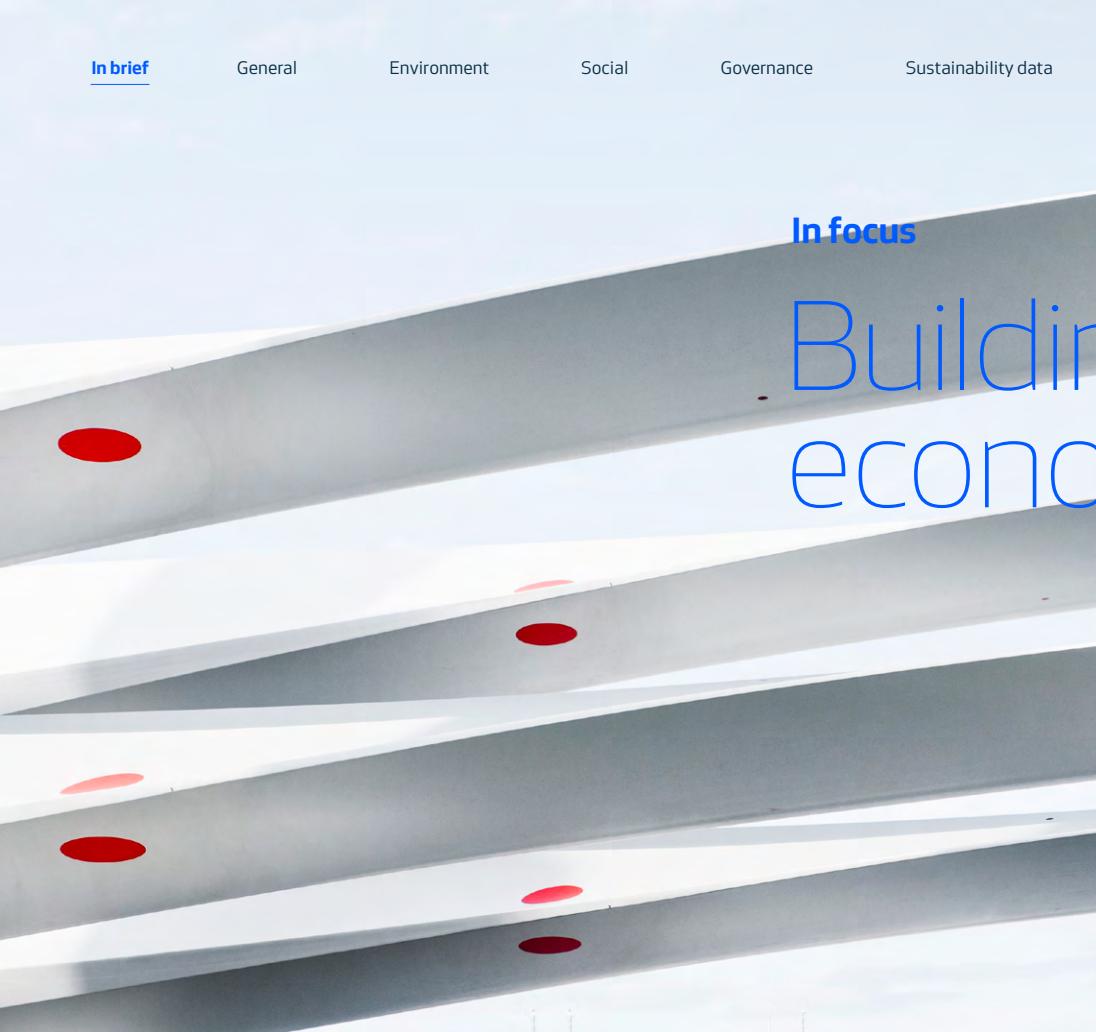
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Through early and robust engagement with our steel suppliers, we intend to become a leading user of emissions-reduced steel, and part of the solution in the decarbonisation of the steel value chain.

Rasmus Boizas - Senior Purchasing Manager, Tower Materials

- Incentivise the production of CO₂-reduced steel in partnership with our suppliers
- Partner with suppliers in the creation and utilisation of green hydrogen and renewable electricity to help decarbonise steel production
- Invest in the development of alternative materials, such as wooden towers, to manufacture our turbines

As part of our program to decarbonise steel production, we joined the World Economic Forum's First Movers Coalition in May 2022, committing to procure at least 10 percent near-zero emissions steel by 2030. Through this commitment, we are sending a strong demand signal to our steel suppliers that we are eager for transformative changes in the production of steel, and will prioritise working with steel companies that invest in emissions-reduced products. ●



In focus

Building a circular economy for blades

Along with Aarhus University, Danish Technological Institute, Olin, and Stena Recycling, we developed a new solution that enables materials in epoxy-based turbine blades to be recovered and re-used, without requiring a change in design.

A break-through in blade recycling

Turbine blades have previously been challenging to recycle due to the chemical properties of epoxy resin, a resilient substance that was believed to be impossible to break down into reusable components. This has led to many technology leaders attempting to replace or modify epoxy resin with alternatives that can be more easily treated.

Along with our partners, we now present a new solution that renders epoxy-based turbine blades as circular, without the need to change the design or composition of blade material. Combining newly discovered chemical technology with industrial scale, the solution can be applied to blades currently in operation. This will eliminate the need for blade redesign, or landfill disposal of epoxy-based blades when they are decommissioned.

The solution is enabled by a novel chemical process that can chemically break down epoxy resin into virgin-grade materials. The chemical process was developed in collaboration with Aarhus University, Danish Technological Institute, and Olin, who are the partners of the CETEC (Circular

Economy for Thermosets Epoxy Composites) initiative, which is partly funded by the Innovation Fund Denmark.

Scaling up the solution

Through a newly established value chain, supported by Nordic recycling leader Stena Recycling and global epoxy manufacturer Olin, we will now focus on scaling up the novel chemical disassembly process into a commercial solution. Once mature, the solution will signal the beginning of a circular economy for all existing, and future epoxy-based turbine blades.

For several decades, producing wind turbine blades manufactured with epoxy-based resin has been standard practice in the wind industry. In the most mature markets for wind energy, the first turbines are reaching the end of their operational life, a number that will only increase over the coming years. WindEurope estimates around 25,000 tonnes of blades to reach the end of their operational life annually by 2025.

As the newly discovered process only uses widely available chemicals, industrialisation can occur quickly and cost-efficiently. Once this new technology is implemented at scale, legacy blade material currently sitting in landfill, as well as blade material in active windfarms, can be disassembled, and re-used.

A pilot project to operationalise the partnership and construct new recycling facilities will now commence. Based on the success of this pilot, the partners will begin to scale up the circular blade recycling solutions, signaling the beginning of a circular economy for all existing and future epoxy-based turbine blades, and a new era for circularity in the wind industry.

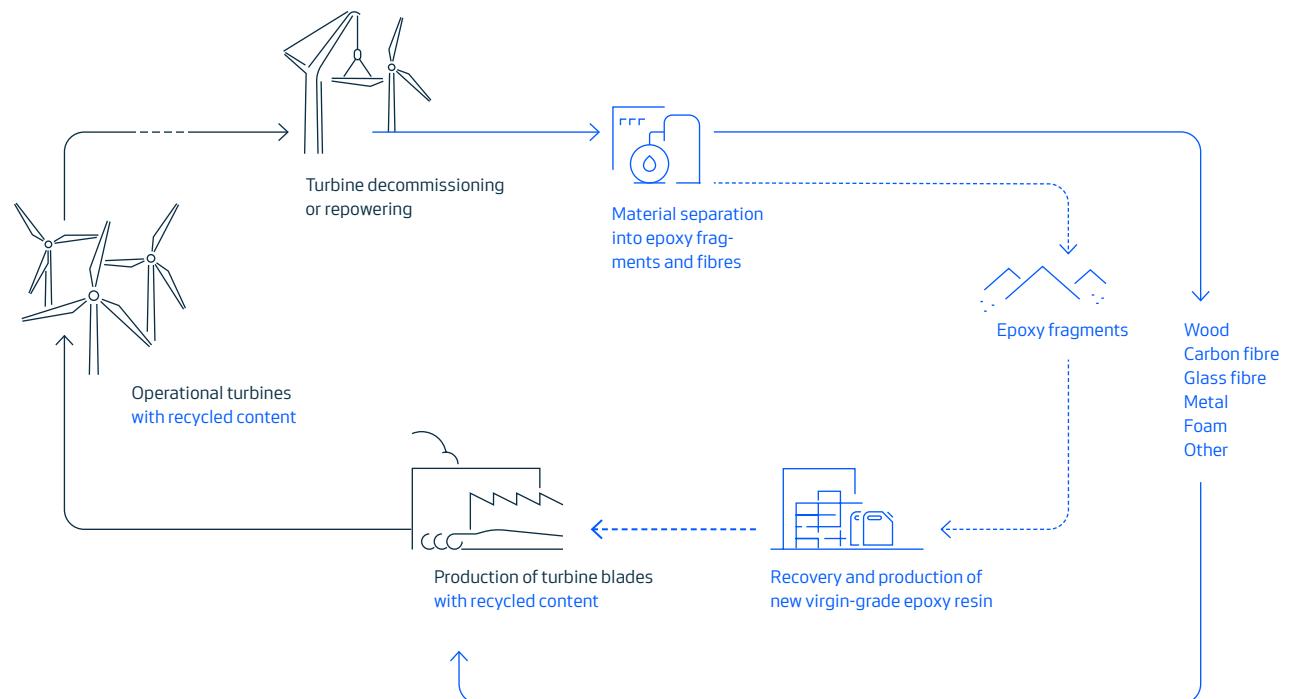
Once mature, the new solution will provide Vestas with the opportunity to produce new turbine blades made from re-used blade material. In the future, the new solution may also enable all epoxy-based composite material to become a source of raw material in the broader circular economy, potentially encompassing industries beyond wind energy.

This is the ultimate goal of circular economy, the first step in which has been unlocked by this breakthrough in technology, and proving our philosophy that scaling-up sustainably requires innovative collaboration with strategic partners. ●

II

The newly discovered chemical process can turn epoxy-based turbines blades, whether in operation or sitting in landfill, into a source of raw material.

Mie Elholm Birkbak - Specialist, Innovation & Concepts



In focus

Issuing the first sustainability-linked bonds in Denmark

Sustainability-linked financing is a key enabler of our mission to integrate sustainability in everything we do, and helps ensure that we can meet financial and sustainability targets hand-in-hand.

To concretely link progress on our sustainability targets with our financial performance, we became the first Danish company to issue sustainability-linked bonds, joining an exclusive group of companies that have been able to utilise the new finance instrument so far. Announced in March, the two EUR 500 million sustainability-linked bonds will enable us to make further investments into an industry-leading sustainability performance.

The bonds' fixed rate is directly linked to our sustainability performance. Quantitative performance in three key areas determines whether we are successful in achieving the favourable interest rate:

1. Reducing the carbon footprint of our own operations (scope 1 and 2)
2. Reducing the carbon intensity of our supply chain (scope 3)
3. Increasing the material efficiency of our own operations

The full sustainability-linked bond framework agreement, including yearly defined targets on these KPI's, is publicly available on our corporate website, with progress reports on the bonds issued annually.

External perspective from Lars Eibeholm

"Vestas plays an instrumental role in the global green transition to a rapid decarbonisation of the global energy supply. In 2022, Vestas established the first Danish Sustainability-Linked Bond Framework, which provides an opportunity for investors and shareholders to learn and engage in Vestas' efforts to reduce or eliminate negative environmental impacts from its operations. Being a "green company" does not exclude Vestas for addressing its environmental challenges.

Sustainability and business strategy integration combined with a focused communication approach is important to show leadership and achieve capital markets success. Sustainability-Linked financing helps accelerate the green transition and set long-term targets and commitments towards key stakeholders including investors, banks, customers, employees, business partners and society. Further, engaging in sustainable finance broadens the investor base, reduces the execution risk, and allows investors to support and follow Vestas on its sustainability journey.

By incorporating sustainability into its financing, Vestas has once again showed the way forward for its industry and demonstrated their motto of 'Sustainability in everything we do'." ●



Lars Eibeholm
Head of Sustainable
Banking, SEB DK

"Material efficiency and emission reductions in the supply chain (scope 3) are substantial challenges for the wider wind industry – and to set yearly targets for these challenges and include them as a performance commitment towards bond investors is brave and demonstrates leadership."

General

- Business model
- Materiality assessment
- Sustainability governance
- Stakeholder engagement
- ESG data digitalisation

[Business model](#)

How we create value



We help decarbonise global energy demand, build energy independence, and enable prosperous and resilient societies through our three core business areas: Development, Power Solutions, and Service.

Through development activities, we help expand the pipeline of permitted renewable energy projects.

Our primary business activity by revenue is the sale of Power Solutions, primarily onshore and offshore wind turbines. We are the oldest and largest supplier of wind energy technology globally and are actively engaged in expanding our Power Solutions capabilities to enable an ecosystem of sustainable energy technologies.

Finally, through routine inspection, maintenance, component repair and refurbishment, and service upgrades, we help our customers maintain and optimise the value of their renewable energy assets over decades of operation.

[Our approach to sustainability](#)

Addressing the issues that matter



The concept of sustainability means being able to meet the needs of the present generation without compromising the ability of future generations to meet theirs (Brundtland Commission 1987). If a practice can continue over time and causes little or no harm to people or the planet, it is considered socially and environmentally sustainable.

Sustainability at Vestas means reducing or eliminating negative environmental and social impacts. It also means maximising the value that our business and products create for our customers, employees, shareholders, suppliers, local communities, and the planet at large. It involves upholding sustainability in governance structures, whereby we hold ourselves accountable to internationally recognised principles and standards, act with integrity and responsibility, and safeguard responsible processes and remunerations. We believe these efforts not only enhance our own performance but help elevate the standards of our industry as a whole.

At Vestas, sustainability is grounded in our four corporate values:

**Simplicity**

We eliminate the use of unnecessary resources and optimise our energy solutions for displacing carbon emissions.

**Collaboration**

We seek a partnership approach to creating sustainable solutions, as we acknowledge that great achievements are only realised through joint action.

**Accountability**

We commit to behaving responsibly and inclusively within and across our business, to always act with integrity, and to deliver on our targets.

**Passion**

We are proud of our shared purpose to make the planet a better place – our products are a testament to our passion for sustainability.

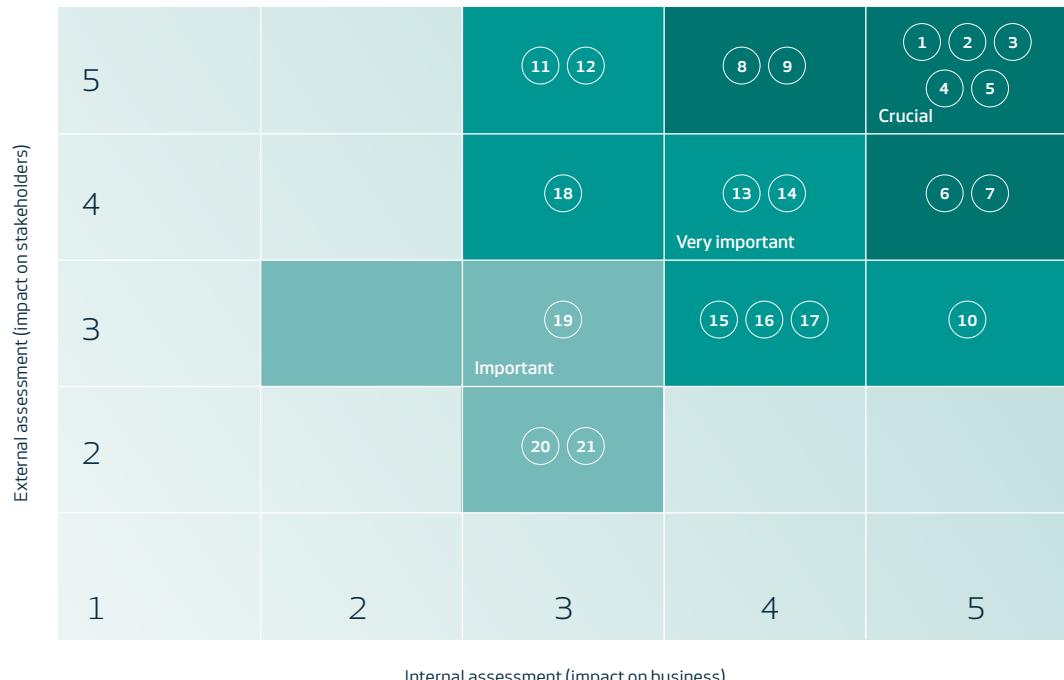
Materiality assessment

Prioritising our ESG efforts

To identify the elements of sustainability that are most relevant to our business and stakeholders, in 2020 we conducted a materiality assessment. This assessment mapped our major economic, environmental and social impacts against our stakeholders' interests. As a result of this process, we can now better prioritise between a growing number of sustainability issues, and allocate resources where they are needed most.

We commissioned external auditors to conduct our materiality assessment, which included four key phases. First, a gap assessment was carried out to evaluate our sustainability strategy against emerging mega-trends, both in the wind energy industry and globally. Second, selected groups of internal and external stakeholders were prioritised according to their interest in, and influence over, our sustainability performance. Third, during the stakeholder engagement phase, some of our most important stakeholders were asked to evaluate the issues identified in phase one. Finally, these issues were then ranked in the materiality matrix on the right. The matrix confirms that crucial topics are embedded in our sustainability strategy and helps guide our future sustainability endeavours.

In 2023, we plan to refresh our materiality assessment to incorporate emerging scientific understanding, reflect the changing needs of our stakeholders, and better account for the “double materiality” of ESG topics.



Topic tiering

Crucial

1. Materials efficiency, sourcing and disposal
 2. Emissions and climate change strategy
 3. Waste management
 4. Occupational health and safety
 5. Supply chain management
 6. Product health and safety
 7. Community relations
 8. Broader environmental role in society
 9. Diversity and inclusion

Very important

10. Business ethics and anti-corruption
 11. Stakeholder dialogue
 12. Management of the regulatory and legal environment

13. Human rights
 14. Labour conditions
 15. Ecological impact of project development
 16. Employee engagement and wellbeing
 17. Talent attraction and retention
 18. Critical incident risk management

Important

- 19. Corporate governance
 - 20. Responsible tax
 - 21. Water management

Topics have been scored on a scale from 0 to 5.
0: Not relevant **1:** Of little importance **2:** Somewhat important
3: Important **4:** Very important **5:** Crucial
Please note that issues within the same quadrant have equal weighting, e.g. issues 11 and 12.

Sustainability governance

Governing sustainability

Solid governance structures are the backbone to our work on sustainability. This section summarises how sustainability is managed and governed at Vestas and outlines central activities in 2022.

Group Sustainability

Group Sustainability, led by the Vice President and Head of Sustainability, is responsible for developing and coordinating our sustainability strategy. In close collaboration with the functional areas, the department also drives and practically supports the execution of the strategy. Group Sustainability reports to the CEO monthly, the Sustainability Committee and full Executive Management team multiple times a year, and the full Board of Directors at least once per year, with more regular reporting to the Audit Committee and the Technology & Manufacturing Committee.

Must Win Battle Sustainability: Matrix organisation

The environmental scope of sustainability is one of our so-called Must Win Battles (MWB). As a result, we take a unique matrix-based governance to accomplish the environmental goals. We have identified a set of priority projects to decarbonise our own operations and supply chain, and improve circular economy, which have been approved by the Board. Through MWB governance, employees in virtually every part of the organisation, from service to procurement to R&D are assigned ownership of specific priority projects.

The CEO is the owner of the MWB Sustainability, and the VP Sustainability is the lead.

Sustainability Leads

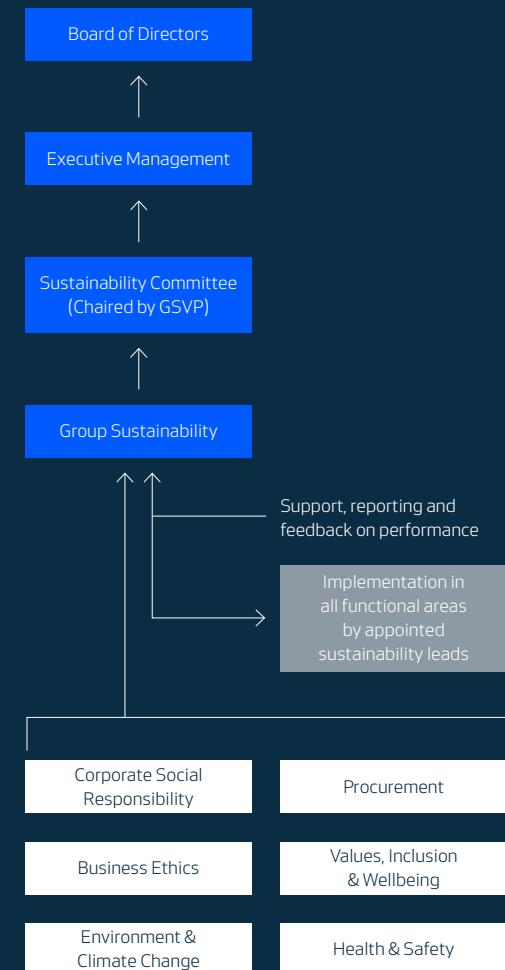
Sustainability Leads for each area of the business have been appointed. In close collaboration with Group Sustainability, these individuals define action plans and resource allocation to support the achievement of our sustainability goals and targets within their business area. Individual departments are responsible for specific global policies, procedures and overall guidance on sustainability: Health, safety and environment are managed by the Quality, Health, Safety & Environment (QHSE) department; Corporate Social Responsibility and Business Ethics are managed by the Legal, Risk & Compliance department. We have also appointed design Module Sustainability Leads (e.g. for nacelles, blades, towers, etc.). These Module Leads work to achieve reductions in carbon emissions and waste through the design of their specific part of the turbine.

Sustainability Committee

The Vestas Sustainability Committee prioritises, oversees, and coordinates cross-functional sustainability initiatives. The Committee also ensures our company conforms with and lives up to its responsibilities as a signatory to the United Nations Global Compact (UNG). It is essential that the Committee represents Vestas in its entirety, so each member speaks for their respective function or department and the Committee reports to Vestas' Executive Management team. The following functions are represented in the Committee: Investor Relations, Compliance & CSR (Corporate Social Responsibility), Sustainability, People & Culture, Service, Sales, Procurement, Quality, Safety & Environment, Global Supply Chain & Transport, and Power Solutions.

In 2022, the Sustainability Committee met on a quarterly basis. Key priorities included the discussion and approval of initiatives to deliver on the sustainability strategy, including emissions-reduced steel offerings, emissions targets in modules, safety strategy and performance, and incorporating biodiversity in product design. In 2023, the Committee, in close dialogue with Group Sustainability, will continue to oversee the execution of our sustainability strategy.

Our Sustainability Governance



Additional information

Further information on the Board of Directors and Board committee's oversight and competencies related to sustainability are available in the Annual Report 2022 pages 55-56. More information on the overall corporate governance, ESG remuneration, and evaluation of governance is available through the Corporate Governance Report 2022 and Remuneration Report 2022 available on vestas.com.



Product design governance and assessment

Vestas Way to Market

We consider sustainability throughout design and development, a process which we call the Vestas Way to Market. We use this framework to plan, manage, and execute technology and product development across the value chain, while maintaining a firm focus on customer requirements. By involving relevant stakeholders in the development process, we can build requirements into the product design at an early stage.

Vestas Way to Market is a stage-gate process, with a group of gatekeepers positioned at each milestone. This approach helps us to decide whether to progress a project to the next stage and ensures that specification requirements are met. The specifications are based on internal commitments (such as the Prohibited and Restricted Substances document), international legislation (such as European directives), internationally recognised codes and standards set by organisations such as the American Society of Mechanical Engineers (ASME), the International Organization for Standardization (ISO) and the International Electrotechnical Commission (IEC), and commitments in our sustainability strategy. For example, in 2022 we integrated targets to reduce CO₂e and waste generated within the product design of future turbines.

Life cycle assessment (LCA)

Since 1999, we have developed LCAs to provide a 'cradle-to-grave' evaluation of the environmental impacts made by our products and activities. In these LCAs we focus on two key actions:

- Documenting the environmental performance of Vestas wind turbines
- Analysing results to improve or develop wind turbines with less environmental impact

The studies assess each wind turbine's entire bill-of-material, accounting for the approximately 25,000 parts that make up a single turbine. In our LCAs, we conduct a complete assessment of a wind power plant, up to the point of connection with the electricity

grid. This includes the wind turbine itself, its foundation, site cabling, and transformer station.

In 2022, we engaged with a taskforce within WindEurope to help standardise LCA approaches among major western turbine manufacturers. In time, we expect this collaboration to improve the comparability of LCA results in the wind industry. All published LCAs are accessible on our corporate website.

Vestas SiteLCA™

We offer our customers the opportunity to receive a customised Life Cycle Assessment of their own wind power plants. We call this service a Vestas SiteLCA™. Each assessment determines key indicators of environmental performance and takes the wind turbine type, site-specific conditions, and production supply chain into consideration.

The environmental performance of wind power plants varies across the globe. For this reason, SiteLCA™ provides our customers with focused and transparent environmental facts, such as a specific wind plant's carbon footprint, return on-energy, or water-use. These fact-based indicators increase business case certainty by supporting a customer's energy strategy. They also support project planning and permitting processes, for example regarding decommissioning, and public consultation and response.

For more information, please see the Vestas SiteLCA™ brochure on our corporate website.

Management systems

The Vestas Management System enables us to put all external and internal sustainability requirements into practice systematically, efficiently, and effectively. It is a key to our intent to make sustainability an integral component of all business processes. In order to further demonstrate a commitment to meeting the highest standards of health, safety, and the environment, our operations are built on global certificates for ISO 9001 for Quality, ISO 14001 for Environment, and ISO 45001 for Health and Safety.

Stakeholder engagement



While the materiality assessment reflects a focused approach to align our sustainability strategy with our most important stakeholders, as a global company we interact with a large array of different stakeholder groups. These include customers, shareholders and investors, employees, policy makers, suppliers, non-governmental organisations, local communities, and the media. Our sustainability performance is an important part of our relationship with these groups. By proactively engaging with stakeholders to understand their needs and concerns, we can feed this information back into our decision-making process.

We have both categorised and prioritised stakeholders to rationalise and focus our engagement efforts. This exercise is based on the degree to which they influence Vestas' performance and are affected by it, as well as their interest in Vestas. Engagement ranges from forming active partnerships to address common sustainability issues, to more passive engagement through, for example, the publication of the Vestas Annual Sustainability Report. We use the priority given to each stakeholder to determine the most appropriate approach to engagement.

Transparency is fundamental to our engagement strategy and underpins our many engagement efforts. We publicly disclose key sustainability information in our Sustainability Report. Additionally, we regularly lead more detailed dialogues with key stakeholders, as well as keeping day-to-day contact with customers and holding annual events such as our Supplier Forum.



The 2022 Vestas Sustainable Supplier award was granted to Schaeffler.

Supplier engagement

Every year we host the Supplier Forum where we engage with our most critical suppliers and share expectations for the future development of the renewable energy industry. The Supplier Forum creates a platform to share business perspectives and expectations with our suppliers who represent a large pool of resources and networks. We want to connect those resources into partnerships through an integrated ecosystem that makes our business and industry stronger.

Developing a sustainable supply base is essential to make long-term progress on our sustainability commitments. To enable these partnerships and build the foundation for the ecosystem, we must mature collaboration with our key partners and facilitate connections among our partners.

The theme of this year's Supplier Forum was "competitiveness", including staying competitive while meeting sustainability requirements. A key message was "Sustainability is the new digital arena." Transparent and quality ESG data is a prerequisite to a successful partnership with Vestas.

During the event, awards were presented to suppliers that excelled in critical areas, including sustainability. This year our supplier Schaeffler was presented with the sustainability award. They won based on four criteria:

- Ambitious sustainability strategy including 100% renewable electricity consumption by 2024, and clear carbon neutrality targets
- Green steel partnership engagement with potential for significant CO₂e reductions
- Pioneering initiatives to reduce carbon-based fuels in production
- Demonstration of organisational sustainability embedded through initiatives such as 'climate action day'

Following the Supplier Forum, we conducted three sustainability webinar sessions, with the purpose of building capacity and working with our critical suppliers towards a sustainable supply base. The sessions aimed to convey our sustainability strategy and activities to mitigate the environmental and social impacts of our supply chain operations.

ESG data digitalisation

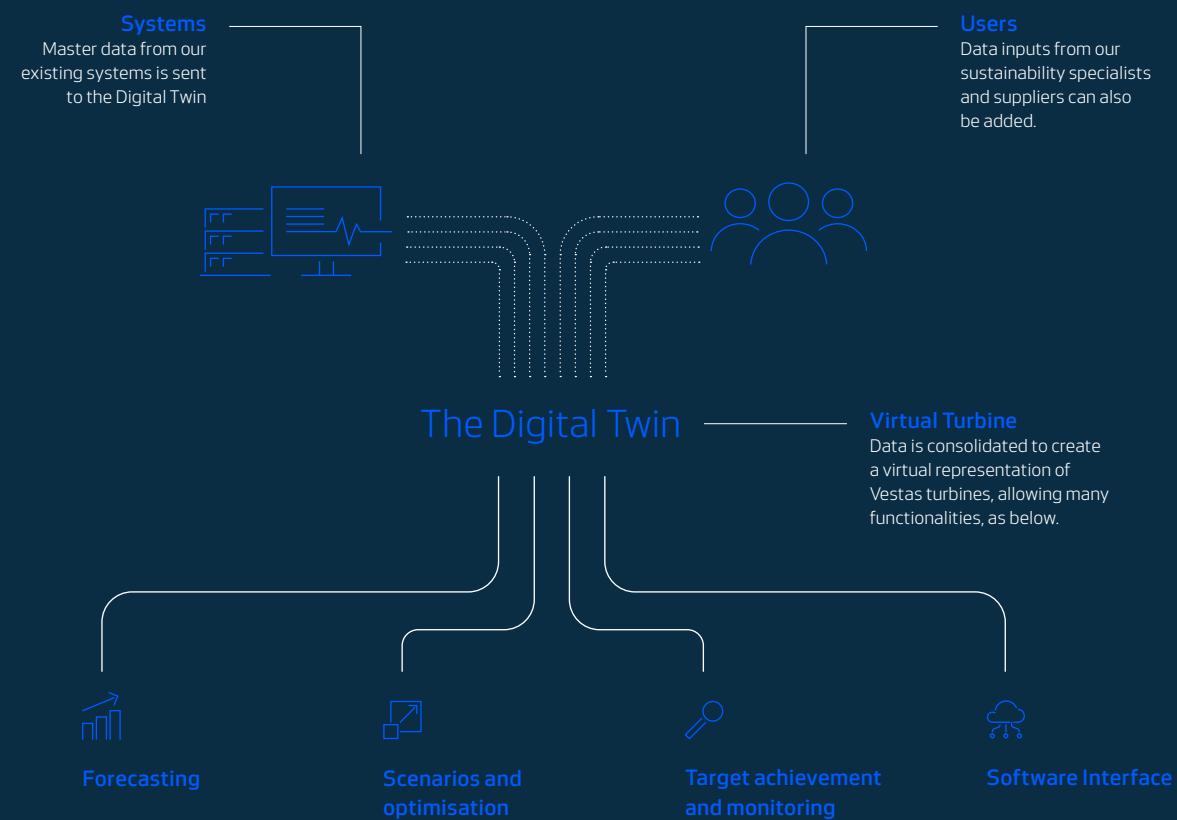
To enable the achievement of our ambitious sustainability goals, we invested in a sustainability data platform that uses digital twin technology to calculate real-time climate footprints and run scenarios that support in monitoring, forecasting, optimisation, and target achievement. Our supply chain emissions (scope 3) account for approximately 98 percent of our total emissions. Therefore, leveraging emissions and waste data from our value chain is crucial for our decarbonisation journey.

After going live in 2022, the sustainability data platform allows our suppliers to report their emissions and enables us to calculate the real-time environmental footprint and scenarios. This provides readily available data for monitoring, forecasting, and optimizing sustainability performance for Vestas. We believe having the right information is key to efficient decision-making. Using supplier-specific data rather than industry averages equips us to fully understand the climate-related impact of our supply chain with greater accuracy, consistency, and transparency. The platform enables us to map impacts throughout the value chain and to prioritise collaboration with suppliers who are working to reduce the emissions intensity of their products and materials.

Twenty-one of our strategic suppliers were onboarded and delivered emissions data through the software by the end of 2022. Our suppliers benefit by being able to track their year-on-year emission reduction progress and, in dialogue with us, explore reduction opportunities.

The platform will undergo continuous improvement and development in the coming years as we continue to onboard additional suppliers.

How we utilise data to accelerate sustainability



Our approach

Decarbonising energy demand

Our impact

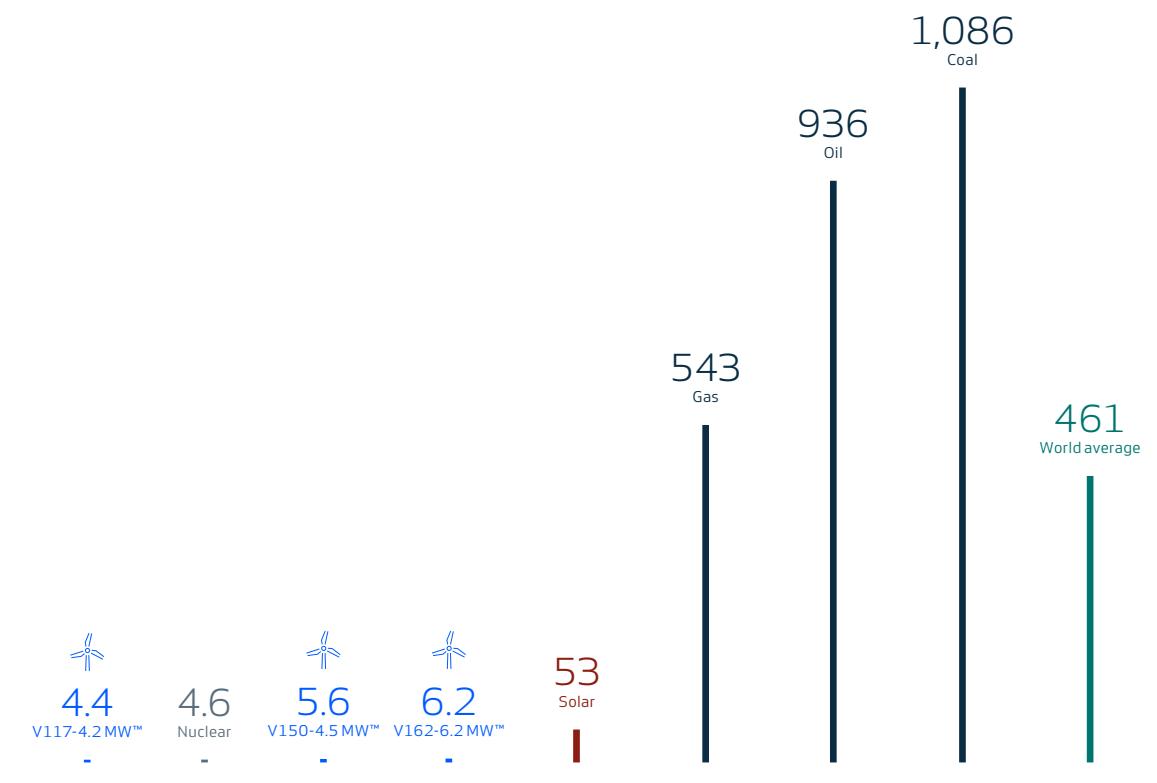
We aim to meet or exceed environmental standards and ensure environmental protection as a pre-requisite of doing business. Although our technology majorly contributes to the green energy transition, we recognize that our products can have negative environmental impacts. Our QHSE policy outlines our commitment to mitigating these impacts, and we work closely with our suppliers and customers to enhance the environmental performance of our solutions across a broad range of issues.

Our plans to ensure that our business model and strategy is compatible with the highest environmental standards and a transition to a climate-neutral economy requires engagement from many stakeholders in our value chain. This includes our targets and action plans to address material climate related impacts, risks, and opportunities.

Our technology is a key enabler of the green energy transition

Mitigating global climate change by accelerating the green energy transition is our greatest positive sustainability impact and core to our purpose as a business. Our fleet of turbines already avoids a massive sum of carbon emissions (see page 30). In addition, we are committed to decarbonising our own operations and supply chain in line with science-based targets (see pages 28-32).

For example, emissions related to time-bound leases and charter contracts for vehicles and vessels used to construct and service



Kilograms of CO₂e per MWh

Vestas turbines range from 4-9 kilograms per MWh, and are based on Lifecycle Assessments published on vestas.com. Source for Nuclear, Solar, Gas, Oil, Coal: Sphera (2022). Sphera – GaBi 9 dataset documentation for the software-system and databases, LBP, University of Stuttgart and Sphera Solutions GmbH, Germany.
Source for World average: IEA (2022). CO₂ emission from fuel consumption highlights

our wind farms are being phased out in the ongoing transition of our operations to carbon neutrality by 2030 (see page 29).

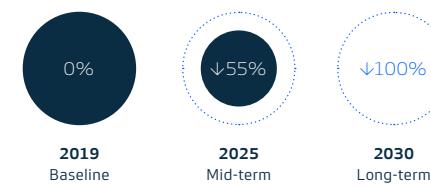
As a pure-player in wind energy, the vast majority of our revenue, operating expenditures, and capital expenditures are eligible and aligned with the EU taxonomy on sustainable activities, as they significantly contribute to mitigating global climate change (see page 87-91).

The carbon footprint of electricity from our turbines is significantly reduced compared to other electricity-generating sources.



Climate change mitigation

Targets for Scope 1 and 2 emissions

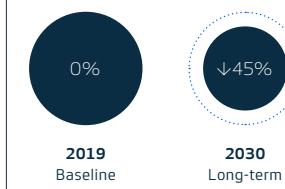


[Carbon neutrality by 2030 - without using carbon offsets](#)

We are committed to reducing emissions from our own operations by 55 percent by 2025 and 100 percent by 2030 (from a 2019 baseline). We will achieve this through our own actions, rather than utilising carbon offsets.

In August 2020, the carbon neutrality target for our own operations was validated by the Science Based Target initiative (SBTi), a programme led by the Carbon Project, the UN Global Compact, the World Resources Institute, and the WWF. The SBTi confirmed that our carbon neutrality target is in line with the efforts required to keep global warming to 1.5°C above pre-industrial temperature levels. This earned us the most ambitious designation available through the SBTi validation process.

Targets for Scope 3 emissions



[Reduce CO₂ e emissions in the supply chain by 45 percent per MWh generated.](#)

By 2030, we are committed to reduce carbon emissions from our supply chain by 45 percent per MWh produced and shipped. We will deliver on these reductions by:

- Supporting our strategic suppliers in developing strategies to measure and reduce their emissions
- Redesigning turbines with less carbon-intensive materials

We have chosen an intensity-based target because it incentivises sustainability partnerships with suppliers who reduce carbon emissions. It also allows for the continued growth of the renewable energy sector, which is critical to achieving global decarbonisation targets.

Action plan for Scope 1 and 2 emissions

Since 2013, we have taken a large share of our electricity from renewable sources and compensated for non-renewable electricity use. Since 2020, we have sourced 100 percent renewable electricity across our operations globally.

By 2025, we will phase out benefit cars powered by fossil fuels. In 2022, 872 of our benefit cars, either in-use or ordered from the supplier, were electric or hybrid vehicles. To support the scale-up of (PH)EVs, we have signed a partnership with Enel X in 2021, which has accelerated the electrification of our company fleet. Through the agreement, Enel X will provide us with the charging infrastructure we need to electrify our corporate vehicles across our most prominent markets.

In terms of our service fleet, we introduced 76 sustainably fuelled vehicles during 2022, including EVs and biofuel vehicles that meet strict sustainability criteria, for a total of approximately 300. This is a continuation of a transition to a fully sustainable service fleet, and we aim to make all new service vehicles zero-emission from 2025.

To decarbonise our offshore service vessels and/or transition to sustainable biofuels, we pioneered the first hydrogen-powered vessel in the wind industry in July 2022 (read the story of this vessel on page 13). In December 2022, we also signed contracts to launch the first offshore CTV vessel powered by methanol, which will enter operation in 2023. These pilot projects are intended as learning opportunities to enable a complete green transition of the fleet by 2030.

We are transitioning to renewable energy for heating in our factories, while improving our energy efficiency across all sites globally. In 2022, we matured our mapping of energy consumption and initiated a number of projects in this area. For example, we transitioned two natural gas boilers to biomass energy sources and replaced an oil boiler with an electric heat pump. For more information on our progress related to renewable energy sources, please see pages 76-77.

In 2022, scope 1 emissions from our own operations amounted to 98,000 tonnes of CO₂e. Scope 2 emissions amounted to 2,000 tonnes calculated on a market basis, and 59,000 tonnes on a location basis. This represents a reduction in Scope 1 and 2 GHG emissions of 12 percent from a 2019 baseline. For our energy consumption mix, see page 77.

Action plan for Scope 3 emissions

More than 98 percent of our total carbon footprint stems from our suppliers' operations, so we are determined to work collaboratively towards greening our supply chain. At the end of 2022, 46 out of 50 strategic suppliers committed to working to achieve decarbonisation of the supply chain. Of these, 96 percent of strategic suppliers in sustainability hotspot areas (towers & steel, transport, and blades, which cumulatively account for approximately 60 percent of our scope 3 emissions) committed to reduce their emissions in line with our targets. We continue to work with non-signatories to gain their support in our CO₂ reduction commitment.

In 2022, our supply chain CO₂e emissions amounted to 8.18 million tonnes. See table below for a breakdown of Scope 3 emissions. The supply chain CO₂e emission intensity decreased 5 percent from the 2019 baseline and 3 percent from 2021 to a rate of 6.46 kg/MWh.



-12%

We have reduced emissions from our own operations by 12 percent since 2019.

Our supply chain (Scope 3) CO₂e emissions in 2022

Category	Description	CO ₂ e emissions (1,000 tonnes)
1	Purchased goods and services	7,100
2	Capital goods	106
3	Fuel and energy related activities	25
4	Upstream transport and distribution	835
5	Waste generated in operations	15
6	Business travel	15
7	Employee commuting	66
12	End of life of sold products	15
Total		8,177

Partnerships for Low-Emission Steel

Decarbonising steel is key to reaching our scope 3 emission reduction target. Steel and iron manufacturing account for 80 to 90 percent of the material mass of a wind turbine, making up approximately 50 percent of our scope 3 emissions. In 2022, we began partnering with steel suppliers to share our need and secure an aligned strategy to accelerate the availability of emissions-reduced steel.

In 2022, we formalised our intent to utilise near zero emissions steel by joining the World Economic Forum's (WEF) First Movers Coalition, making a firm commitment to purchase at least 10 percent of our steel from near-zero emissions breakthrough technologies by 2030.

Exploring alternatives to steel

Through our Vestas Ventures programme, we are an active investor in Modvion™, a bio-composite company specialising in modular, sustainable wind turbine towers. Modvion's™ towers are made from laminated veneer lumber (LVL), a bio-composite material sourced sustainably from a supplier network validated as being in line with robust reforestation strategies. When compared directly with the value chain of a conventional steel tower, LVL towers are proven to reduce carbon emissions by 80 percent. The reduced weight of an LVL tower, and the lower CO₂ intensity of the materials used, contribute to the overall reduction in CO₂ emissions.

We will leverage our position as an investor to support Modvion's™ scale-up strategy. Our goal is to integrate LVL towers into our design process and manufacturing operations. Plans to offer a 'wooden' tower variant are already in development. Through these plans, we aim to strengthen our ability to support customers in their sustainability journey, while continuing to offer cost-competitive solutions that address factors such as increased ease of transportation.

Avoided GHG emissions from products (Scope 4)

As the oldest and largest wind turbine manufacturer and servicer in the world, we are a leading contributor to the decarbonisation of global energy demand.

Generating wind energy is one of the most carbon-efficient ways of producing electricity. A single Vestas wind turbine generates around 30 to 50 times more energy than it consumes during its lifecycle. This offers enormous potential to reduce carbon emissions across the global energy system.

To date, our total installed capacity of more than 164 GW globally has helped to avoid 1.9 billion tonnes of carbon emissions, equivalent to the CO₂e emissions from 4.5 billion barrels of oil. And we are continuing to scale this potential. In 2022, we increased our total aggregate installed capacity by 8 percent compared with 2021.

We also calculate the amount of expected CO₂e that will be avoided over the lifetime of the turbines produced and shipped in the year. In 2022, the turbines we produced and shipped are expected to avoid 408 million tonnes of CO₂e over their lifetime. This is calculated by first converting the MW of turbines installed into MWh per year, and then multiplying by the average capacity factor of Vestas serviced wind farms, the expected lifetime of the turbine in years based on the design criteria, and the global average emissions intensity of electricity from the International Energy Agency.

How we calculate emissions avoided

Turbines produced and shipped (MWh)	114,808,560
MW produced x days/year x hours/day = 13,106 x 365 x 24	
Capacity factor (%)	34.7
Average of all Vestas serviced wind projects	
Expected lifetime of the turbine (years)	22.2
Average of design specification of turbines produced and shipped	
Emissions intensity of electricity (g CO ₂ e / kWh)	461.2
Global average CO ₂ e emissions of electricity from IEA's 2022 report	
Expected CO₂e avoided over the lifetime of the capacity produced and shipped in 2022 (million tonnes)	408
MWh * Capacity factor * Lifetime * Average CO ₂ e intensity	

Pollution prevention

Controlling chemicals and hazardous substances used in the development, manufacturing, and service of turbines is an important part of our management system, and is essential to our sustainability performance. We have committed to prevent pollution and protect the environment through our QHSE policy. Thus, we actively work to find safer and more environmentally friendly products to ensure a healthy workplace for our employees and minimal impact on the environment.

Our chemical management process follows global procedures for the approval of new chemicals. We also provide local instructions for handling, transporting and storing chemicals, and a global chemical database for sharing knowledge with suppliers.

To adapt to changing chemical legislation globally, such as GHS/CLP and REACH, we continuously update a central list of substances. This list identifies chemicals that are prohibited around the world and restricts certain substances in our product manufacturing and service processes.

We require our suppliers to fulfil the requirements set out in our prohibited and restricted substances management document for all products delivered. We also do not buy products containing prohibited substances. If a product contains restricted chemicals, the supplier must perform health and safety evaluations to ensure correct use of the materials in question.

Furthermore, we expect our suppliers to create action plans for phasing out these restricted substances and finding sustainable alternatives. In parallel with this process, we assess if a time-bound dispensation can be signed off and/or if the product can be substituted.

To avoid emission of volatile organic compounds (VOC) from the painting of blades we are actively transitioning to low VOC paint. Please refer to page 76 for data on our VOC emissions in 2022.



Water and marine resources

We measure freshwater withdrawal on a global level. However, as our primary use of water is for domestic purposes, the environmental impacts resulting from water usage are considered to be minor.

For the service business, freshwater withdrawal increased in line with activity levels. In manufacturing, it decreased relatively less than production level.

Please refer to page 77 for complete data on our freshwater withdrawal and discharge in 2022.



Biodiversity preservation

Fostering local biodiversity

Wind energy can negatively impact local biodiversity. But by decarbonising global energy demand, utilising nature-based solutions, and mitigating harm through technology, wind farms can have a net-positive biodiversity impact.

Biodiversity – the rich diversity of life on Earth – is being lost at an alarming rate. The population sizes of mammals, birds, amphibians, and reptiles have seen an average drop of nearly 70 percent since 1970. And more than half of all species face high extinction risk under a business-as-usual climate scenario.

Biodiversity loss endangers human health and food production, and erodes the significant value of our natural resources. It is therefore clear that protecting biodiversity is a necessary strategic investment to preserve not only the planet's species, but our health, wealth, and security.

Renewable energy, principally wind and solar PV, plays an important role in mitigating climate change and ultimately in stemming global biodiversity loss. But as we accelerate the transition to a world powered by renewable energy, we must do so in balance with local ecosystems and species. By carefully considering biodiversity in the lifecycle of our projects, we can minimise, or even make positive, our impact on local fauna and flora.

Failing to take biodiversity into consideration can lead to costly curtailment of our customers' energy generating capabilities. And in the most severe cases, it can threaten to close entire wind farms.

Biodiversity has not been a material focus of our sustainability strategy to-date. However, several scientific and framework developments such as SBTN (Science Based Targets for Nature) and TNFD (Taskforce on Nature-related Financial Disclosures) will enable us to incorporate biodiversity into our sustainability efforts systemically. In 2023, we plan to start this work by conducting a full biodiversity impact assessment of our operations and supply chain and creating a designated biodiversity policy and monitoring program.

Siting

Our greatest opportunity to positively impact biodiversity lies in the spatial planning of wind energy development zones. Through wind resource and biodiversity impact assessments, we can optimise locations within established wind zones. This ensures new wind farms do not contribute to habitat loss or endanger threatened species. Working with local agencies and regulations, we carry out environmental impact assessments when developing new projects. We also take appropriate measures to mitigate or compensate for any anticipated adverse impacts our projects might have.

Impact assessment

When establishing a wind plant, the planning process should always include a location impact assessment. In many countries, environmental impact assessments are required by law; they can also be required by the financial institutions that support infrastructure projects. In most cases, our customers have the primary responsibility for undertaking environmental assessments and developing environmental management systems for their wind plants. However, we are responsible for these steps in the projects we develop ourselves. In either case, we work closely with our customers at every stage.

Environmental assessments typically take into account direct and indirect impacts, including:

- Landscape and visual impressions
- Flora (e.g. native vegetation)
- Fauna (e.g. birds, mammals, fish)
- Noise
- Shadows

Impact on birds and bats

Most biodiversity impacts relating to wind development are short-term and linked to construction. However, some longer-term impacts, such as the direct collision of birds and bats with turbine blades, can also occur. Through careful siting outside major migration corridors and other sensitive areas, the risk to birds and bats can be greatly reduced.

Remaining impacts to local bird species can be further reduced through the operational curtailment of our wind farms. Indeed, our turbines can be optimised to curtail operations based on the historical peaks of local bird and bat activity, and can incorporate radar based systems to track birds and bats even more effectively.

Artificial reefs

Offshore wind farms have the potential to help support marine wildlife. Wind turbine foundations and scour protection areas can create new habitats for marine species to colonise. In turn, these habitats attract additional species in a process known as the 'artificial reef effect', leading to more productive and species-rich ecosystems.



Marine protection

According to the UN's Global Framework for Managing Nature Through 2030, more than 30 percent of marine areas need to be protected by the end of the decade to ensure marine health is maintained and restored for the future. By conducting environmental impact assessments for offshore wind farms, we can contribute to the scientific knowledge base that supports marine protection. We can also help establish areas with reduced marine traffic, where the most environmentally damaging activities, such as bottom trawling, are prohibited.

Siting

By siting new wind farms with biodiversity in consideration, we can minimise our impact on local ecosystems.

Reefs

Offshore wind turbines can help protect marine areas and the foundations can create artificial reefs, helping restore an ecosystem heavily damaged by overfishing and bottom trawling.

[Circular economy](#)

Building a zero-waste turbine through circular economy

In 2021 we released our Circularity Roadmap, becoming the first organisation in the wind industry - and one of the first in any sector - to translate the theory of circular economy into actionable targets and goals.

Our roadmap will help us reduce waste across the value chain, with the ultimate ambition of producing zero-waste wind turbines by 2040. The roadmap is based on three key areas: design, operations, and material recovery

Design for circularity

Material efficiency

By 2030, we aim to increase our material efficiency by 90 percent. Our initial focus is on blade manufacturing, the process which creates the most internal waste. To achieve this, we will raise awareness within our factories, optimise blade design and production methods, source more efficient manufacturing kits, and make circularity metrics key performance indicators.

During 2022, our material efficiency improved 20 percent to 1.6 tonnes of non-recycled waste per MW produced and shipped, compared to 2.0 in 2021. To further increase material efficiency, we are optimising the use of carbon, glass fabric, and chemicals in our blade manufacturing processes. We are also running initiatives to map out waste streams in all areas of manufacturing and further reduce the use of materials through waste reductions in design and packaging.

Blade and turbine recyclability

We are significantly accelerating our ambition around blade recyclability, pushing the boundaries of circularity by creating a truly circular blade. As well as committing to create a rotor that can be 100 percent recycled, we are minimising the down-cycling of blade materials.

While recent innovations have enabled us to recycle blades in some regions, the materials recovered from these processes are significantly down-cycled. Under our new target, the value of such materials will be preserved, enabling recovery and reuse in new turbines or similar devices.

Beyond blades, we are also working to integrate recyclability requirements across the full turbine structure. To achieve a zero-waste wind turbine, we are investigating new recycling pathways for difficult-to-recycle materials. Our ambition is to redesign the turbine or develop new circularity routes so that every component will be recyclable by 2040.

Our large scale blade recycling project continues in the USA, where in 2022 we recycled 475 blades in total (compared with 285 blades in 2021), including nacelle and hub covers. Recycling can include cement co-processing, gasification, forming new composite materials, and reclaiming glass fibre and carbon fibres. We are exploring opportunities to offer these services beyond the USA in regions where local recycling infrastructure is robust and customer demand can be established.

In 2021, the CETEC (Circular Economy for Thermosets Epoxy Composites) initiative, spearheaded by Vestas, has significantly advanced solutions for composite circularity. CETEC technology enables circularity for thermoset composites, which constitute the majority of turbine blade mass.

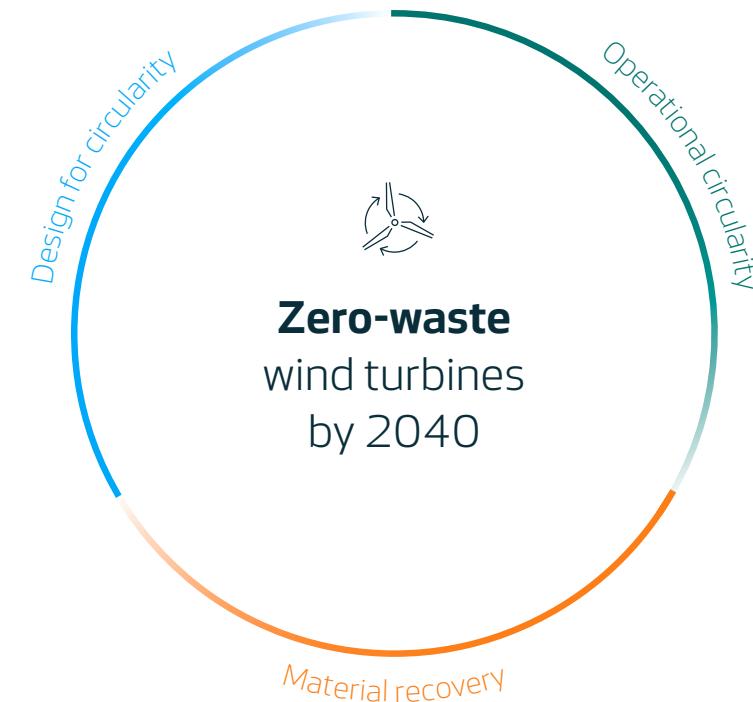
Through the CETEC recycling route, we can disassemble the epoxy resin from fibres. Then, we can break down epoxy into its base components and reutilise the high-value building blocks in the manufacture of new turbine blades. In addition, the CETEC process will help to solve circularity challenges in other sectors that use composite materials, such as automotive and aviation.

Started in 2020 and continuing throughout 2022, the DecomBlades project has focused on value chains for the recycling of end-of-life (EOL) turbine blades. In collaboration with other major manufacturers, recycling companies and knowledge partners, DecomBlades aims to identify one or more sustainable, globally available and economically feasible recycling routes for EOL blades. We are supporting the project by developing materials and value streams for three recycling routes. The recycling technologies will undergo a complete lifecycle analysis and mapping of global warming potential. The project runs for three years and is partly funded by Innovation Fund Denmark (IFD).

Supplier engagement

In addition to reducing waste in our own operations, we are also committing to a 50 percent decrease in the waste intensity of our supply chain by 2030. We are asking our strategic suppliers, covering nearly 50 percent of procurement spend, to report on their waste generation, and to set waste reduction targets for themselves and their own suppliers. Those that do so are granted a Vestas Certificate of Circularity Commitment. As we expect our supply chain to consolidate in the coming years, suppliers that partner with us on our sustainability journey will be highly valued.

In the first quarter of 2022, we asked 48 of our strategic suppliers to report on their waste generation, set waste reduction targets for their own operations, and by the end of 2024, set waste reduction targets for their suppliers. We expect these initiatives to trigger a cascade of waste reductions through our value chain. At the year-end, 40 strategic suppliers had officially contributed to our circularity commitments and been awarded a Vestas Supplier Certificate of Circularity Commitment. We actively continue to engage with suppliers on the waste reduction journey through our regular supplier meetings with key accounts.



Design for circularity

Design, manufacture, and supply-chain

- Fully recyclable blades by 2030, both from a technical and commercial perspective
- 90 percent increase in material efficiency by 2030
- 50 percent reduction in supply chain waste intensity by 2030

Operational circularity

Reuse, repair, refurbish, and life extension

- 55 percent total refurbished component utilisation rate by 2030
- Expansion and regionalisation of repair infrastructure

Material recovery

Recycling and decommissioning

- Less than 1 percent of manufacturing waste landfilled by 2030
- More than 94 percent of manufacturing waste recycled by 2030

Operational circularity

Repair and refurbishment

Across our operations, we are committed to expanding our efforts to refurbish and reuse turbine components, while regionalising our repair and refurbishment infrastructure where possible. Through refurbishment, we can reuse up to 70 percent of component materials, and emit 45 percent less CO₂ than manufacturing a new component, even after considering the emissions involved in transportation.

The major components of our turbines are already largely refurbished and reutilised. However, our roadmap commits us to achieve 55 percent total refurbished component utilisation by 2030 and 75 percent by 2040, mostly by creating new repair loops for minor components. This will lead to further waste reduction, lower carbon emissions, and local job creation.

In 2022, we achieved a total refurbished component utilisation rate of 17 percent, an improvement of 2 percent year-on-year. The parts we currently refurbish are primarily main components, such as blades, generators, gearboxes, main shafts, with some minor components included as well. We also significantly improved the refurbished component utilisation rate on a number of component categories. For example, we achieved a refurbished component utilisation rate of 71 percent for blades, an improvement of 8 percent year-on-year.

Moving forward, we will continue to expand our repair capabilities to include additional minor components, and regionalise our refurbishment infrastructure to improve the business case and sustainability impact of refurbishment.

Material recovery

Eliminating landfilling and incineration

We have committed to reduce the amount of manufacturing waste going to landfill to less than 1 percent, waste incinerated to less than 1 percent, and waste incinerated with energy recovery to less than 5 percent, all by 2030. As most of our internal waste is centralised in manufacturing facilities, these targets go hand-in-hand with improving our material efficiency. However, we are not only focusing on our manufacturing waste.

All of our functional areas - including manufacturing, construction, and service - will begin by mapping out their waste streams. As part of this process, they will identify priority projects to divert from landfill as quickly as possible, with the majority of landfill reductions planned to occur before 2025. As we decrease landfilling and incineration, we will increase our recycling rate to more than 94 percent by 2030. This marks a significant increase from our present recycling rate of 55 percent.

In 2022, we landfilled 7 percent of our internal waste, incinerated 38 percent, and recycled 55 percent. Please refer to Selected environmental data and SASB disclosure for the absolute amounts of waste produced by our operations in 2021, along with the breakdown of material classes used.

During the year, waste generation within our service business decreased compared to our activity levels. In manufacturing, waste generation decreased relatively less than production levels. It should be noted that the overall environmental performance of our manufacturing facilities varies globally. These fluctuations are linked to local infrastructure, turbine variants and the frequency with which these variants are introduced. In 2022, we activated our governance structure to introduce our new circularity targets, covering the entire value chain. For example, we worked with sustainability module leads responsible for developing and implementing circularity initiatives and targets for each turbine part. We also utilised a regionalised HSE structure to introduce year-on-year recycling targets for each of our factories.

Circularity implementation and governance

To support our overall sustainability strategy, we have embedded the Vestas Circularity Roadmap throughout our organisation – from our engineers designing new turbines, to our factories manufacturing components, to our workers across our global supply chain. Nearly every functional area within Vestas has a part to play in achieving our circularity ambitions. Internally, the targets outlined above have been agreed between Group Sustainability and respective functional areas. Interim yearly targets will be established and implemented through various internal mechanisms, including our Vestas Way to Market stage-gate system (see page 24) and specific year-on-year recycling targets established for each factory.

Externally, governance around circularity is still relatively immature. As part of the roadmap, we are planning to engage with external partners and the wind industry to create shared circularity governance. This will enable us to increase transparency and comparability of circularity between companies.

+5%

The percentage of materials recycled increased 5 percent in 2022

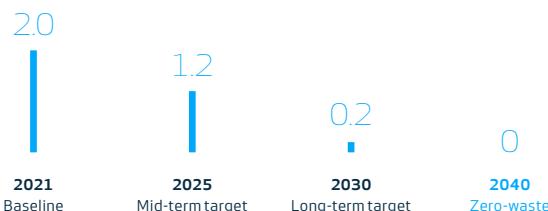
Our circular economy targets

Design for circularity

Strategy area: Material efficiency

Metric: Tonnes of waste / MW produced and shipped

Supporting projects: Internal strategy deployment



Strategy area: Turbine designed for circularity

Metric: % mass of material recyclable (WTG)

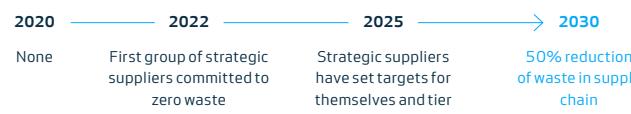
Supporting projects: DecomBlades / SusWind / CETEC / Modvion™



Strategy area: Supplier engagement

Metric: % suppliers committed

Supporting projects: Sustainability Dashboard



Operational circularity

Strategy area: Repair/reuse/refurbish

Metric: % refurbished components utilisation rate (# of components)

Supporting projects: Global repair strategy

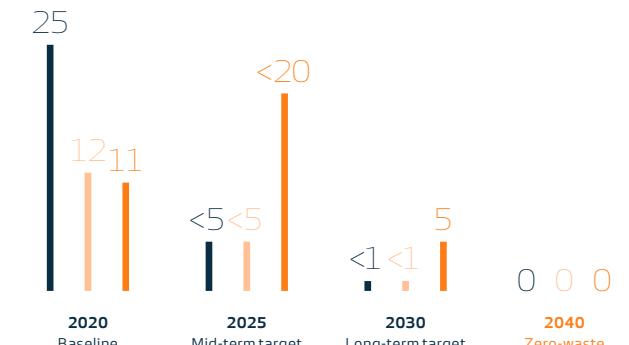


Material recovery

Strategy area: Reduce landfilling and incineration

Metric: % (own operations)

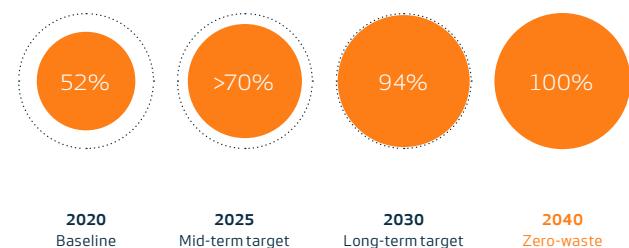
Supporting projects: SusWind / DecomBlades



Strategy area: Increase recycling

Metric: % recycled or reused (own operations)

Supporting projects: Internal strategy deployment



Social

- Our approach
- Own workforce
- Workers in the value chain
- Affected communities



Our approach

Our social responsibility

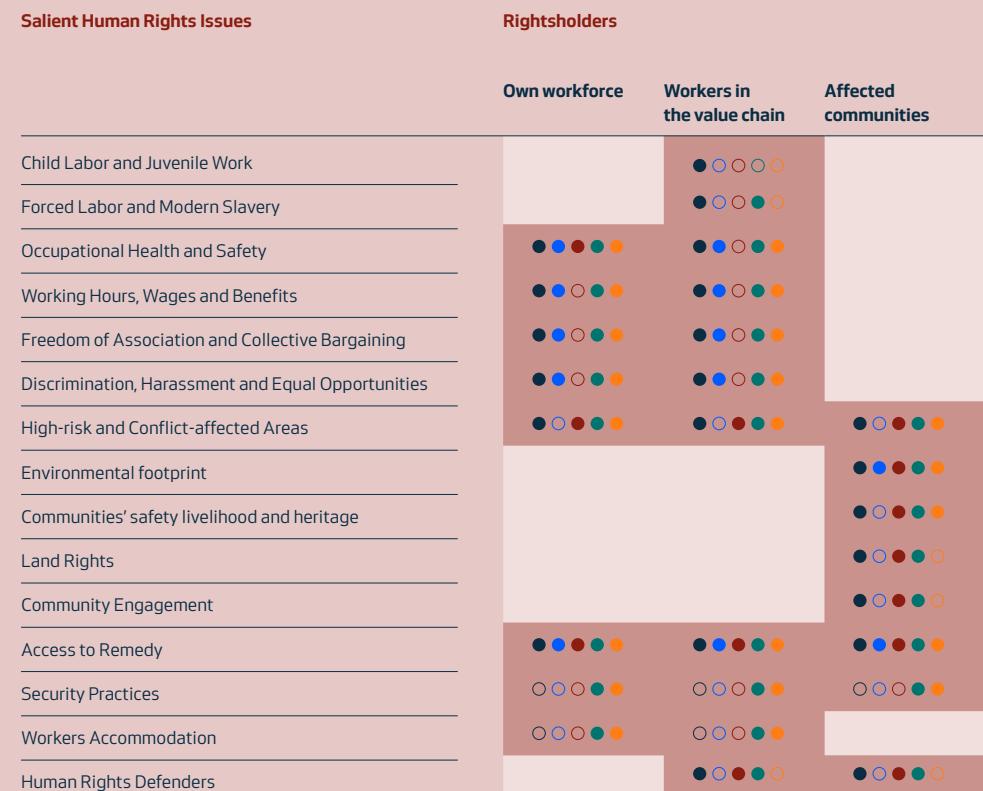
Our commitment to become the safest, most inclusive, and most socially responsible company in the energy industry begins with identifying and understanding our potential impacts on people.

We are committed to respecting human rights within our entire value chain. Doing so requires us to be aware of our most salient human rights issues and how they vary over time. Following our first corporate-wide Human Rights Assessment (HRA) by external sustainability experts from Business for Social Responsibility (BSR) in 2018, our second HRA was conducted in 2022. While much progress has been made since 2018, the latest assessment identified some changes in our salient human rights issues as our business, and the external environment, evolved.

The assessments, which analysed different parts of our operations, consisted of desktop research, an analysis of internal management processes, and interviews. The new assessment evolved to include interviews with external stakeholders who represent relevant rightholder groups such as indigenous peoples and workers, in addition to our senior management and internal subject matter experts. The 2022 assessment also included our new development business function, in addition to the manufacturing, construction, and service operations units assessed in 2018.

Salient human rights issues for our three primary social stakeholders

- Supply chain
- Manufacturing
- Development
- Construction
- Service Operations
- Salient
- Not salient



Salient human rights issues

Both HRAs identified a number of salient human rights issues across our operations and value chain. Every salient human right pertains to one or more of our rightsholders groups: our own workforce, workers in our value chain, and affected communities.

Each salient issue was prioritised according to two sets of criteria: the salience of risk (scale, scope, remediability, likelihood) and relevance for business action (attribution, leverage, risk history, current management). Depending on the salience of risk and the relevance for business action, each salient human rights issue was assigned a priority level to signal which issues should be prioritised.

Our areas for continuous focus remain the same as in 2018: rights related to labour conditions, occupational health and safety, community engagement and land rights, especially focused on vulnerable groups such as indigenous communities. Some of the new focus areas identified for business action by our 2022 assessment are high-risk and conflict-affected areas, access to remedy, and human rights defenders. In the coming years, we will prioritise working across the organisation to strengthen our processes on these issues.

Improvements made since 2018 HRA

Since our first HRA in 2018 which concluded that we needed to focus on our governance and management of human rights, as well as focus on the salient issues highlighted above, we have reached the following milestones:

1. Policy improvements:

- Updated Human Rights Policy (see page 41): in 2019, we updated our policy to reflect changes to our due diligence processes and remedy access. The new policy also acknowledges more rightsholders, including human rights defenders and indigenous peoples, and strengthens our commitment to remedying adverse impacts on individuals, workers, and community members. The policy is signed by the Chairman of our Board of Directors.
- New Employee Code of Conduct (see page 43): in 2021, we updated our Employee Code of Conduct, to reflect current industry standards and increase our focus on areas such as community engagement.
- New Supplier Code of Conduct (see page 53): in 2021, we launched our Supplier Code of Conduct, replacing the Business Partner Code of Conduct, in line with our commitments to international standards, and with an increased focus on topics such as conflict minerals.
- New Conflict Minerals Policy (see page 53): in 2022, we published a new Conflict Minerals Policy, signed by the Head of Global Procurement.

2. Due diligence processes:

- Updated Project-Level Social Due Diligence (see pages 59-61): in 2020, we updated our Social Due Diligence system to address human rights issues raised in the HRA recommendations and to reflect learnings from projects in emerging markets.
- New Conflicts Minerals Program (see pages 56-57): in 2021, we created our Conflicts Mineral Programme following the Organisation for Economic Co-operation and Development's (OECD) Due Diligence Guidance for Responsible Supply Chains of Minerals. To date, we have completed two conflict minerals assessments based on supplier reporting, and are in the process of completing a third.
- Revised Supplier Risk Matrix (see page 53): In 2022, we initiated the modification of our matrix to help identify suppliers at high sustainability risk. We aim to include more risk indices on factors such as freedom of opinion and expression, indigenous peoples' rights and the ethical behaviour of firms.

3. Grievance and remedy:

- Incident management system updated: in 2022, we migrated data from our IT system to a new provider to manage grievances on our operations. As part of this process, the Community Incident section was strengthened and learnings from previous cases were applied.
- Operational grievance reviewed: in 2022, our organisational grievance mechanism underwent a review against the UN Guiding Principles on Business and Human Rights (UNGPs) effectiveness criteria and our new community incident categories.

Future improvements to be implemented based on 2022 HRA

While we have made advances on key issues, our 2022 assessment has identified new focus areas for us. Our key actions following the 2022 HRA will be:

- Improving human rights governance structure: we will work on creating better human rights governance at different parts of our value chain. This will ensure salient human rights issues are understood, recognised, prioritised, and well-managed across our operations.
- Rare-Earths Usage Mapping: In 2023, we aim to finalise an analysis of our use of rare earth minerals to further develop our risk frameworks.
- Expanding risk matrix assessment to indirect suppliers: based on the updates conducted on our matrix for sustainability risk for direct suppliers, we aim to implement the same principles for our indirect suppliers, who have a separate risk-based approach.

Human Rights Policy

Our commitments

Our Human Rights policy outlines our commitment to respecting human rights wherever we are present. Our responsibility to respect human rights includes supporting the following international instruments in our policy: the UN International Bill of Human Rights, ILO's eight fundamental conventions, the UN Guiding Principles on Business and Human Rights (UNGPs), and the OECD's Guideline for Multinational Enterprises. We have also been a signatory to the UN Global Compact since 2009.

Where local laws and regulations set lower standards, but do not prohibit applying international standards that exceed local laws, we abide by international standards.

We considered various internal stakeholders when setting the policy, and engaged an international consultancy to carry out a review. The policy applies globally and we expect our business relations both upstream and downstream to respect human rights within their scope. The Human Rights Policy is signed by Vestas' Board Chair, and is publicly available on vestas.com.



Governing our Human Rights Policy

Our Compliance & CSR function oversees the policy and works day-to-day to implement it within our internal processes across the organisation.

The commitments in our Human Rights Policy are embedded into several other policies and processes including our Employee & Supplier Codes of Conduct, due diligence processes, our Social Due Diligence process on wind farms, and in the assessment of our direct and indirect suppliers.

Implementation is carried out in collaboration with different stakeholders across the company at various levels. For example, with Group Sustainability at a strategic level, with Sustainable Procurement on a supplier level, and with the legal, sales and construction teams at the wind farm project level, to name a few.

Communication and training

Continuing to improve the understanding of human rights and how we can have an adverse impact is important to us. We prioritise raising awareness of the Human Rights Policy among our employees through internal communication and training. In 2022, we hosted a company-wide round-table webinar about human rights management at Vestas. For the past three years, on Human Rights Day (10 December), we have shared a company-wide article and visual material to emphasise our commitment to the UNGPs.

We also work collaboratively to promote the respect of human rights in business. For example, we are a member of the Nordic Business Network for Human Rights, the UN Global Compact Human Rights Network, and BSR, a sustainable business network, as well as taking part in the annual annual UN Forum on Business and Human Rights.

Link to the policy: [Policies \(vestas.com\)](https://vestas.com)

Whistleblower platform: EthicsLine

EthicsLine is our whistleblower platform that allows our employees and partners to report violations of the Vestas Codes of Conduct, applicable laws, and Vestas policies and procedures. Since 2007, EthicsLine has helped ensure that such violations are always brought forward and dealt with appropriately.

The main purpose of EthicsLine is to provide our employees, partners, or anyone associated with the company a place to report unethical behaviour or practices observed at work. EthicsLine also provides guidance for employees who may find themselves in an ethical dilemma.

The EthicsLine Policy highlights our zero-tolerance approach to retaliation against reporters raising a case in good faith, whether the report is ultimately substantiated or not. The same applies to individuals who cooperate as part of an EthicsLine investigation (for example as witnesses).

EthicsLine is hosted on a secure external website where anyone can raise a concern without fear of repercussion. The platform allows reporters to remain anonymous, except in instances when this would be specifically prohibited by law. Subject to applicable laws, all matters reported through EthicsLine are investigated thoroughly, and everyone involved is treated fairly.

To support the availability of EthicsLine, the platform is accessible publicly on Vestas.com, on the Vestas Compliance app on the App Store and Google Store, and internally on our intranet. EthicsLine is also available by phone in the United States. To raise further awareness of EthicsLine and how to use it, several training sessions, communication initiatives, and webinars are conducted across Vestas. Our training material, which has been translated into several languages, is available on the Code of Conduct Portal and includes training slides with anonymised EthicsLine cases.

An Ethics Committee supports and supervises the EthicsLine function on a global and regional level, and determines, on a case by-case-basis, the appropriate outcome of an investigation including disciplinary steps and other remediation actions.

Remediation actions are implemented and monitored by the relevant departments.

In 2022, a total of 539 EthicsLine cases were raised, a 16 percent increase from 2021. Of these cases, 137 were substantiated, leading to various disciplinary actions. We perceive the increase in EthicsLine reports as a positive sign that employees and partners are aware of the hotline, find it easy to use, and not the least are comfortable speaking up and reporting non-compliant behaviour, knowing that this can be done anonymously and without fear of retaliation.

Development in EthicsLine cases and substantiation rate



* The most recent data will reflect a status quo, where the final substantiation rate can only be seen in connection with full-year reporting the following year. The cases not registered as either substantiated or unsubstantiated were still under investigation at the end of the year. See pages 76 and 83 for full data and accounting policies.

[Own workforce](#)

Employee Code of Conduct

The Vestas Employee Code of Conduct is our employees' guide to making the right decisions.

The Code is binding to all Vestas employees and outlines the behaviours expected from them on topics such as Health & Safety, Discrimination & Harassment, Anti-Bribery & Corruption, Supplier Relations, Environment, Community Relations, Intellectual Property, Information Security, Data Privacy, Competition and Sanctions Law, and more. All employees are expected to act in accordance with the Code, however, day-to-day responsibility for ensuring its implementation rests with all managers at Vestas. Managers are expected to lead by example and drive the culture of integrity across the company.

The Code is managed by our Compliance & CSR team, which works to update the document and develop guidance and communication on its contents across regions and functions. The EthicsLine function, our whistleblower system, provides insights on whether the Code has been violated in specific reported incidents.

The Code is communicated through various channels, including mandatory topic-specific micro-learnings released at various times during the year, voluntary awareness webinars, trainings, and through our internal Code of Conduct Portal. Since the update of our Employee Code of Conduct in 2021, five mandatory topic-specific micro-learnings have been released. The Code of Conduct Portal is a central resource where employees can access the Code in eighteen languages, download training and communication material, and access pre-recorded training sessions. To equip managers with tools to implement the code, training toolkits designed to facilitate a conversation around the different topics in the Code of Conduct are available in the portal.

We have been a signatory to the United Nations (UN) Global Compact since 2009 and we are committed to the UN Guiding Principles on Business and Human Rights. The Code follows the Universal Declaration of Human Rights, the International Labour Organization (ILO) Declaration of Fundamental Principles and Rights at Work, and the OECD's Guidelines for Multinational Enterprises' recommendations on responsible business conduct. When local laws and regulations set lower standards but do not prohibit applying international standards that exceed local laws and regulations, we apply international standards.

The international standards embedded in the Code commit us to respecting the human rights of not only our stakeholders, but also our workers – including their labour rights. To this end, our Code expresses zero tolerance to the use of modern slavery, forced labour, or human trafficking. For more information on how we engage with potentially affected stakeholders and provide remedy, see page 61.

The Code was drafted in consultation with external and internal stakeholders, representing different regions and functions across the organisation.



Predicting, preventing, and managing health and safety risks

As a responsible company, it is our obligation and responsibility to ensure that our 28,000 employees go home to their families, their loved ones and friends as safe and healthy as they started their workday at Vestas.

Every day, our employees manufacture, install, and service wind farms all over the world. Without exception, they always operate under the principle of 'safety first'. We want to become the safest company in the energy industry, so we are committed to reducing our Total Recordable Injury Rate (TRIR) to 1.5 by 2025, and to 0.6 by 2030.

TRIR includes 'restricted work injuries' and 'medical treatment injuries' in addition to Lost Time Injuries (LTI's). The TRIR therefore provides greater insight to help inform our activities and initiatives. Our focus on TRIR also indicates the maturity of our safety journey, underscoring the fact that we have reduced our Lost Time Injury Rate (LTIR) by 25 percent over the last five years.

The scope of our TRIR reporting has included Vestas employees and supervised contractors. Going forward from 12 January 2023, we will include all contractors under our operational control. The consequence will be our baseline will rise; however, we are still committed to reducing our TRIR by 2025 (please see page 58 for more information on contractor safety).



To reach our ambitious target, in the second half of 2022 we have initiated a new HSE management system, which is simpler, clearer, and more systematic. The system takes a risk-based approach, in line with the new ISO 45001 standards. It will form the backbone of our approach to addressing HSE risks, and is fundamental to effective HSE management, which must be integrated into the operational process and considered in all future development projects. It will be mandatory for all regions and functions to comply with this systematic approach, which sets the minimum bar for how we manage our risks in our operations. With this in place, we will be able to address operational control through critical control checks, and an assurance methodology including the training of certified auditors.

In 2023, we will also focus on HSE leadership and awareness, including personal safety action plans, global campaigns and enhanced training products. These programmes will establish a systematic approach to driving our vision and ambition to establish a culture where safety is second nature. The bottom line is that safety needs to be a natural part of our working culture. To drive the awareness, we have started developing dashboards providing intelligence on HSE performance down to the individual site for managers throughout the organisational levels.

Our safety performance in 2022

Our TRIR increased to 3.3, from 3.1 in 2021. While we have managed to reduce our TRIR by 69 percent since 2012, we remain committed to maintaining progress and meeting our 2025 and 2030 targets.

During the year, our LTIR per million working hours increased to 1.2. We continued to focus on incidents with high actual severity or high potential severity. We will now ensure that we learn from these incidents and share the lessons across the organisation to prevent re-occurrence. Zero employee fatalities occurred in 2022.

Safety awareness

Widespread awareness is integral to the management and prevention of safety hazards. Since 2007, we have run a safety awareness programme for employees and managers. Furthermore, safety training is a mandatory part of the onboarding process for all

employees. The ultimate objective of this programme is to eliminate all Lost Time Injuries. To further strengthen our safety culture and encourage good safety behaviours, 22,497 of our employees participated in safety awareness training during 2022.

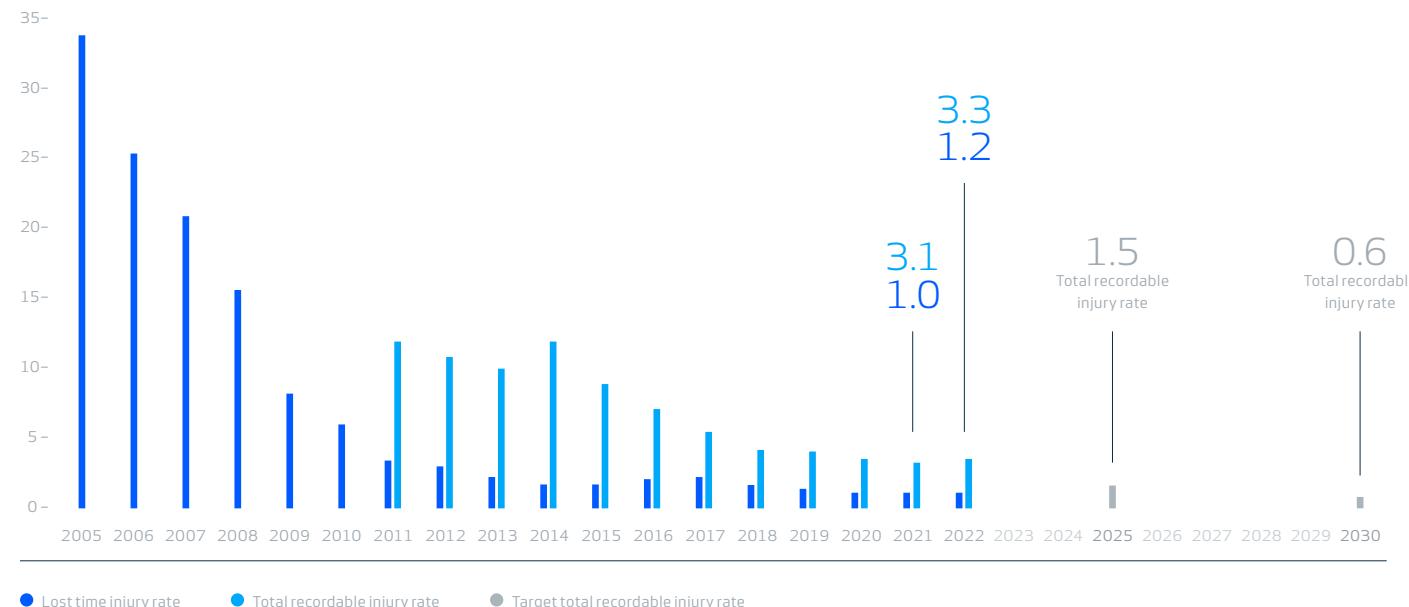
As well as participating in the safety awareness programme, senior management demonstrated top level commitment to safety this year by participating in 'safety walks'. A safety walk is an opportunity for managers to engage in constructive dialogue and discuss safe behaviour with employees, helping to find new ways of improving safety within specific job environments.

Focusing on behaviour

We have identified behaviour, specifically a lack of focus and awareness, as primary causes of workplace incidents and injuries.

Our safety performance

Injuries per million working hours



Strengthening and encouraging a sustainable culture

With our vision of becoming the global leader in sustainable energy solutions, we must be able to continuously attract, develop, and retain top talents.

We aim to have the right people with the right mindset and capabilities in the right positions at the right time. This mission reflects on the entire employee lifecycle, and, alongside our corporate values of Simplicity, Collaboration, Accountability, and Passion, it guides the way we perceive and support our talented employees, allowing us to create a sustainable company culture and to future-proof our organisation.

Attracting and recruiting top talent

We aim to attract, develop, and retain top talent in the market and to become employer of choice in the sustainable energy industry by 2023. We kick-started this journey in 2021 as we developed a new Employer Value Proposition (EVP) as a strategic effort to strengthen our employer brand. Throughout 2022, focus has been on unlocking the EVP through various initiatives such as reinforced collaboration with relevant educational institutions, Great Place To Work certifications in selected key markets, a new employee ambassador programme, an increased level of employee stories on both external and internal channels, and further regional initiatives.

Improving engagement across the employee lifecycle



"

Only by enabling the success of our employees can we succeed as a company. We want to create an attractive and inclusive workplace, where our employees feel valued and supported throughout their employment. It is a continuous journey, and we are aiming to constantly improve our processes across the employee lifecycle to allow our employees to reach their full potential.

Kerstin Knapp – Executive Vice President, Chief People & Culture Officer



To become an employer of choice we must also build accurate assessment processes and diversity measures into the recruitment process. To ensure we promote and sustain an inclusive culture where diversity is valued, our recruitment process follows a multi-stage evaluation of the candidate to ensure bias mitigation and accurate skillset evaluation. Various platforms and tools are utilised, including Develop Diverse to improve inclusive written communication in elements such as job adverts, and mandatory psychometric assessments for all white-collar positions to help us better understand the candidates in the process.

Onboarding

In a world where work environments are rapidly changing, the onboarding of new colleagues has become more crucial than ever before. So, in 2022, we began creating an integrated and engaging end-to-end onboarding journey for new employees.

As a first step, we launched an onboarding page with information and toolkits for new hires, managers, and buddies to support the orientation and induction of new colleagues. We also launched two elearnings. One was created for new employees about our business, organisation, and culture, including presentations by members of the Executive Management team. The second was created for new people managers.

To further strengthen the onboarding experience and to help guide our initiatives and actions in the coming years, we launched a new onboarding survey in November 2022 and defined the strategic mission of onboarding at Vestas: "Create a smooth and engaging start at Vestas. Onboarding strengthens the sense of belonging by bringing new employees, managers, buddies, and colleagues together to provide a good start."

Performance and development

Our Continuous Performance and Development (CPD) process is a key part of the employee lifecycle. It works to support the performance and development of our employees on a continual basis, providing them with the opportunity to own their development, supported by Vestas.

The CPD process is our global performance and development concept, and works to ensure that all employees are aware of what is expected of them and of their contribution to Vestas. It also ensures that every employee has a specific and individual development plan, with clear performance objectives set on an annual basis in collaboration with their manager. This provides the continuous feedback and dialogues that enable our employees to grow and perform both as people and as part of Vestas.

People Review is a part of our CPD process and provides further insights into the performance and potential of employees at every corporate leadership level. Here, each management team must reflect on its employees, discuss their development, and identify who is eligible for nomination to our talent programmes. In the programmes, the focus is on preparing participants to move into critical positions, thereby future-proofing the organisation.



↑

Henrik Andersen

Group President
& CEO

"The purpose of the Vestas Leadership Forum is to strengthen our leadership capabilities while ensuring that we are all aligned on our priorities across both regions and functions. We aim to foster a sustainable culture where leaders steer employees in the right direction by providing them with the best possible means to speak up, make the right decisions, and translate our shared strategic direction to the context of each team."

" "

The Rising Executive programme played a significant role in my development, not only as a leader but as a person. To have been able to exchange ideas with such amazing and talented individuals has enabled me to grow in many ways. For me, the programme was one of those once in a lifetime moments that will continue to play a positive role in my future career.

Martin Patrick Vcelka – Product Lead and participant in the Rising Executives Programme

nominated as part of individual performance evaluations. The 10-month programme accelerates, stretches, and develops the participants to help fill the regional leadership pipeline across all leadership career tracks, resulting in higher promotion rates of participants compared with peer groups. In 2022, 34 percent of the participants were women.

- **The Rising Executives Programme** focuses on developing global leaders with executive potential. The 10-month programme offers tailored development opportunities, learning activities and assignments to prepare participants for future leadership positions globally. Participants benefit from a significantly higher promotion rate compared to peer groups. In 2022, 21 percent of the participants were women.
- **The Vestas Leadership Forum**, launched for the first time in 2021 and planned to continue on an annual basis, gathers our most senior leaders across functions and locations to unite in conversations and development. The forum itself comprises strategic briefings and inspiring presentations on key topics, such as customer partnerships, servicing our future, efficient scalability, future technology, and leading with a global and inclusive mindset.

Learning

We give our employees the opportunity to learn and grow by providing them with the tools to power their development in the key areas and competencies that we all need to master at Vestas. To democratise development opportunities across all geographies and functions, we provide blended learning offerings, so that each employee can choose the learning format that suits them the best. This includes game-based courses, audio- and e-books, and online on-demand or facilitator-led courses.

To further engage employees, we continuously post challenges and fun competitions in our Power Your Development Community. Through all these initiatives, we encourage employees to embrace self-led development and to own their career journey.

Recognition

As well as development opportunities and a competitive salary, we offer our employees a range of further benefits. Depending on local market conditions, we offer a pension, insurance plans, health insurance, subsidised lunch, gym access, and work-life policies, such as flexible working arrangements. We also provide competitive vacation policies. Our compensation packages are benchmarked against local market salaries for each position, ensuring equal and fair pay regardless of social identity. Our annual salary reviews are linked to performance evaluation to help us achieve strong alignment between performance, pay, and the external environment. We also commission external audits on pay equity, investigating pay levels in relation to gender, nationality, and age.

A unique element of our remuneration scheme is our global bonus programme. Every employee at Vestas is part of the programme and rewarded for annual company performance. We use bonus score-cards to calculate the exact amount to be allocated each year, and bonuses are paid out when and if the minimum success criteria for Group profits are met.

To aid the ambition of carbon neutrality by 2030, we have updated our benefit car programme. As of 2022, we only offer electric vehicles (EV's). By 2025, our benefit car fleet will be comprised exclusively of zero-emission vehicles. This has been accompanied by infrastructure to charge EV's at many office locations.

→
On-stage at Vestas Leadership Forum



Employee survey

In 2022, we continued to run our Employee Engagement Survey. Continuously listening to our people and acting on their feedback is crucial to ensure a workplace that meets the needs and demands of our workforce and creates an environment where people thrive every day. Our Employee Engagement Survey is run twice annually and explores how our people feel about their daily lives in and around the workplace.

The 2022 fourth quarter survey achieved a response rate of 89 percent, a two percent increase from the 2021 end-year survey. In the survey, we achieved an overall satisfaction and engagement score (eSat) of 73, stable from 2021. The fourth quarter survey also showed an increased employee net promoter score (eNPS). Overall, most of the scores in the survey improved, including areas such as empowerment, manager, feedback, growth, and recognition. The score on decision making decreased by one point. Along with the survey scores, the more than 42,000 comments received in the survey will guide our focus areas to continue our journey towards becoming employer of choice.

Exit

When our employees leave the company, we want them to leave satisfied, aware of the impact they have made within the company and in helping to drive the global energy transition. Their departure from the company can come in many forms. Retirement is a key sub-stage of the Vestas lifecycle. While this is still categorised as an 'exit' from the company, we work to ensure the right procedures and conditions are in place when one of our employees retires. In other instances, employees may choose to submit a resignation. In this case, it is crucial for us to understand the reasons for their resignation, which is why we updated our Exit Survey in May 2022, enabling us to improve Vestas' standing as an employer of choice. Finally, if we are forced to terminate a contract with an employee, we always do our best to provide equitable market-level severance packages.



Diversity, Equity, Inclusion, & Belonging

In 2022, we continued our efforts to ensure an inclusive working culture across all our business functions and regions. To take this to the next level, we have decided to expand our focus from Diversity and Inclusion to Diversity, Equity, Inclusion, and Belonging (DEIB).

Ensuring a diverse and equitable workplace where all our colleagues feel included and have a strong sense of belonging is essential to enhance employee wellbeing and attract and retain talent. This is why we strive to be the most inclusive workplace within the renewable energy sector.

Gender representation

We understand diversity in the broadest sense and continuously work to expand our diversity focus. However, as 14.7 percent of all our colleagues are women, gender remains a key focus area for us. We have therefore set targets for a more gender-balanced leadership: 30 percent female representation in leadership positions by 2030, and 25 percent by 2025. By the end of 2022, we are set to meet our annual target of 22 percent, as our gender balance in corporate leadership has increased from 21 percent to 23 percent women over the last year. This improvement was supported by the increased focus on DEIB in 2022. To continue this journey, we have also recently updated our DEIB Policy.

In terms of gender representation on our board, we reached our

gender balance targets in 2022, when the shareholders elected three female and five male board members. With the inclusion of employee-elected Directors, these figures will rise to five female and seven male board members.

We have also introduced a gender-balance target for our senior management of 25 percent of the underrepresented gender by 2025, to meet new Danish regulations that will come into effect in 2023. We know that to meet our senior management and corporate leadership targets, we must actively build our talent pipeline through our talent programmes.

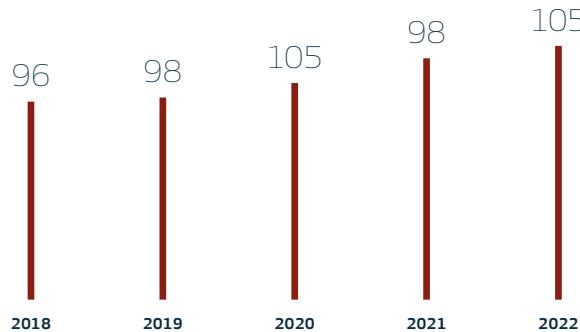
Ethnicity representation

In the coming years, we also intend to set targets for diversity that truly represent the many regions that we work in. We will start by introducing ethnicity as an additional diversity focus area in 2023. Unlike gender, we cannot set global targets for ethnicity due to the European General Data Protection Regulations (GDPR). However, we will use nationality as a proxy to track our global progress, while encouraging our regions to set their own regional targets where it is legally permissible to record our employees' ethnicity (e.g. in the USA). While we will not be able to set ethnicity targets globally, our awareness-raising campaigns and initiatives will focus on ethnicity.

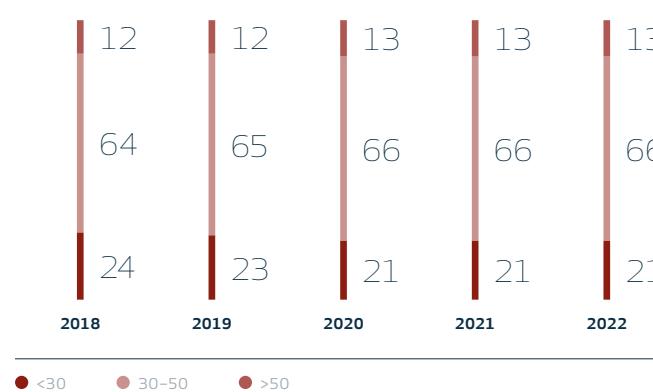
One such example is our recently entered partnership with The Professional Women of Colour (ProWoc) Network, a non-profit organisation that offers career and personal development opportunities for women of colour seeking to increase their visibility and impact in Denmark.

Cultural diversity¹

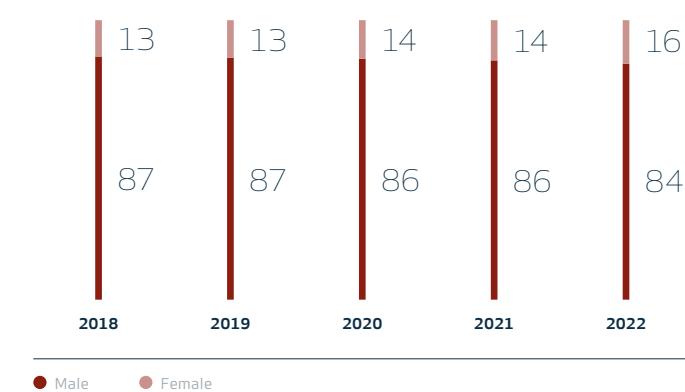
Number of nationalities (#)

**Generational diversity¹**

Employees by age group (%)

**Gender diversity¹**

Gender of employees (%)

**An equitable and inclusive employee lifecycle**

We know that working on diversity, equity, inclusion, and belonging requires a detailed assessment of every single aspect of our employee lifecycle structures and processes to ensure an equitable meritocracy where we mitigate bias. We have therefore taken steps to initiate a detailed assessment of our attraction and recruitment processes, onboarding, learning and development, Continuous Performance and Development dialogues, promotion processes, and talent selection. We already engage in many efforts within all these areas (e.g. unconscious bias training for recruiters, language software to aid inclusive communication in job ads, inclusive leadership training and exit surveys). We know this is an area which requires continuous improvement, and it will therefore remain an ongoing project.

We have also continued to focus on pay equity. This work follows on from the implementation in late 2020 of a robust Vestas job framework. The framework enables the evaluation and comparison of job roles and provides a clear view of pay equity across the organisation. We also continued to gather insights, both through research and learnings from pioneers, on how to move forward with

pay equity from a strategic and tactical perspective. This included aligning our pay equity efforts with the broader DEIB agenda. To further support our wider People & Culture community, we created tools and guidelines to ensure conscious decisions are made when setting pay, and we have started our journey to train our People & Culture community in pay equity.

Embedding inclusion in our culture: inclusive leadership training

We aim to create a true culture of inclusion where all our colleagues feel a sense of belonging, are able to be their true selves, and can reach their full potential. To do so, we need to enable all our people managers to role-model inclusive leadership and allyship. For this reason, we have decided to roll out mandatory inclusive leadership training for all our people managers. We aim to have trained 80 percent of all our people managers by the end of 2023, starting with senior management. As of 2022, we are well ahead in reaching this goal. After the pilot for the training was successfully carried out in June 2022 with our management team in Taiwan, we began to roll out the actual training in August 2022 to our regional management teams. Latin America, North America, and Northern Central Europe were among the first to complete their training in December 2022.

While all functional management teams are scheduled to have completed their training by the second quarter of 2023, the company-wide roll out began in November 2022 and will continue until the end of 2023. Similarly, our inclusive leadership training is also an embedded module across our talent programmes, such as Rising Executives and the Regional Talent Programme, and was an extensive part of the Vestas Leadership Forum 2022.

Global DEIB Team & Regional initiatives

2022 has seen great progress for DEIB. Most notably, we have for the first time brought together all our informal DEIB representatives across our regions and functions under the umbrella of the Global DEIB Team. The team connects DEIB representatives and agents across our regions to exchange cross-regional knowledge, share best practices, support one another in DEIB initiatives, and discuss regional challenges and how to address them. The team was launched in August 2022, currently comprises 45 members and is steadily growing. We currently have more than 50 different initiatives in our five regions, and the number of initiatives is expected to grow steadily as a result of the synergy created by the Global DEIB Team.

Our North American region has steadily worked on its DEIB awareness-raising and training efforts, as well as supporting employees through different resource groups. This is largely made possible by the region's well-established DEIB Committee, which continues to drive all of these different efforts with the strong support of its management.

Similarly, our Latin American region, supported by its management, has begun transforming its DEIB taskforce into a robust DEIB Steering Committee that will continue to forge employee resource groups, as well as awareness-raising efforts and communications.

Our Mediterranean and Asia Pacific regions are following suit and are in the process of establishing a DEIB Committee that can drive similar ongoing and new initiatives. The Global DEIB Team will support them with feedback from regions where such committees have already been established.

Finally, our Northern and Central European region is in the process of establishing a DEIB taskforce to identify and drive initiatives. In short, 2022 was the year when we firmly placed DEIB on our agenda across all our regions. We will continue to support this agenda from a global perspective in the years to come.

"

To truly ensure DEIB at Vestas, we need to embrace a culture of mutual growth, respect, and acceptance where DEIB becomes a living, breathing thing in every corner of the business. Rolling out inclusive leadership training for all our people managers and establishing a Global DEIB Team are some of our first steps to move us one step closer to achieving this goal.

[Theresa Alin Ammann – Head of Diversity and Inclusion](#)

External Partnerships

As part of our ambition to become an employer of choice and the most inclusive workplace within the renewable energy sector, we have initiated consulting support and several strategic industry partnerships. Globally, we have engaged in the Mærsk Gender Career Equity Network (a cross-industry network to advance gender equity), and locally, we have engaged with Green Power Denmark's Diversity Taskforce.

We have also continued our partnership with Above & Beyond's Diversity Council, a strategic alliance of global, Nordic-based companies, which seeks to promote diversity and inclusion around the world. As part of this, for the second year in a row, we also participated in the Lead the Future role model campaign that seeks to attract more women into STEM. Similarly, we have monthly consultations with BSR to stay up to date with the latest DEIB developments around the world.

While we are making positive change towards diversity, equity, inclusion, and belonging, this will be an ongoing journey. We are thrilled to continue working towards being the most inclusive workplace within the renewable energy industry.

DEIB Mission Statement

At Vestas, we believe that a diverse and inclusive workforce is vital for accelerating the green energy transition globally. We know that our differences make us stronger, more innovative, and better equipped to address the challenges of the future. Therefore, we are committed to making sure that all potential, future, and current Vestas employees are guaranteed equal opportunities and fair treatment regardless of their background. Everyone must feel safe, valued, and a sense of belonging, and know that their voice will be heard. Together, we will keep moving forward on the journey to become sustainable in everything we do.



Workers in the value chain

Policies for value chain workers

Suppliers are the backbone of our ability to develop, deliver, and service our sustainable energy solutions.

We engage with suppliers around the world including direct, upstream suppliers who manufacture the turbine components and materials delivered to Vestas factories and our external suppliers. We also engage with indirect, downstream suppliers that deliver products and services to our factories and service sites and suppliers that perform services at wind farms.

To work directly with our suppliers on ESG concerns, we have embedded a Sustainable Procurement team within our Global Procurement function. The priorities established by Sustainable Procurement are enacted through Regional Procurement Officers, our supplier onboarding qualification process, onsite assessments for all direct suppliers, and assessments of indirect suppliers based on a risk evaluation conducted by our Supplier Quality & Development (SQD) team.

By integrating sustainability requirements into our onboarding and auditing processes, we aim to partner with our suppliers in building a sustainable and resilient supply base, attuned to local needs and conditions.

Based on our Materiality Assessment and Human Rights Assessment, the most salient risks identified in the supply chain include occupational health & safety, sourcing from high-risk and conflict affected areas, forced labour and modern slavery, child labour and juvenile work, and the supply chain in general.

In addition to our Human Rights Policy (see page 41), we supplement the management of identified risks related to value chain workers with the Vestas Conflict Minerals Policy and the Vestas Supplier Code of Conduct.

The Conflict Minerals Policy was enacted in 2022. We do not source minerals or metals directly. However, we do source parts and components from our suppliers which might contain potential conflict minerals (Tin, Tantalum, Tungsten and Gold). The policy is aligned with the OECD Due Diligence Guidance for Responsible Supply Chains of Minerals and outlines our expectations to suppliers regarding responsible minerals sourcing.

The Vestas Supplier Code of Conduct outlines our expectations to suppliers in four main areas: Human Rights, Working with Integrity, Respecting the Environment, and Fair Business Practices.

The Supplier Code of Conduct applies to all Vestas suppliers, and is aligned with our commitments to the UN Global Compact principles. It is also based on international standards, including the International Bill of Human Rights, the eight core conventions of the International Labour Organization, and the UN Guiding Principles on Business and Human Rights. It encompasses all applicable areas from the Human Rights and Conflict Minerals policies and sets the mandatory requirements for our suppliers. It is crucial that the health and safety of everyone involved in turbine production, installation, and service is always protected. Thus, a specific section of the Supplier Code of Conduct covers our requirements related to health and safety.

The above policies are made public on vestas.com, and the Supplier Code of Conduct is an integrated part of the purchase agreement with suppliers. All new suppliers must commit to the code as a pre-requisite for transacting with Vestas. This is accomplished through the signing of purchase agreements between Vestas and our suppliers.

We always welcome questions or comments from our suppliers related to the Supplier Code of Conduct, and see this dialogue as a way to ensure understanding of our compliance requirements. In autumn 2022, three webinars were organised with a total of 294 participants. The aim was to give an understanding of our overall sustainability strategy and communicate our expectations of suppliers. A specific webinar covered the social aspects of the Supplier Code of Conduct.

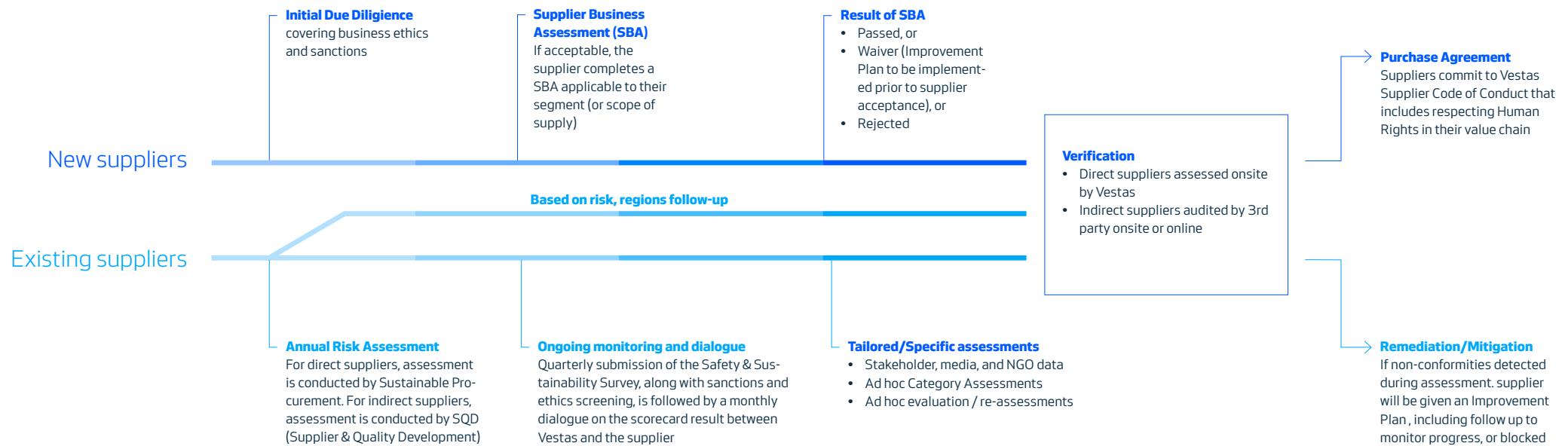


Supplier assessment framework

Managing a responsible supply chain through ongoing audits

The framework below describes the process covering: supplier onboarding, including due diligence, supplier business assessment (SBA), and high-risk identification models for both direct and indirect suppliers, which then result in onsite audits. To monitor progress, supplier account managers conduct monthly supplier reviews using a supplier scorecard to record dialogues and track progress.

To identify, assess, monitor, manage, and mitigate potential risk to supply chain workers, we conduct the following:



Supplier audits and risk assessment

Indirect suppliers

Onsite audits are part of our overall due diligence process. Onsite audits for indirect suppliers are conducted by a third party service provider, who ensures that the auditing team is competent and trained within this area, which can be sensitive. Interviews conducted with value chain workers provides employees the opportunity to be open about actual working conditions, while at the same time ensuring transparency.

Generally, an onsite audit will also involve a meeting with a worker and/or Union-representative, which increases transparency and the potential for verification of findings during a document review or factory tour. We do not generally engage directly with workers in the supply chain, but we will request corrective actions if negative impact is disclosed during audits.

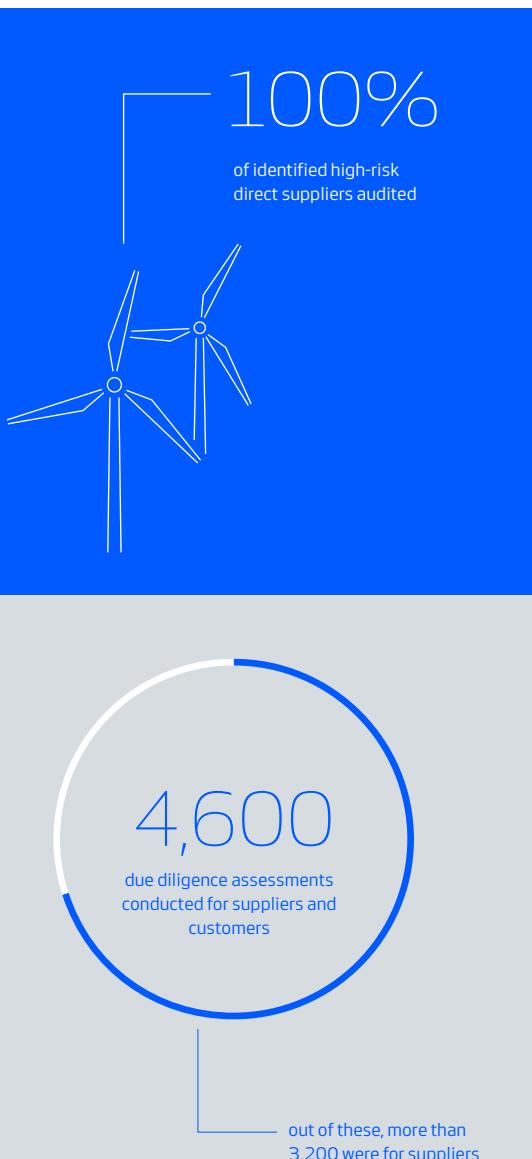
Direct suppliers

Our own teams from Supplier & Quality Development (SQD) conduct onsite audits for direct suppliers. These audits are generally performed as an integrated management system assessment and based upon the completed SBA-questionnaire (Supplier Business Assessment) by the specific supplier. The applicable audit protocol covers 14 questions on the Code of Conduct, including human rights, labour rights, working hours, wages, and the grievance mechanism for workers to raise their concerns. Validation of answers is achieved by reviewing supporting evidence for each question and engaging in dialogue with the supplier management team.

In 2022, we initiated the revision of our risk matrix for direct suppliers with the aim to strengthen it by including more risk indices within Human Rights. A "Sustainability Risk Supplier" is defined by their potential to cause an adverse social and/or environmental impact, while also considering our dependency on the supplier. Thus, the highest risk involves the greatest potential adverse impact combined with a high level of dependency. To determine these risks, we are using country risk data, commodity risk, and specific integrated ESG factors. In 2023, we plan to include the following new risk indices for indirect suppliers: freedom of opinion and expression, indigenous peoples' rights, and ethical behaviour of firms.

Supply chain auditing target

Our target for onsite assessment is 100 percent for high-risk suppliers identified for each business unit within a 12-month period. We assess direct suppliers and inform business units internally of applicable high-risk suppliers. The internal business units are then responsible for either conducting separate onsite or online audits or obtaining recent assessment data. For indirect suppliers, we arrange third party audits. We believe in dialogue and supplier engagement and target that each identified non-conformity is followed with a corrective action plan to mitigate negative impact.



Results in the year

In 2022, we assessed and audited our suppliers in the following ways:

- We conducted more than 3,200 due diligence assessments for potential suppliers, prior to the supplier onboarding process.
- We commissioned 28 sustainability audits from third parties. Of these, 19 were performed onsite, and 9 were conducted online due to current pandemic restrictions in certain areas.
- Our own teams also conducted 55 onsite supplier assessments. 52 scored above 70 percent, which is an acceptable score based on our risk methodology. For the 3 suppliers that scored below 70 percent, improvement tasks were defined and agreed upon by Vestas and Supplier, or alternative suppliers were found.
- We reached 100 percent of our onsite assessment targets for high-risk direct suppliers. By adding ad-hoc audits and investigations, we aim to reduce negative impacts on supply chain workers.

More than 80 percent of non-conformities were closed within 12 months and the remaining percentage were in the process of concluding a corrective action plan at the time of this reporting.

Conflict minerals management

We conduct additional assessments on suppliers who may be at risk of procuring conflict minerals. In 2022, we completed our second conflict minerals programme and surveyed 500 suppliers using a third party supply chain data management solution. Supplier responses were submitted by using the Conflict Minerals Reporting Template (CMRT). The survey results showed that suppliers who participated in both the 2021 and 2022 programmes improved their assessment score by transitioning from high to lower risk smelters. Supplier response rates also increased from 81 percent in 2021 to 89 percent in 2022. The aim of our conflict minerals programme is to increase the transparency of our own sourcing, to educate our supply chain on avoiding the procurement of conflict minerals, and to encourage suppliers to establish their own responsible sourcing programmes.

Rare earth elements

Rare earth elements occur naturally and, once mined and processed, can be used in a variety of industrial applications. These include permanent magnets in hybrid car motors and other high-tech applications. We use rare earth elements in the tower magnets of all new turbine models, in permanent-magnet generators in the older GridStreamer™ models, in the EnVentus™ platform, and in smaller quantities throughout many magnets and electronic components found in our turbines.

The majority of rare earth minerals are found in the generators of turbines. In permanent-magnet generators, there are two types of turbine drive train concepts: geared drive trains and gearless direct drive generators. The amount of rare earth elements used in geared drive trains is up to 10 times lower than the amounts used in direct drive generators drivetrains. Today, all Vestas turbines are based on technology using the less rare earth intensive geared drive trains.

We use rare earth elements in our turbines because they make generators more efficient and more grid-compatible, improving overall performance. They also enable us to reduce the overall size of the generator and power-train. This means we use fewer resources, such as steel and other structural materials, which in turn helps to reduce our carbon footprint. Furthermore, compared to previous models, our most recent EnVentus™ turbine uses significantly fewer light rare earth materials per MW. In this variant, we have also eliminated the use of heavy rare earth materials in the generator altogether.

However, one of the gaps identified in our Human Rights Assessment (see page 39) related to rare earth minerals. In 2022, we initiated a detailed mapping of our rare earth mineral use in specific wind turbine platforms. We expect to finalise the analysis in 2023 and use the results to further develop our risk frameworks and management of these materials.

Process and channels for engaging with value chain workers and channels

According to our Supplier Code of Conduct, all suppliers are expected to have their own reporting system in place. Supply chain workers can use EthicsLine (see page 42) to raise any concerns they may have. Cases raised via EthicsLine by a supply chain workers are handed over to the applicable department(s) responsible for the scope of the raised concern. As such, cases from value chain workers will not follow the standard governance for reported cases. Instead, they will be handled separately in compliance with applicable

processes for a sustainable supply chain by Sustainable Procurement. We have a zero-tolerance approach to retaliation outlined in the EthicsLine Policy.

In 2022, no reports have been shared for further investigation related to concerns raised about supply chain workers. We aim to use our implemented processes to effectively reduce, and try to eliminate, risk to supply chain workers. Our target is that any concern reported via EthicsLine is investigated and managed thoroughly.

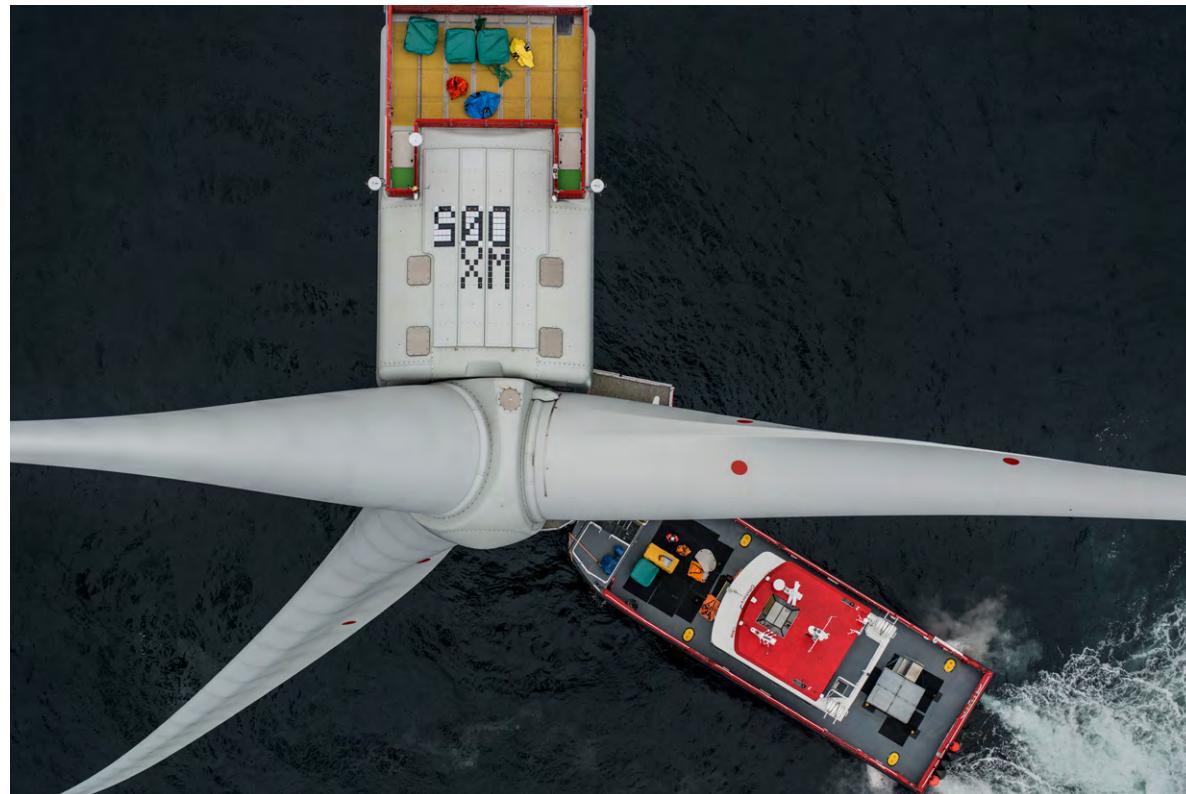
Supply chain planning and forecast sharing

We share forecasts with our suppliers to reduce the risk of contributing to or causing material negative impact to the supply chain workers. In 2022, we successfully implemented the latest module of our Digital Supply Chain Collaboration tool, which enables us to work more efficiently with our suppliers, receive real time data on deliveries and orders, and collaborate with our suppliers on forecasts and upcoming activities in our supply chain.

Our forecasts serve as a planning tool, which also enables our suppliers to estimate the necessary materials and the work force needed to fill our orders. However, it is important to underline that the forecasts are a rough estimate, and final purchase orders may vary in volume once placed.

We also participate in WindEurope's supply chain taskforce, helping the industry map supply chain risks, and we take a collective approach to mitigate these risks using our collateral leverage.

Our overall framework is established with the intention of supporting Sustainable Development Goal (SDG) 8 Decent Work and Economic Growth, specifically targets 8.5, 8.7 and 8.8.



Contractor and supplier safety

Supplier Safety & Sustainability Survey

Our supplier performance evaluations are based on Supplier Scorecards. The Safety & Sustainability (S&S) survey feeds into the scorecard and has a weight of 30 percent in the overall performance evaluation.

The survey enables us to measure the maturity of suppliers in health & safety, environmental, and social sustainability on a quarterly basis. It includes, but is not limited to, questions about whether suppliers measure CO₂e emissions and set reduction targets for their activities, whether they measure and have set a target for their scope 3 emissions, and if they are committed to science-based targets to reduce CO₂e emissions. We also collect information on our suppliers related to the use of renewable electricity, their waste reduction efforts, and the amount of recycled content in products supplied to Vestas.

In 2022, the Safety & Sustainability survey was distributed to approximately 230 key suppliers. Throughout the year, we achieved an average score of 83 percent across all suppliers, exceeding our average target score of 80 percent. By the end of 2022, our engagement resulted in improved sustainability performance for approximately 50 percent of suppliers who received the survey.

The assessment ensures we capture an overview of our supplier's sustainability performance and helps us prioritise our engagement. We conduct performance dialogues with all scorecard suppliers which, for low-performing suppliers from any segment, follow up on performance and action plans until our standards are met.

Contractor safety

As the safety performance of our own employees has improved significantly over the years, the performance of contractors has become an increasingly important focus area.

We continue to collaborate with external partners to drive and improve performance across the industry. In 2022, we began working on contractor safety governance. Our data shows that our contractors contribute a disproportionate share of our incidents when compared to their exposure hours. In 2023, we will strengthen our governance through audits and inspections.

With the rapid expansion of the wind industry, many inexperienced contractors are exposed to the risks of working at heights, in tight spaces, with high-voltage electricity, and surrounded by high-lift operations. To minimise these risks, we are committed to only ever working with trained and competent technicians.

Despite these efforts, three contractor fatalities occurred in 2022. These incidents have been fully investigated to determine the root causes. In October 2022, we globally implemented a new incident management platform to facilitate better reporting, a more systematic approach to determine the root causes, and to follow corrective actions. We also established a set of root cause categories in our management system to better determine which root causes should be addressed first.

Beginning January 2023, safety data for all contractors will be integrated within our HSE management system, and despite the expanded scope, we will maintain the same ambitious targets for contractors as for our own employees (see page 45).



[Affected communities](#)

Our commitment to respect host communities

It is essential to build a foundation of community acceptance, approval, and trust across our operations.

Our commitments to respect the rights of communities and indigenous peoples, as well as of preventing and addressing impacts on them, are stated in our Human Rights Policy, Employee Code of Conduct, and Supplier Code of Conduct. The policies are publicly available on vestas.com.

Our Human Rights Policy (see page 41) establishes our commitment to respecting human rights and acknowledges community engagement, the rights of indigenous people, land acquisition, and resettlement as the most salient human rights issues for our industry. We facilitate non-judicial access to remedy for internal and external stakeholders through our globally applied grievance mechanism, which enables host communities to raise concerns or grievances.

Our Employee Code of Conduct includes the section 'Our Responsibilities Towards Communities.' This topic sets out our expectations towards our own employees concerning engagement with host communities. We expect our employees to engage with and listen to host communities respectfully, in an inclusive and culturally appropriate way.

In addition, our Supplier Code of Conduct includes similar provisions requiring our suppliers to avoid causing or contributing to negative impacts on host communities, to engage with and listen to communities in a respectful way, and to establish appropriate grievance mechanisms. Information on how we communicate with suppliers on our Supplier Code of Conduct can be found on page 53.

Furthermore, communities can register complaints via EthicsLine to report any concerns of potential breach of our Code of Conduct (see page 42).

Social Due Diligence Process

Working together with our clients to prevent and agree on the most effective mitigation measures for actual or potential social impacts of the project benefits all parties, including local communities. Our Social Due Diligence framework is implemented globally and informed by the findings of our Human Rights Assessment, international industry practice, and international standards. The process is an integral part of our Sales Gate Process when bidding on a wind farm tender – from Qualifying, to Value Engineering and Negotiation.

The methodology is applied to projects over a certain threshold located outside high-income OECD countries, and projects in OECD countries where there might be a risk of impacting indigenous peoples' lands, territories, and livelihoods. In projects where indigenous peoples' lands are involved, we take additional measures



to establish whether the project has been developed in accordance with national law and international standards.

Our SDD framework ensures that we identify, prevent and mitigate potential adverse human rights impacts on affected communities in a timely manner, and take their perspective into consideration in our decision-making processes. At the same time, we strive to enhance positive impacts, thereby making our projects more inclusive.

The SDD process has two general phases:

1. Identification and assessment of social risks at the tender phase.
2. Implementation of Vestas' action plan together with project stakeholders.

During the first phase we seek to establish an understanding of the country context in which a wind farm project is planned through a 'social-lens'. This is followed by an in-depth assessment of social issues on project-level carried out in accordance with the IFC Performance Standards on Environmental and Social Sustainability (IFC PS).

The assessment determines to what extent information about stakeholder engagement, land acquisition, local employment, cultural customs and heritage, community health and safety, or access to a grievance mechanism and remedy for impacted communities have been adequately addressed. The in-depth assessment also aims to determine whether there is any known past or present community opposition to the project or other infrastructure projects in the same area.

As part of this assessment, we consider whether a site visit is relevant to verify or collect project data. The latter is relevant where project data is limited for completing our social due diligence.

We use our leverage and influence in customer dialogues to address our SDD findings. This ensures that we clarify any uncertainties linked to identified potential social risks and the division of social roles and responsibilities in time, prior to closure of contractual employer requirements. Such issues may include stakeholder engagement, land acquisition, local employment, cultural customs and heritage, community health and safety, or access to remedy for impacted communities and workers.

The developer of the wind farm will, during a public consultation, present potential risks and how the project intends to prevent or, where prevention is not possible, mitigate the impact. During these meetings the developer gains more insight into how the public perceives the project. In addition, the public is given an opportunity to raise any concerns or expectations towards the project.

Identifying, preventing and mitigating social risks

Our tool to identify and assess social risks



Our SDD tool facilitates the review of our customer's Environmental & Social Impact Assessment (ESIA) & Stakeholder Engagement Plan



It also establishes social roles & responsibilities across project stakeholders

← Our Social Due Diligence Tool evaluates projects based on the IFC Performance Standards, ILO standards, & UNGP's.

Social Management Plan

Our action plan to mitigate social risks together with the project stakeholders



Establish relationship with and maximise affected communities' opportunities



Establish operational grievance mechanism between Vestas and the community



Identify project-related community initiatives with community project stakeholders

In the case of complex projects, or those where project documentation does not meet our SDD standards, we may use external consultants and experts to inform our SDD. The SDD is an active document and can be reviewed if there are significant changes to the project development, construction, or service phase.

The findings of the SDD inform the second phase where we prepare and implement project-level social management plans, tailored to the risks, while also seeking to maximise local community opportunities. We may decide to allocate an on-site social coordinator to implement social mitigation measures, which may include job creation and procurement of local sourcing specifically during the construction phase, educating affected communities about wind energy to dispel any myths, establishing a channel for affected communities to raise a concern or grievance, and/or community development initiatives aiming at improving the quality of life in the affected community.

The frequency of our engagements with affected communities or their representatives varies from project to project. To see some of our latest community initiatives in 2022, see page 64.

Progress on our social management plan is reported to the customer on a monthly basis as part of the Health, Safety, Social and Environmental statistic. Therefore, our SDD is conducted in an ongoing basis.

Development

We are committed to engaging respectfully with the communities based in the areas where we plan and operate projects, to be sensitive to environmental and cultural values, and to make a positive contribution to the regions in which we operate. In Australia, we are a signatory of the Clean Energy Council's Best Practice Charter for Renewable Energy Developments that sets out 10 statements regarding how we engage with communities, manage community impacts, and advance local opportunities. In Indonesia, we have partnered with organisations that work through local schools and community-based projects to empower vulnerable youth and adults.

We take an active role in engaging with stakeholders such as landowners, agencies, and partners throughout the development process to ensure stakeholders get timely updates of project news and community members are informed of any actions that might relate to their property, business, or day-to-day activities. Means of engagement with community members and leaders in the local area include hosting public consultations, open houses and webinars, visiting local schools, and attending public events.

Grievance mechanism and redress

We are committed to strengthening our understanding of the concerns, doubts, and expectations of affected communities. Consequently, we have put in place an operational Grievance Mechanism (GM) in which an individual or group can raise concerns, complaints, and doubts transparently and safely. In sharing grievances as they arise, we can strengthen our relationship with affected communities and proactively engage with grievances.

The GM can take the form of various communication channels which may vary depending on local customs and characteristics. The primary channel is face-to-face communication, but we also use suggestion boxes, e-mail, a toll-free telephone hotline, and regular meetings with affected communities.

Roles and responsibilities for handling grievances are clearly defined between us and our customer before the project commences. Depending on the project scope, we may be responsible for managing concerns and grievances related to the operational impacts that occur during project construction, including livelihood issues such as dust impact, community health & safety issues such as road accidents, concerns about cultural heritage or customs, misalignment on the expected benefits of a project, security practices, land compensation, and other topics.

When a grievance is received, we conduct a due diligence to collect facts about the case, determine whether the grievance has merit and clarify if Vestas or any of Vestas' contractors are involved. Where merit is established, Vestas will seek to remedy adverse impacts.

The closing timeline of a grievance will depend on each case, however, regardless of whether a complaint is accepted or not, a response to the stakeholder must be promptly provided in an understandable and transparent way. Vestas ensures that records and evidence are kept in the Vestas Incident Management System (IMS).





In Aquiraz, Ceará, we supported workshops on preserving the traditional arts and music of ancient Brazilian cultures.

Investing in our social license

Building a sound relationship with host communities is fundamental to obtain and maintain a Social License to Operate (SLO) in the wind farm projects to which we contribute. Unlike legal licenses or construction permits, it is not possible to apply for a social license. An SLO is awarded when a project has the ongoing approval and acceptance of the host community and other stakeholders.

Our global approach to the SLO helps us create financeable projects through the inclusion of social risks in our wind farm management. By working continuously with our stakeholders, such as customers and affected communities, we aim to understand the local context and build trust and acceptance in our projects. We also ensure that our own evaluation of potential impacts, and our approach to addressing these impacts, is closely aligned with our customers' efforts.

As we work to become the global leader in sustainable energy solutions, we want to incorporate collaborative leadership into our way of doing business. Such leadership involves working closely with various stakeholders, including customers, partners, investors, contractors, and local communities, and inviting them to join us on our journey.

As part of our commitment, we will continue to improve disclosure around our quantitative and qualitative human rights performance. To this end, we report on the following KPIs:

1. The share of in-scope projects having undergone the SDD process

We constantly work to ensure that all projects within scope undergo the Social Due Diligence (SDD) process to reach our target of 100 percent by 2025. This also means initiating SDD on projects that do not reach firm order intake in the reporting year.

2. The number of community beneficiaries reached

Our intention is to give back to the people living in the communities close to our operations. Our community engagement initiatives can range from providing access to jobs and stimulating local procurement, to training, educational activities, and public infrastructure funding. By reporting on this KPI, we evaluate the reach of the initiatives in our SDD's social management plans.

In 2022, we continued several of our community engagement initiatives, reaching 7,572 direct beneficiaries.

With the number of beneficiaries reached in 2022, we have reached our 2025 target of 35,000 accumulated beneficiaries earlier than anticipated. Going forward, we will continue our efforts to positively impact local communities and adjust our future goals accordingly.

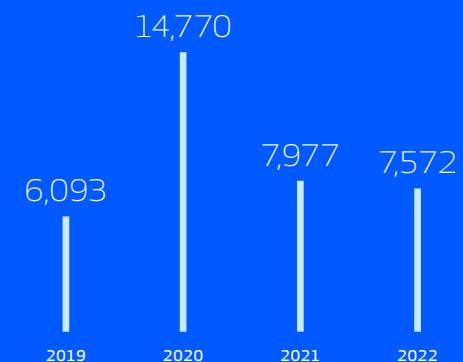
3. The number of community grievances received.

We have an Operational Grievance Mechanism (OGM) that provides a transparent and fair way for those potentially impacted by a project to raise any concerns they might have. It is an integral part of our approach to obtain and maintain our SLO, thereby reducing the risks we face.

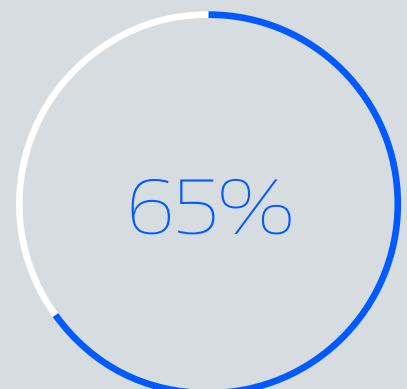
In 2022, we received 13 community grievances. To ensure we receive and handle community grievances appropriately, it is important we have a functioning operational grievance mechanism in place. We are pleased to see that our grievance mechanism is used, and will continue to revise and improve it to ensure local communities can alert us to issues as soon as they arise as outlined in our Human Rights Policy.

7,572
direct beneficiaries
reached in 2022

The number of community beneficiaries reached



The percentage of qualifying projects having undergone the SDD process in 2022





Community development activities

We prioritise working with customers, local authorities, communities, and other actors in wind farm projects to develop strong relationships and invest in the local community. We always consider the results of the Social Due Diligence conducted for the project and our primary Sustainable Development Goals (SDGs) when choosing community engagement initiatives. Some illustrative examples of these projects are included below.

Colombia

The inauguration of the La Guajira I wind farm in Colombia in 2022 marked not only a new market entry for Vestas but also a leap for the energy transition in Colombia.

Our client's project is located in an area owned by Wayuu peoples, an ethnic group native to the Guajiran Peninsula. As we gained a better understanding of the local context and built a relationship with the affected communities, it was decided between the community members and Vestas to conduct community engagement initiatives during the construction phase focused on quality education (SDG 4), clean water and sanitation (SDG 6), affordable and clean energy (SDG 7), and decent work and economic growth (SDG 8).

Furniture and materials for a local Indigenous Rural Integral Ethno-educational institution were provided to improve the facilities

of 14 students in the Lanshalia community. Materials to build a water storage reservoir were provided to support the basic water and sanitation needs of 16 women and 13 men of the Mushalerrain community. Solar panels were distributed to 16 families in the Lanshalia and Mushalerrain communities, contributing to livelihood improvements in terms of connectivity, communication, lighting, and food for families that had limited access to electricity.

Additionally, to promote decent work, economic growth, and employability, we partnered with local universities and training centres. 26 women artisans participated in an ethnic handicraft workshop where they learned how to enhance their weaving techniques and entrepreneurial skills to begin their own businesses. 33 local fishermen were trained in best practices and entrepreneurship together with a partner university.

Jordan

In Jordan, we conducted community development activities linked to education and youth empowerment near our project. We engaged with local skills training centers for women to conduct a hydroponic farming and food processing training programme that benefited 45 women in 4 communities near our project. Through the training, the beneficiaries learned farming methods for domestic use that can enhance their income either through domestic consumption or by starting their own business.

India

In India, 42 women from the villages surrounding our Taralkatti wind farm in Karnataka state underwent tailoring and stitching training. Another 20 women from villages near the Taralkatti wind farm undertook digital literacy training.

Brazil

As part of the 'Keep it Local' initiative, a training programme on wind farm operation and maintenance was provided free of charge to residents of Caiçara do Rio do Vento in collaboration with EDPR and Centro de Tecnologias do Gás e Energias Renováveis (CTGAS-ER) of SENAI-RN. Our employees shared knowledge in several lectures over the three months duration of the course. Caiçara do Rio do Vento is a municipality with numerous wind farm projects under development, construction, and operation.

Community donations

Donations are an instrument to support our mission of becoming the most socially responsible company in the energy industry. Donations, such as materials or works, are provided in-kind. In Brazil, we also supported communities through donations linked to tax incentives. Selected examples of these donations are included below.

Brazil

We supported a project in public schools focused on preserving the heritage of ancient Brazilian cultures through musical and artistic workshops in Aquiraz, Ceará benefitting 230 students. The workshops, run by our partner NGO in partnership with indigenous communities, taught local students to build and play some of the native instruments of the Jenipapo-Kanindé and Quilombola cultures.

Jordan and Senegal

During Ramadan, we ran a food relief campaign in Jordan and Senegal. In Jordan, 450 families around our projects in Abour, Deahan, Shobak and Fujeij benefited from food packages used regularly by Jordanian families. In Senegal, 481 families around our project in Taiba received food packages.

India

In six villages near the Taralkatti wind farm in Karnataka state we conducted material donations such as cupboards and desks to 13 rural pre-schools, benefiting 500 children.



Governance

- Our approach to business conduct
- Political engagement
- Sustainable tax
- Sustainable finance
- Memberships and ratings

Our approach to business conduct

Promoting a culture of integrity

Establishing a strong compliance culture is not a destination but a journey. We continually focus on strengthening our policies, processes, training, and communication around business ethics to foster a culture of integrity. To achieve this, setting the right tone at the top to demonstrate our management's commitment to business ethics is crucial.

Board of Directors: Audit Committee

Commitment to promoting business ethics is embedded at the highest level of the organisation: in the Audit Committee (AC) of the Vestas Board of Directors. The AC is responsible for monitoring, promoting, and assessing our culture of integrity. It evaluates the adequacy and effectiveness of our Anti-Bribery and Corruption (ABC) Compliance programmes and – if deficiencies are identified – ensures implementation of necessary actions to cover risks. The AC is also responsible for overseeing the Code of Conduct and Corporate Social Responsibility initiatives.

Tone from the top: executive management and senior leadership

The Executive Management team, Regional Management, and our people managers all seek to promote a culture of integrity through town halls and other meetings where they address topics within the Code of Conduct such as the trust in management and speak up culture. Furthermore, compliance is addressed in quarterly meetings between the Regional and Executive Management teams to ensure that our leadership oversees progress made by each region in the ABC Compliance programme and other related initiatives. On a yearly basis, Regional Management and Global Compliance meet and discuss initiatives based on the results of the Global ABC Survey. These meetings highlight each region's key compliance risks and action points for the coming year and give management an active role in drafting the ABC Compliance programmes.

Global and regional compliance programmes

Our ABC Compliance programmes are built around our business ethics standards and establish how we map and prioritise activities that support a culture of integrity. Each programme describes how Global Compliance and Regional Legal & Compliance work with ABC Compliance in accordance with international anti-corruption legislation.

The ABC programme comprises five pillars: Programme Governance; Learning & Awareness and Culture & Behaviour, which aim to prevent misconduct and promote a culture of integrity; and Monitoring & Auditing and EthicsLine, which detect and manage misconduct.

In 2022, we ran the Global ABC Survey a second time. This anonymous survey asked all our office employees and service technicians about their perception of bribery and corruption risks. Among other questions, employees were also asked how comfortable they felt raising corruption concerns with their manager and to identify the top three compliance risks.

Approximately 49 percent of the invited employees replied and more than 3,000 written comments were received, creating enough data to identify trends and areas in need of support. The findings were shared with management and enabled regional action points to be included in global and regional compliance programmes to help mitigate the risks identified. We will continue to carry out the survey annually, enabling us to track trends over time.

Training and awareness

Training and communication activities are essential in fostering a culture of integrity globally, contributing to a common understanding of what is expected from our employees.

Since launching an updated Employee Code of Conduct in 2021, new mandatory micro-learning have been released every quarter to refresh employees' knowledge on different topics in the Code. The micro-learning range from 5-12 minutes each, and include several interactive exercises inspired by past anonymised Vestas whistleblower cases.

We also provided several training sessions focused on different topics including Labour Rights and Modern Slavery, Conflicts of Interest, Gifts & Hospitality, and more, targeted to different functions and regions.

Speak Up campaign

In 2022, we began a global compliance campaign to promote our four principles for speaking up about compliance at Vestas: Hard decisions, Transparency, Integrity, and Consequences. To reach the whole organisation, the campaign included an interactive competition, intranet articles, info screens, and other regionalised initiatives at different Vestas locations. The campaign was promoted by senior leadership in town halls and team meetings and will continue throughout 2023.

Working ethically with suppliers

All Vestas suppliers are required to comply with our Supplier Code of Conduct. The Supplier Code is an integrated part of our purchase agreements, and if a supplier is not following the Code, we will take the necessary actions to mitigate risk and resolve any issues.

In some cases, this includes triggering the Supplier Blocking Process to terminate our relationship with the supplier. Some of the other triggers for the Supplier Blocking Process include, but are not limited to, EthicsLine cases and safety non-compliance.



[Political engagement](#)

Engaging with public stakeholders to accelerate the energy transition



↑

The North Sea summit in Esbjerg, Denmark, where political heads of state increased targets for offshore wind power.

As a pioneer in renewable energy, we have contributed to the development of policies and associated regulations that promote the role of wind power in the clean energy transition, thereby creating and shaping new markets across the globe.

Vestas is a key player in the global energy transition and participates in energy debates at international, national, and local levels. We seek to engage with governments and public stakeholders to promote our interests in energy and renewables in a legal, ethical, and transparent manner. This can involve direct advocacy with governments, information campaigns, meetings with officials and politicians on issues linked to wind energy, and indirect lobbying through associations. Our objective is to accelerate the clean energy transition in line with the objective of the Paris Agreement to limit global warming to 1.5 degrees C, and to increase the contribution wind energy makes towards achieving this objective across the globe.

Our Public Affairs department has a global reach, with locally based experts who collectively have political networks and reach across all continents. Quarterly reporting ensures Board oversight of our public affairs activities.

Financial or in-kind contributions

In general, we do not donate corporate funds to political parties or individual politicians. Any exemptions to this rule must be in accordance with local law and have prior written approval from the Group President and CEO. In 2022, we did not donate to any political organisations.

In 2022, we hosted leaders from the EU, Germany, Denmark, Belgium, and the Netherlands at the North Sea summit in Esbjerg. Leaders committed to a target for offshore wind of at least 65 GW by 2030 and 150 GW by 2050 in the North Sea, with Energy Islands and 20 GW of green hydrogen production capacity by 2030.

Through our membership in over 100 renewable energy associations on a global, regional and national level, we help define policy recommendations and consultation responses on various legislative proposals.

We support policies that aim to accelerate the energy transition and achieve the ambitions of the Paris Agreement. Our contribution to the establishment of policy recommendations and responses to public consultations by our associations focuses on:

- Increasing renewable energy build-out
- Scaling-up grid infrastructure and flexible solutions on supply and demand side
- Removing permitting and other bottlenecks that can impede the rapid scale-up of renewable energy
- Balancing the need for affordable electricity with healthy supply chains while incentivising broader system benefits in auction frameworks
- Strengthening renewable energy's contribution to energy security
- Aligning electricity markets with the characteristics of variable renewable energy
- Removing bottlenecks for corporate renewable energy procurement
- Ensuring that legislation does not lock-in fossil fuel based solutions
- Setting a meaningful price on greenhouse gas emissions
- Promoting direct electrification through renewable electricity

- Laying the groundwork for indirect electrification to decarbonise hard-to-electrify sectors
- Passage of green recovery packages
- Incentivising circular economy principles for the recycling of wind turbine blades

Major trade associations

1. Global Wind Energy Council (GWEC)

GWEC is an international trade association that represents the entire wind energy sector. GWEC works at the highest international political level to create a better policy environment for wind power. The association and its members are active all over the world, educating local and national governments and international agencies about the benefits of wind power.

2. WindEurope

WindEurope actively promotes wind energy across Europe and analyses, formulates, and establishes policy positions for the wind industry on key strategic sectoral issues, cooperating with industry and research institutions on a number of market development and technology research projects. Additionally, the lobbying activities undertaken by WindEurope help create a suitable legal framework for wind energy.

3. American Clean Power (ACP)

ACP promotes the acceleration of the clean energy transition in the US. It is the voice of companies from across the clean power sector that are powering America's future and providing cost-effective solutions to the climate crisis while creating jobs, spurring massive investment in the US economy, and driving high-tech innovation across the nation.

We also use consultancies, law firms, and Danish Trade Council services to support in promoting Vestas' interests in markets with insufficient in-house resources. The Trade Council is part of the Ministry of Foreign Affairs and assists Danish and international companies with export and investment promotion services.



Political engagement spending in 2022 (EURm)

Membership fees of trade associations	~3.5
External assistance	~1.0

Sustainable tax

Supporting societies with sustainable tax practices

Transparent and fair taxes are vital to our efforts to make a positive contribution to local communities and create a sustainable planet for future generations.

We reinforce our commitments and mitigate both reputational and financial risks by continuously engaging in dialogue with stakeholders, including on tax transparency. Given our global footprint, we face scrutiny from tax authorities competing for the same tax revenue, which can result in tax audits, double taxation, arbitration, and lawsuits. We recognise that reporting initiatives cannot stand alone and focus on developing tools and governance mechanisms to limit the risk of double taxation. We also apply withholding taxes correctly and allocate income between Vestas companies in accordance with international regulations and standards.

The Vestas Tax Policy

As part of corporate governance, our Tax Policy is approved annually by the Board of Directors (Board). In 2022, management made a recommendation to update the policy adding the new strategic area of Development.

We continue to base our approach to tax transparency on the Global Reporting Initiative (GRI) 207 standard, developed by the Global Sustainability Standards Board (GSSB). Our Tax Policy is available on our corporate website and includes:

- An overall commitment and approach to responsible tax practice
- A governance structure, where our tax policy is subject to annual review and approval by the Board
- An explicit policy on tax planning, disputes, and risk management

In 2022 we continued mapping our tax contribution based on our geographical footprint. Through this process, we have ensured traceability between financial disclosures, disclosures to tax authorities, and our tax contribution report. We have based our reporting on actual tax payments, external revenue, and number of employees to provide an objective and transparent measure.

For consistency in our reporting, we have regionalised geographical segmentation based on our financial disclosure. For an overview of our key tax ratios and country specific payments, see page 79-80. Our aim is to demonstrate how we applied our tax principles and provide more information about our tax footprint. We reconcile the information in the Total Tax Contribution report with the Effective Tax Rate (ETR) of the consolidated group as an additional step in our policy of tax transparency.

The global tax environment

With a global supply chain, manufacturing facilities, and wind turbines installed in more than 86 countries, we are impacted by developments in the international tax arena. We therefore support the harmonisation of international tax rules and collaboration between governments to ensure a fair tax environment.

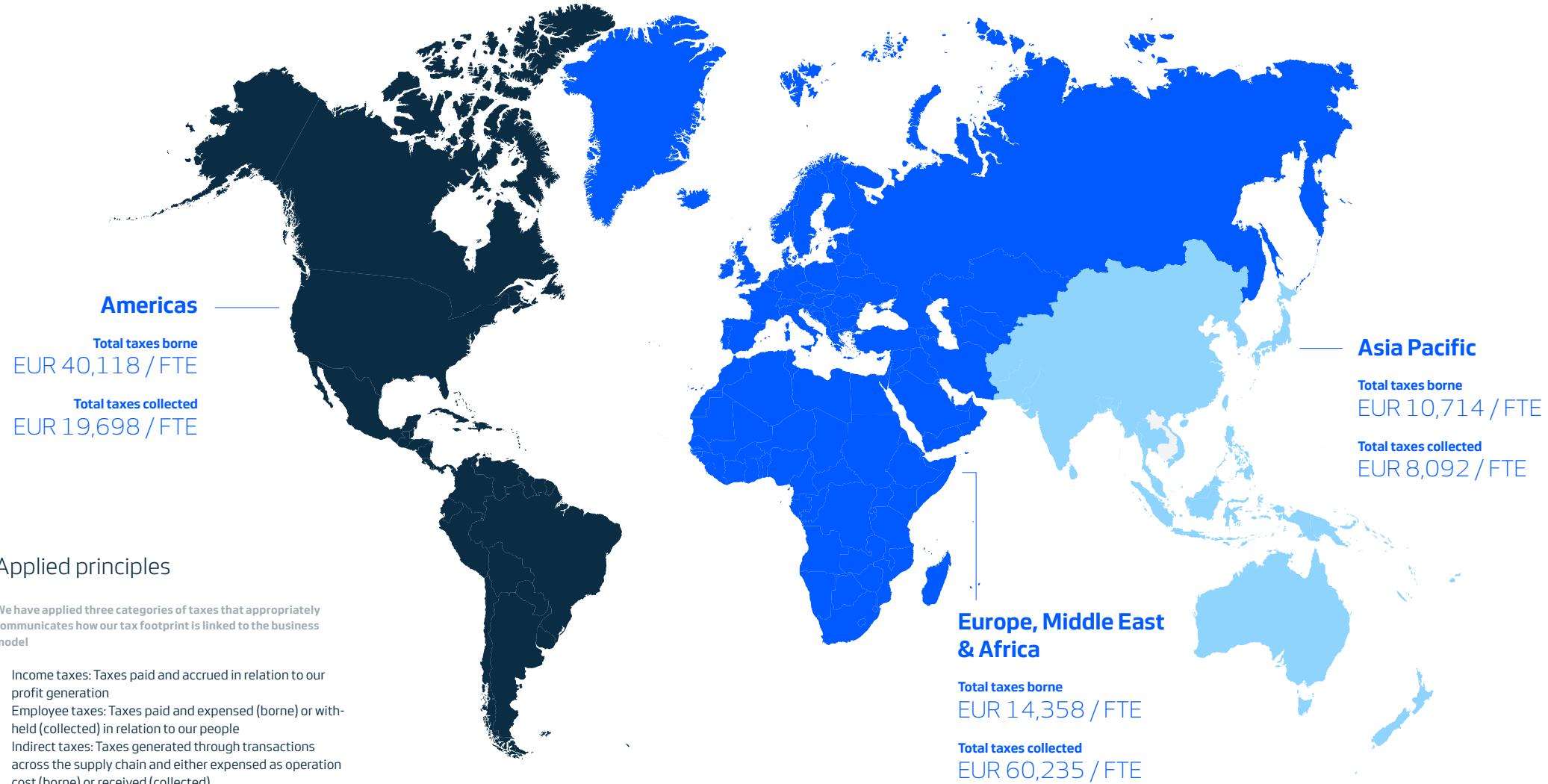
When it comes to tax disputes, we seek to minimise any cash flow impact and engage in an open dialogue with tax authorities. This process is often conducted on a bilateral basis, bringing all relevant parties to the table to reach a swift and fair settlement. Sometimes, such disputes can extend beyond ten years and consume significant resources. As a company, we pursue the interests of our shareholders and will defend our position where we consider this the most reasonable course of action.



Like any other business, we take local tax policies into account when making business decisions, but we do not take operational decisions based on tax optimisation. We act in a responsible way with deep respect of all tax jurisdictions where we are located. Acknowledging the global supply chain and operations which characterise our industry, we advocate for a level playing field for all businesses in the industry.

We also welcome the involvement of industry organisations and political stakeholders to ensure the state of our industry is known to decision-makers, and to promote the transition to renewable energy through improved framework conditions. We seek to mitigate, to the extent possible, significant tax risks by reaching agreements with different tax administrations of countries where we operate. To achieve these objectives our tax policy is designed based on open dialogue with governments and tax authorities all over the world.

Overview of global tax contribution



Applied principles

We have applied three categories of taxes that appropriately communicates how our tax footprint is linked to the business model

- Income taxes: Taxes paid and accrued in relation to our profit generation
- Employee taxes: Taxes paid and expensed (borne) or withheld (collected) in relation to our people
- Indirect taxes: Taxes generated through transactions across the supply chain and either expensed as operation cost (borne) or received (collected)



Sustainability-linked financing

Sustainability-linked loan (SLL)

In 2021, we signed up to a EUR 2,000m revolving multi-currency credit facility with a group of leading banks. The facility's margin is closely linked to our sustainability KPIs and will support our ambitions to accelerate the deployment of renewable energy and drive technological innovation.

Directly linked with our sustainability strategy, the facility's interest rate margin will be adjusted based on sustainability-linked performance targets – the first time we have engaged with sustainability-linked financing. These targets measure our ability to reduce our carbon footprint and enhance workplace safety, while adding ambitious targets to drive improvements across our supply chain. Performance targets will also cover ambitions to increase both the use of sustainable materials and recyclability across the turbine value chain.

The facility will be key to supporting our efforts to drive deployment, evolve new technology and increase sustainability performance across our value chain.

Sustainability-linked bonds (SLB)

To firmly link progress on our sustainability targets with our financial performance, we became the first Danish company to issue sustainability-linked bonds. Announced in March, the two EUR 500m sustainability-linked bonds, with a duration of 7 and 12 years, generated wide interest and were oversubscribed 3.3 times.

The bonds' fixed rate is directly linked to our sustainability performance and will be adjusted based on yearly defined sustainability targets in the following areas:

- Reducing the carbon footprint of our own operations (scope 1 and 2)
- Reducing carbon emissions in our supply chain (scope 3)
- Increasing material efficiency in our own operations

The full sustainability-linked bond framework agreement, including yearly defined targets on these KPIs, is publicly available on our corporate website, along with progress reports on the bonds issued annually. The bonds diversify our funding base and are listed on the regulated market Euronext Dublin. By linking our sustainability performance with interest rate margins, we reinforce our commitment to realising our ambitious sustainability targets, and collaborate with our financial partners to gain access to favourable interest rates as an incentive for doing so.

Memberships and ratings



UN Global Compact

The United Nations Global Compact (UNGC) is the world's largest corporate sustainability initiative for businesses committed to aligning their operations and strategies with ten key principles in the areas of human rights, labour, the environment and anti-corruption. These principles serve as the basis for all sustainability efforts at Vestas. While we first committed to the UNGC in 2009, we annually report and publish our progress on implementing the 10 principles.

In 2020, we reiterated our commitment to the UNGC as our Group President & CEO, Henrik Andersen, signed the UNGC's "Statement from Business Leaders for Renewed Global Cooperation". By doing so, we commit to continuously demonstrate ethical leadership and good governance, invest in addressing systematic inequalities, ensure accountability and transparency, promote equality as well as respect human rights. We, including our CEO, again reiterate this commitment in 2022.

In the UNGC Nordic Network, we have demonstrated our sustainability leadership through our participation in the working groups on human rights and the SDGs. We use these working groups to promote stronger sustainability efforts for businesses in their local context.

Memberships

- Global Wind Energy Council (GWEC)
- WindEurope
- American Clean Power
- World Economic Forum
- 100+ wind associations around the world



ESG ratings

All major ESG ratings and rankings are kept updated on our corporate website.

Highlights include:

- Ranked #2 in Corporate Knights' Global 100 ranking of most sustainable companies
- Added as a member of the Dow Jones Sustainability Indices – World Index
- Received an A rating on climate by CDP



Sustainability data

- Sustainability key figures
- Selected environmental data
- Selected employee data
- Selected tax data
- SASB disclosure
- Sustainability key figures

Sustainability key figures

Environmental	2022	2021	2020	2019	2018
Utilisation of resources					
Consumption of energy (GWh)	641	738	621	638	614
- of which renewable energy (GWh)	231	283	295	258	211
- of which renewable electricity (GWh)	187	233	261	227	178
Renewable energy (%)	36	38	48	40	34
Renewable electricity for own activities (%)	100	100	100	82	68
Withdrawal of fresh water (1,000 m ³)	341	378	421	473	470
Waste					
Volume of waste from own operations (1,000 t)	47	70	89	85	81
- of which collected for recycling (1,000 t)	26	35	46	43	42
Recyclability rate of hub and blade ¹ (%)	42	42	41	42	-
Material efficiency (tonnes of waste excl. recycled per MW produced and shipped)	1.6	2.0	2.5	3.3	3.6
CO₂ emissions					
Direct emissions of CO ₂ e (scope 1) (1,000 t)	98	99	83	66	69
Indirect emissions of CO ₂ e (scope 2) (1,000 t)	2	3	14	48	61
Indirect emissions of CO ₂ e from the supply chain (scope 3) ¹ (million t)	8.18	10.56	10.59	7.83	-
Indirect emissions of CO ₂ e from the supply chain (scope 3) ¹ (kg per MWh generated)	6.46	6.65	6.63	6.82	-
Products					
Expected CO ₂ e avoided over the lifetime of the capacity produced and shipped during the period (million t)	408	532	493	322	275
Annual CO ₂ e avoided by the total aggregated installed fleet (million t)	219	210	186	154	134

¹ Data only available from 2019 onwards.

² The most recent data will reflect a status quo, where the final substantiation rate can only be seen in connection with full-year reporting the following year. The cases not registered as either substantiated or unsubstantiated at the end of the year were still under investigation at the time of reporting.



For definitions and accounting policies for the Sustainability key figures, see the Notes on page 83.

Social	2022	2021	2020	2019	2018
Safety					
Total Recordable Injuries (number)	200	201	185	213	210
- of which Lost Time Injuries (number)	73	67	65	67	80
- of which fatal injuries (number)	0	0	0	1	0
Total Recordable Injuries per million working hours (TRIR)	3.3	3.1	3.3	3.9	4.0
Lost Time Injuries per million working hours (LTIR)	1.2	1.0	1.2	1.2	1.5
Employees					
Average number of employees (FTEs)	28,779	29,164	26,121	24,964	24,221
Employees at the end of the period (FTEs)	28,438	29,427	29,378	25,542	24,648
Diversity and inclusion					
Women in the Board and Executive Management team at the end of the period (%)	25	27	27	23	15
Women in leadership positions at the end of the period (%)	23	21	19	19	19
Human rights¹					
Community grievances (number)	13	17	20	10	-
Community beneficiaries (number)	7,572	8,236	14,770	6,093	-
Social Due Diligence on projects in scope (%)	65	0	78	32	-
Governance					
Whistle-blower system					
EthicsLine cases (number)	539	465	287	226	173
- of which substantiated (number)	137 ²	129	65	58	48
- of which unsubstantiated (number)	358 ²	336	222	168	125

Selected environmental data

Our energy consumption was divided into the following categories:

Energy consumption by source

1,000 MWh	2022	2021	2020	2019	2018
Fuels for heating (direct energy)					
Oil	8	19	16	15	17
Gas	53	96	114	134	130
Indirect energy					
Electricity	187 (100% renewable)	233 (100% renewable)	261 (100% renewable)	278 (82% renewable)	262 (100% renewable)
Heat	45 (82% renewable)	56 (75% renewable)	38 (71% renewable)	35 (71% renewable)	36 (68% renewable)
Fuels for transportation					
Liquefied petroleum gas (LPG)	1	1	1	0.3	1
Diesel oil	132	133	138	132	123
Petrol	73	60	53	44	46
Marine gas oil	142	139	//	//	//

Our water withdrawal was divided into the following categories:

Water withdrawal by source

1,000 m³	2022	2021	2020	2019	2018
Fresh water withdrawal					
From municipal water supplies or other water utilities	277	312	233	389	387
From ground water	58	60	84	82	72
Fresh water from surface water, including water from wetlands, rivers and lakes	6	6	4	2	1
Non-fresh water withdrawal					
From surface water, including water from wetlands and oceans	0	0	0	0	0
Cooling water					
From surface water, including water from wetlands, rivers, lakes, and oceans	0	0	0	0	0

We emitted wastewater to the following destinations:

Waste water

1,000 m³	2022	2021	2020	2019	2018
Treated by Vestas to public treatment facility	50	48	64	56	48
Treated by Vestas directly to environment	13	21	25	41	42
Non-treated wastewater to public treatment facility	199	224	226	241	272
Non-treated wastewater directly to environment	6	4	10	17	12

Our waste disposal was divided into:

Waste disposal

1,000 tonnes	2022	2021	2020	2019	2018
Non-hazardous	43	64	83	78	74
Hazardous	4	6	6	7	7

We disposed waste to the following destinations:

Waste disposal

1,000 tonnes	2022	2021	2020	2019	2018
Recycling	26	35	46	43	42
Incineration	18	24	21	18	19
Landfill	3	11	22	24	20

We recorded the following air emissions:

Air emissions

Tonnes	2022	2021	2020	2019	2018
VOC	100	205	268	270	264

Selected employee data

Employees by region and function¹

Number	EMEA	Americas	Asia Pacific	Total
Manufacturing & Global Sourcing	4,848	896	1,864	7,608
Sales and service	9,280	4,048	2,243	15,570
Power Solutions	1,832	61	747	2,640
Others	1,178	240	1,067	2,484
Total	17,138	5,244	5,921	28,303

Employees by age group and gender¹

Percent	<30 years	30-50 years	>50 years	Total
Female	3.9	10.3	2.1	16.3
Male	16.5	56.0	11.3	83.7
Total	20.4	66.3	13.3	100

Employees by level and gender¹

Percent	Female	Male	Total
Leadership positions	4.1	14.0	18.1
Other	12.2	69.7	81.9
Total	16.3	83.7	100

New employees by region and gender¹

Number	EMEA	Americas	Asia Pacific	Total
Female	549	176	340	1,065
Male	2,274	955	867	4,096
Total	2,823	1,131	1,207	5,161

New employees by age group and gender¹

Number	<30 years	30-50 years	>50 years	Total
Female	489	534	42	1,065
Male	1,704	2,185	207	4,096
Total	2,193	2,719	249	5,161

Turnover by gender¹

Number · Percent	Female	Male	Total
No. employees	4,300	23,525	27,825
No. employees leaving	626	3,596	4,222
Turnover (%)	14.6	15.3	15.2

Turnover by region¹

Number · Percent	EMEA	Americas	Asia Pacific	Total
No. employees	16,493	5,099	6,233	27,825
No. employees leaving	2,021	1,078	1,123	4,222
Turnover (%)	12.3	21.1	18.0	15.2

Turnover by age group¹

Number · Percent	<30 years	30-50 years	>50 years	Total
No. employees	5,434	18,708	3,684	5,132
No. employees leaving	1,250	2,580	392	4,222
Turnover (%)	23.0	13.8	10.6	15.2

Board of Directors by age group and gender²

Percent	<30 years	30-50 years	>50 years	Total
Female	0	0	37.5	37.5
Male	0	0	62.5	62.5
Total	0	0	100	100

Employees by age group and level¹

Number	<30 years	30-50 years	>50 years	Total
Leadership positions	151	4,023	958	5,132
Other	5,622	14,735	2,814	23,171
Total	5,722	18,758	3,773	28,303

Employees by employment contract and gender¹

Number	Standard employment	Temporary	Total
Female	4,411	190	4,601
Male	23,153	548	23,702
Total	27,565	738	28,303

¹ Excluding employees from Utopus Insights Inc.

² Only Board members elected by the general meeting are included.

Selected tax data

Taxes by category

EURm	EMEA	Americas	Asia Pacific	Global
Corporate income taxes	110	60	28	199
Indirect taxes	835	103	25	962
Employee taxes	333	151	58	542
Total	1,278	314	111	1,703

Taxes by category

EUR/FTE ¹	EMEA	Americas	Asia Pacific	Global
Corporate income taxes	6,447	11,435	4,771	7,020
Indirect taxes	48,700	19,654	4,169	34,003
Employee taxes	19,446	28,727	9,866	19,161
Total	74,593	59,816	18,806	60,184

Taxes by category

% of EURm revenue	EMEA	Americas	Asia Pacific	Global
Corporate income taxes	1.3	1.2	2.1	1.4
Indirect taxes	10.1	2.1	1.8	6.6
Employee taxes	4.1	3.1	4.3	3.7
Total	15.5	6.4	8.1	11.8

Taxes borne by category

EURm	EMEA	Americas	Asia Pacific	Global
Corporate income taxes	105	55	25	185
Indirect taxes	48	71	12	132
Employee taxes	92	84	26	203
Total	246	210	63	520

Taxes borne by category

EUR/FTE ¹	EMEA	Americas	Asia Pacific	Global
Corporate income taxes	6,147	10,436	4,253	6,545
Indirect taxes	2,819	13,588	2,090	4,662
Employee taxes	5,391	16,094	4,370	7,161
Total	14,357	40,118	10,714	18,368

Taxes borne by category

% of EURm revenue	EMEA	Americas	Asia Pacific	Global
Corporate income taxes	1.3	1.1	1.8	1.3
Indirect taxes	0.6	1.5	0.9	0.9
Employee taxes	1.1	1.7	1.9	1.4
Total	3.0	4.3	4.6	3.6

Taxes collected by category

EURm	EMEA	Americas	Asia Pacific	Global
Corporate income taxes	5	5	3	13
Indirect taxes	786	32	12	830
Employee taxes	241	66	33	340
Total	1,032	103	48	1,184

Taxes collected by category

EUR/FTE ¹	EMEA	Americas	Asia Pacific	Global
Corporate income taxes	300	999	518	475
Indirect taxes	45,880	6,067	2,079	29,340
Employee taxes	14,055	12,632	5,496	12,001
Total	60,235	19,698	8,092	41,816

Taxes collected by category

% of EURm revenue	EMEA	Americas	Asia Pacific	Global
Corporate income taxes	0.1	0.1	0.2	0.1
Indirect taxes	9.6	0.7	0.9	5.7
Employee taxes	2.9	1.4	2.4	2.3
Total	12.6	2.1	3.5	8.2

¹ Excluding employees from Utopus Insights Inc. and SoWiTec Group GmbH.

Selected tax data

VAT receivables (gross)

EURm	EMEA	Americas	Asia Pacific	Global
Total	233	292	105	629

VAT receivables (gross)

EUR/FTE ¹	EMEA	Americas	Asia Pacific	Global
Total	13,585	55,602	17,654	22,221

VAT receivables (gross)

% of EURm revenue	EMEA	Americas	Asia Pacific	Global
Total	2.8	6.0	7.6	4.3

Top five countries by total, borne, and collected

EURm	Total	Borne	Collected
USA	227	USA	156
Denmark	192	Germany	65
Germany	183	Denmark	42
Finland	181	China	33
France	143	United Kingdom	17
Other	777	Other	207
Total	1,703	520	1,184

Top five countries by tax category

EURm	Corporate income taxes	Indirect taxes	Employee taxes
USA	46	Finland	179
Denmark	36	France	133
Germany	35	Poland	122
China	11	Sweden	115
Spain	7	Germany	89
Other	64	Other	325
Total	199	962	542

Top five countries by region

EURm	EMEA	Americas	Asia Pacific
Finland	181	USA	227
Germany	180	Brazil	36
Denmark	177	Canada	19
France	143	Argentina	10
Poland	129	Mexico	7
Other	467	Other	15
Total	1,278	314	111

SASB disclosure

Topic	Accounting metric	SASB reference	2022			2020
			2021	2020		
Workforce health & safety	1) Total recordable incident rate (TRIR)	R-WT-320a.1	3.3 per million working hours 0.66 per 200,000 working hours	3.1 per million working hours 0.62 per 200,000 working hours	3.3 per million working hours 0.66 per 200,000 working hours	
	2) Fatality rate for: (a) direct employees and (b) contract employees ¹	R-WT-320a.1	0 for direct employees 0 for contract employees	0 for direct employees 0 for contract employees	0 for direct employees 0 for contract employees	
Ecological impacts of project development	Average A-weighted sound power level of wind turbines, by wind turbine class	RR-WT-410a.1	Max sound power level for model range is 103.8 - 11.7 dB(A) ²	Max sound power level for model range is 103.8 - 110.6 Db. ²	Max sound power level for model range is 103.8 - 110.6 Db. ²	
	Backlog cancellations associated with community or ecological impacts	RR-WT-410a.2	0	0	0	
Materials sourcing	Description of efforts to address ecological and community impacts of wind energy production through turbine design	RR-WT-410a.3	Vestas Sustainability Report 2022, page 24-25 and 31-33	Vestas Sustainability Report 2021, page 30-38	Vestas Sustainability Report 2020, page 32-37	
	Description of the management of risks associated with the use of critical materials	RR-WT-440a.1	Vestas Sustainability Report 2022, page 31 and 53-57	Vestas Sustainability Report 2021, page 35-36	Vestas Sustainability Report 2020, page 36-37	

¹ Contract employees are defined by SASB's Wind Technology Project Developer's Standard 2018 "as those who are not on the entity's payroll, but who are supervised by the entity on a day-to-day basis, including independent contractors and those employed by third parties (e.g., temp agencies and labor brokers)."

² Sound emissions can be significantly lower during normal operation, since the given range consists of the maximum sound power levels of the different turbine models installed in the year. We also offer a number of noise-reduced operational modes where lower sound emissions are required.

³ Wind class data based is based on design wind class and does not correlate to delivered figures per wind-class.

SASB disclosure – continued

Topic	Accounting metric	SASB reference	2022		2021		2020
Materials efficiency	Top five materials consumed, by weight	RR-WT-440b.1	Tonnes (turbine only)		Tonnes (turbine only)		Tonnes (turbine only)
			Steel & iron	1,311,100	Steel & iron	1,827,800	Steel & iron
			Composites	111,400	Composites	153,100	Composites
Activity metrics	Average top head mass per turbine capacity, by wind turbine class	RR-WT-440b.2	Average tonnes ³		Average tonnes ³		Average tonnes ³
			Global	55	Global	59	Global
			IEC1	54	IEC1	58	58
			IEC2	56	IEC2	54	54
			IEC3	54	IEC3	54	55
	Description of approach to optimise materials efficiency of wind turbine design	RR-WT-440b.3	Vestas Sustainability Report 2022, page 34-37		Vestas Sustainability Report 2021, page 19-21 and 32-34		Vestas Sustainability Report 2020, page 33
	Number of delivered wind turbines, by wind turbine class	RR-WT-000.A	# WTGs		# WTGs		# WTGs
			IEC1 / S	46	IEC1 / S	89	IEC1 / S
	Aggregate capacity of delivered wind turbines, by wind turbine class	RR-WT-000.B	MW		MW		MW
			IEC1 / S	163	IEC1 / S	327	IEC1 / S
			IEC2 / S	888	IEC2 / S	983	IEC2 / S
			IEC3 / S	1,794	IEC3 / S	3,309	IEC3 / S
			IECS	9,187	IECS	12,260	IECS
	Amount of turbine backlog	R-WT-000.C		EUR 19.0bn		EUR 18.1bn	EUR 19.0bn
	Aggregate capacity of turbine backlog	RR-WT-000.D		19,623 MW		21,984 MW	24,630 MW

1 Contract employees are defined by SASB's Wind Technology Project Developer's Standard 2018 "as those who are not on the entity's payroll, but who are supervised by the entity on a day-to-day basis, including independent contractors and those employed by third parties (e.g., temp agencies and labor brokers)."

2 Sound emissions can be significantly lower during normal operation, since the given range consists of the maximum sound power levels of the different turbine models installed in the year. We also offer a number of noise-reduced operational modes where lower sound emissions are required.

3 Wind class data based is based on design wind class and does not correlate to delivered figures per wind-class.

Notes to Sustainability key figures

Basis for preparation of the statement

General reporting approach

The below description of accounting policies refers to the environmental, social, and governance indicators presented on page 76.

All Vestas' wholly owned companies are covered by the report. Newly established companies are included from the time of production start, and companies are excluded from the reporting from the specific time when they leave Vestas' control. Acquired companies are included from the specific time when coming under Vestas' control.

Defining materiality

Vestas performs its materiality assessment based on an analysis of significant economic, environmental and social impacts of the company's activities. The analysis is based on internal priorities as well as experience from dialogue with and direct involvement of customers, investors, policy makers, employees, and media. The result of the analysis is incorporated in the Vestas Sustainability Report, which is published on an annual basis.

Environmental

Vestas' environmental key figures encompass the Vestas Group in an operational control perspective (including owned and leased entities) ensuring a comprehensive and accurate statement of these figures. This approach applies to all environmental indicators that are reported for the accounting period, based on data registered locally in the Vestas reporting system, consolidated on Group level.

Utilisation of resources

Consumption of energy (GWh)

This indicator includes electricity, gas, oil, biomass, LPG, diesel, gasoline, marine gas oil and district heating. Energy is reported based on quantities consumed, including cars owned and leased by Vestas, employee benefit cars, and fuel for transportation on project sites, production equipment, and machinery. Consumption of electricity comprises electricity purchased externally. Oil for heating is based on external purchases and meter readings at the end of the reporting period.

Renewable energy (%)

Electricity from renewable energy sources is calculated on the basis of supplier statements.

Renewable electricity for own activities (%)

Electricity from renewable energy sources is calculated on the basis of supplier statements. Only 100 percent renewable electricity is counted as renewable electricity.

Withdrawal of fresh water (1,000 m³)

The withdrawal of water is measured by withdrawal of fresh water based on supplier statements and metre readings.

Waste

Volume of waste from own operations (1,000 tonnes) and of which collected for recycling (1,000 tonnes)

Volume of waste is based on weight. Waste disposal method is based on supplier statements.

Recyclability rate of hub and blade (%)

Recyclability rate of hub and blade is calculated as the recyclable share of the total rotor (i.e. hub and blade) mass. The measure is based on the material composition of all turbine types that were produced and shipped in the reporting year. Recyclability rates of different materials and component types are quantified and estimated based on information from life cycle assessment (LCA) reports.

Material efficiency (tonnes of waste excl. recycled materials per MW produced and shipped)

Material efficiency is defined as the total tonnes of non-recycled waste materials from Vestas' own manufacturing per MW capacity produced and shipped during the reporting period. Non-recycled waste materials include those that are incinerated or landfilled.

CO₂e emissions

Carbon emissions are measured using the carbon dioxide equivalent (CO₂e) to include all relevant greenhouse gasses according to the Greenhouse Gas Protocol. A distinction is made between scope 1, 2, and 3 emissions, as also defined by the Greenhouse Gas Protocol.

Direct emissions of CO₂e (scope 1) (1,000 t)

Scope 1: Direct emissions of CO₂e are calculated based on determined amounts of fuel for own transport and the direct consumption of fossil-based fuels (e.g. oil and gas), with the usage of standard factors published by the UK Department for Business, Energy & Industrial Strategy (BEIS) (2022).

Indirect emissions of CO₂e (scope 2) (1,000 t)

Scope 2: Covers emissions released in connection with the consumption of purchased electricity and heat. Indirect market-based emissions of CO₂e from consumption of electricity are calculated using national grid emission factors published by the International Energy Agency (2022). Indirect CO₂e emissions from district heating are calculated using BEIS (2022) emission factors.

Indirect emissions of CO₂e from the supply chain (scope 3) (million t)

Scope 3: Indirect emissions of CO₂e from the value chain are reported based on the Greenhouse Gas Protocol. Scope 3 categories 8, 9, 10, 11, 13 and 15 are immaterial for Vestas and category 14 is not applicable.

Wind plant: The largest part of the emissions is in category 1 'Purchased goods and services', emissions from materials going into products are calculated based on LCAs following ISO 14040 & 14044, publicly available at vestas.com.

The CO₂e emissions of different materials and component types are based on the total quantity of annual produced and shipped turbines and the material composition of the individual turbine types as stated in the LCA reports. Based on this, the global material mass balance is calculated for all materials consumed during the production and CO₂e emissions are calculated using GaBi (2022) emission factors per material group for raw materials used in production and manufacturing processes. The actual steel mass for all produced and shipped turbines is used to calculate global CO₂e emissions for the raw material production of steel and for foundation materials. The CO₂e emissions from concrete and steel used in foundations is based on the same LCA reports as the remaining material groups.

Construction: The CO₂e emissions emitted during the construction of a wind farm is estimated based on the quantity of diesel-fuel consumed per wind turbine produced and shipped in markets in which Vestas is responsible for installing the wind turbine. LCA studies for the diesel combustion per turbine installation and respective BEIS emission factors (2022) are applied.

Service: CO₂e emissions from service operations are estimated using the quantity of spare parts that are replaced and repaired in the reporting year, as well as expected repair and replacement levels. GaBi (2022) emission factors for the raw materials are applied to estimate global CO₂e emissions.

Capital goods: Other purchased goods and services and capital goods (category 2) and waste generated in operations (category 5) are estimated based on spend data using BEIS

factors for Indirect emissions from the supply chain (2011). Fuel- and energy-related activities are calculated using BEIS factors for emissions related to the production of fuel and NREL factors for renewable energy.

Transportation: Emissions from upstream transportation (category 4) are based on supplier information and estimated based on the LCA reports for weight and distance of components transported and BEIS (2022) carbon emissions factors. Business travel (category 6) emissions for air flights are activity-based data provided by the travel agency used for all bookings. Employee commuting (category 7) is reported on daily commute by car, which is estimated based on the average number of FTEs and a selected sample of commuting distance. It applies standard factors published by the BEIS (2022).

End-of-life treatment: Of sold products (category 12) is estimated based on material composition of all produced and shipped wind turbines in the reporting year. For materials that are not recyclable, an average GaBi (2022) emission factor for inert landfill is applied.

Indirect emissions of CO₂e from the supply chain (scope 3) (kg CO₂e per MWh generated)

The amount of MWh generated is based on the number and type of wind turbines produced and shipped in the financial year along with values for wind turbine capacity factor and site-specific lifetime. In relation to the target to reduce carbon emissions in the value chain, indirect emissions of CO₂e from the value chain per MWh generated include 70 percent of the scope 3 emissions.

Products

CO₂e avoided is to be understood as the volume of emissions avoided by using the wind turbines as an electricity source, compared to the latest updated IEA World average level of CO₂e impact involved in electricity generation.

Expected CO₂e avoided over the lifetime of the capacity produced and shipped during the period (million tonnes)

This is based on total wind turbines (MW) produced and shipped during the reporting period. A weighted average capacity factor was applied in 2022, based on actual hourly

performance data from the wind turbine types produced and shipped in the reporting year. Vestas applies an expected lifetime based on site-specific agreed lifetimes where this differs from the standard design lifetime. The avoided CO₂e is based on the latest updated standard factor of global average carbon emissions for electricity from the International Energy Agency (2022).

Annual CO₂e avoided by the total aggregated installed fleet (million tonnes)

Annual CO₂e avoided by the total aggregated installed fleet is calculated based on total annual installed capacity and global average CO₂e emissions avoided in one year of operation. Vestas applies a fleet average capacity factor in 2022. The avoided CO₂e is based on the latest updated standard factor of global average carbon emissions for electricity from the International Energy Agency (2022).

Social

Safety

Total Recordable Injuries (number)

The total recordable injuries (TRI) include fatalities, lost time incidents, restricted work injuries and medical treatment injuries.

TRI includes injuries for employees and externally employed workers under Vestas' supervision. Supervision of an external worker is day-to-day working directions.

'Of which Lost Time injuries': The lost time injuries are based on incidents reported in Vestas' reporting system, with more than one day of absence from work, including externally employed workers under Vestas' supervision.

'Of which fatal injuries': The fatal injuries are based on incidents reported in Vestas' reporting system, including externally employed workers under Vestas' supervision.

Total Recordable Injuries per million working hours (number)

Total Recordable Injury Rate (TRIR) represents all injuries reported in the Vestas reporting system per one million

working hours, including externally employed workers under Vestas' supervision.

Lost Time Injuries per million working hours (number)

Lost Time Injuries are injuries that have caused at least one workday of absence after the day of the injury per one million working hours. The Lost Time Injury Rate (LTIR) represents all Lost Time injuries reported per one million working hours. The number of working hours and external supervised workers are registered and measured on the same basis as the Total Recordable Injuries. The LTIR includes fatalities.

The number of working hours is measured on the basis of hours registered in the system for hourly-paid employees, and prescribed working hours for salaried employees excluding e.g. holidays, absence due to illness and maternity leave.

Employees

Average number of employees (FTEs)

The average number of employees is calculated as the twelve-month average number of full-time equivalents (FTEs). The employees included are under Vestas' financial control (i.e. have standard and temporary contracts directly with Vestas).

Employees at the end of the period (FTEs)

Employees at the end of the period are calculated based on total full-time equivalents (FTE). The employees included are under Vestas' financial control (i.e. have standard and temporary contracts directly with Vestas).

Diversity and inclusion

The share of women in the Board, the Executive management team and leadership positions are calculated based on headcounts at the end of the reporting period. Headcount is based on number of individuals employed, irrespective of contract (full-time/part-time).

Women in the Board and Executive Management team at the end of the period (%)

Women in the Board and Executive Management team is the share of women among the members of the Board who are elected by the Annual General Meeting and the share

of women among the members of the Executive Management combined.

Women in leadership positions at the end of the period (%)

The share of women in leadership positions is calculated based on headcounts at the end of the reporting period. The parameter is calculated based on the number of women in leadership positions divided by the total number of leadership positions. Employee information is from the company's ordinary registration systems with specification of gender and management level. Leadership positions comprise managers, specialists, project managers, and above.

Human rights

Community grievances (number)

The number of community grievances is calculated based on incidents registered in the reporting system. The measure "Community grievances" covers the total number of community complaints registered in the reporting system in the reporting year. Vestas registers and handles community incidents caused by Vestas or its contractors on communities that turn into a grievance, where a "community" is a person or group that is either directly or indirectly affected by Vestas or Vestas' activities. The cases occur in connection with a wind farm project and its associated facilities (e.g. accommodation facilities), a Vestas factory or a Vestas Research and Development Centre.

Community beneficiaries (number)

Community beneficiaries are defined as individuals that have benefitted by participating in Vestas' community development initiatives intended to upgrade skills or by receiving financial or equivalent aid.

These initiatives are implemented during the reporting period in connection to a wind farm project and associated facilities, a Vestas factory, or Vestas Research and Development Centre.

Community development initiatives are identified in collaboration with local stakeholders, such as local authorities and members of the local community to ensure that the initiatives meet local needs.

This indicator only includes defined community members that benefit directly. It does not include Vestas employees or community members in cases where the number of beneficiaries is undefined e.g. installation of solar cells on a village health clinic. Where the beneficiary is a household, Vestas calculates the total beneficiaries based on the average number of individuals per household defined by the UN Department of Economic and Social Affairs (UN 2017).

Social Due Diligence on projects in scope (%)

This measures the share of wind power projects, materialised as firm orders, that have been subject to social due diligence (SDD) processes in the reporting period. Wind farm projects in scope for SDD are: 1) Engineering, Procurement and Construction (EPC) projects in emerging markets; 2) all Supply-and-installation projects of 100 MW or above in emerging markets; and 3) projects in OECD countries with a risk rating of 'Extreme' or 'High' according to the Verisk Maplecroft's "Indigenous People" risk index on risks related to indigenous people's lands, territories or livelihoods under threat. In this context, 'Emerging markets' are defined as non-OECD, high-income countries, as defined by the World Bank classifications. SDD procedures include: 1) a high-level country assessment; 2) 'Know Your Customer' assessment; and 3) an in-depth project assessment on social matters.

Governance

Whistle-blower system

EthicsLine cases (number)

All whistleblower cases reported to the EthicsLine whistleblower hotline are investigated by the EthicsLine function supported by the relevant Ethics Committee, with the purpose of identifying whether a violation of the Code of Conduct has taken place.

Of which substantiated (number) or unsubstantiated (number): Upon the completion of the investigation, cases are classified as either substantiated or unsubstantiated. At the end of the reporting year, the variance between the total number of reported cases and the combined total of substantiated and unsubstantiated cases are calculated to identify the number of open cases still under investigation. These are expected to be assessed during the following reporting year, and included in the number of substantiated or unsubstantiated cases in the reporting year when the case is closed.

Appendix

- EU Taxonomy reporting
- UN SDGs

EU Taxonomy reporting

The EU Taxonomy for sustainable activities (the "Taxonomy") is a classification system of economic activities that are determined by the EU to make a substantial contribution to environmental sustainability.

Under Article 8(1) of the Taxonomy regulation (EU) 2020/852, companies required to publish non-financial information pursuant to the Non-Financial Reporting Directive (NFRD) shall disclose information to the public on how and to what extent their activities are associated with environmentally sustainable economic activities.

For reporting year 2022, companies are required to report on 1) the eligibility of their economic activities, 2) the environmental objective(s) their eligible activities substantially contribute to and 3) the alignment of their eligible activities with the applicable Do No Significant Harm ("DNSH") criteria and the Minimum Safeguards in line with Article 3 of EU/2020/852.

By screening our business activities, we have identified our manufacturing activities as eligible under Activity 3.1: Manufacture of renewable energy technologies, and our construction, service, and development activities as eligible under Activity 7.6: Installation, maintenance, and repair of renewable energy technologies.

Our manufacturing activities substantially contribute to climate change mitigation by manufacturing renewable energy technologies, and our construction, service and development activities substantially contribute to climate change mitigation by installing, maintaining, or repairing wind turbines.

To align with the DNSH criteria and comply with the Minimum Safeguards, we have ensured compliance to these criteria for each eligible business activity.

All DNSH criteria are applicable to Activity 3.1 while only DNSH 1: Climate Change Adaptation is applicable to Activity 7.6.

Taxonomy alignment

DNSH 1: Climate Change Adaptation

We ensure that we have screened our economic activities and critical suppliers against the physical climate risks listed in Section II of Appendix A to the Taxonomy. The materiality of the significant risks identified has been assessed, and adequate adaptation solutions have been implemented.

DNSH 2: Sustainable Use and Protection of Water and Marine Resources

We ensure that an Environmental Impact Assessment ("EIA") in accordance with Directive 2011/92/EU of the European Parliament and of the Council including an assessment of the impact on water in accordance with Directive 2000/60/EC, or equivalent, has been carried out for all manufacturing facilities in the EU. For facilities in countries outside the EU, we have ensured the presence of EIAs and water permits equivalent to the standards of the EU.

DNSH 3: Transition to Circular Economy

We ensure that our manufacturing activities assess the availability of, and where possible, adopt techniques that support the requirements under the three sub-criteria: Reuse, Design, and Waste Management. To comply with the sub-criteria Traceability of Substances, we have implemented a third-party software to track substances of concern, which will enable us to trace the materials used to manufacture products throughout their lifecycle.

DNSH 4: Pollution Prevention and Control

We ensure that our Prohibited and Restricted Substance Management document, used to regulate restricted and prohibited chemicals at all business levels and units at Vestas, meets the standards necessary under the five sub-criteria: Persistent Organic Pollution, Mercury, Ozone Depleting substances, Substances in Electrical and Electronic Equipment, and certain dangerous substances.

DNSH 5: Protection and Restoration of Biodiversity and Ecosystems

We ensure that an EIA or screening has been performed in accordance with Directive 2011/92/EU for all necessary facilities in the EU, and that the required mitigation and compensation measures for protecting the environment are implemented where necessary. For facilities in countries outside the EU, we have ensured the presence of EIAs and water permits equivalent to the standards of the EU.

Minimum Safeguards

Our Social Management System and Social Due Diligence approach is developed based on the United Nations Guiding Principles on Business and Human Rights ("UNGPs") and Organisation for Economic Co-operation and Development ("OECD") Guidelines for Multinational Enterprises. They contain all the necessary requirements to be considered as adequate process for human rights due diligence as per Article 18 of the Delegated Act.

We are compliant with the sub-criteria Taxation through our Tax Policy, which covers all decisions that directly or indirectly affect reporting and/or payment of taxes under the liability of any Vestas Group Company, and our Tax Risk Management reporting.

Our Global Anti-Bribery and Corruption Programme consists of five pillars: programme governance, learning & awareness, culture & behaviour, monitoring & auditing, and EthicsLine. Our annual Global Anti-Bribery and Corruption Survey is taken by Vestas employees globally and ensures that we have adequate anti-corruption processes in place in compliance with Article 18 of the Delegated Act.

Our Employee Code of Conduct and Supplier Code of Conduct each include a section on fair competition, which includes clear expectations on how our employees and suppliers should adhere to all applicable competition laws. We have also developed a detailed Competition Law Guideline and launched a mandatory e-learning on Competition Law for our office employees.

We have not registered any final court convictions violating labour law and human rights, tax laws, corruption laws, or fair competition laws against the Vestas Group or senior management, and we have implemented a new approach to tracking court convictions, ensuring compliance with the Taxonomy.

Taxonomy-aligned revenue

96 percent of our revenue is aligned for 2022. 71 percent of the aligned revenue is related to our manufacturing activities, and 25 percent of the aligned revenue is related to our construction and service activities.

For Taxonomy reporting, the revenue derived from 1) Supply-only, 2) Supply-and-installation, 3) Engineering, Procurement and Construction ("EPC"), and 4) Service contracts (excluding Sale of spare parts) is split under Activity 3.1 and Activity 7.6. The supply portion of contracts is included under Activity 3.1, and the installation portion and other activities included in the contracts are included under Activity 7.6.

Revenue not Taxonomy-aligned

4 percent of our revenue is eligible but not aligned for 2022. Based on our assessment, we cannot conclude that activities related to the Development business or Sale of spare parts are aligned. These activities are currently considered eligible under Activity 7.6. Alignment of these activities is planned for 2023.

Accounting principles - revenue

Vestas recognises revenue in compliance with IFRS 15, split into two segments: Power Solutions and Service.

The Power Solutions segment comprises revenue relating to Supply-only, Supply-and-installation, and EPC (Engineering, Procurement and Construction) contracts. Revenue from the Development business is reported under Supply-only in the Power Solutions segment. The Service segment comprises revenue relating to contracts for servicing wind turbines

manufactured by Vestas and wind turbines manufactured by third parties. Revenue generated from the sale of spare parts is reported under 'products and services transferred at a point in time' in the Service segment. More details on key accounting estimates, judgements, and accounting policies for revenue are available in the Consolidated Financial Statements, Note 1.2, page 83 in the Annual Report.

For Taxonomy reporting, we separated revenue resulting from supply in both 1) Supply-and-installation and 2) EPC projects. Supply-and-installation and EPC projects are bundled performance obligations as per IFRS 15.29, but in this case were separated to report revenue under the correct economic activity of the Taxonomy. The revenue from the Development business is presented under Activity 3.1 bundled together with Supply-only, which is in line with the presentation in Note 1.2, page 85 in the Annual Report.

The revenue is separated based on a ratio derived from the pricing of revenue in each contract type. The denominator includes all revenue derived from both our segments: Power Solutions and Service, net of taxes and rebates, as defined under article 2 point (5) of directive 2013/34/EU. The numerator includes all revenue except that which results from the Development business and Sale of spare parts as these activities are not aligned for 2022.

To avoid double counting, we excluded non-aligned revenue from the total revenue when calculating the percentage of aligned revenue.

Taxonomy-aligned OPEX

94 percent of our operating expenditure (OPEX) is aligned for 2022. 23 percent of the aligned OPEX is related to Activity 3.1, and 71 percent of the aligned OPEX is related to Activity 7.6.

The aligned OPEX consists of expenditures relating to short term leases, research and development costs not capitalised during the year, building renovation measures and other direct expenditures linked to service and operation of assets related to manufacturing, construction, and service.

OPEX not Taxonomy-aligned

1 percent of our OPEX is eligible but not aligned as it relates to the Development business and Sale of spare parts.

The remaining 5 percent of our OPEX is non-eligible as it is related to supporting administrative functions not directly linked to our eligible business activities.

Accounting principles - OPEX

Our OPEX comprises 1) research and development costs not capitalised during the year, and 2) distribution costs and administration costs as specified in Note 1.3 on page 86 in the Annual Report.

The definition of OPEX in the Taxonomy is different from the one used at Vestas. Following the definition of OPEX in Article 8(2) of the Delegated Act, we have included all expenditures relating to short term leases, repair and maintenance, research and development not capitalised during the year, building renovation measures and other direct expenditures relating to servicing and operation of assets in our calculation of OPEX.

The denominator includes OPEX relating to eligible as well as non-eligible activities. The numerator includes OPEX directly linked to aligned business activities and therefore excludes any OPEX related to the Development business, Sale of spare parts, and support functions.

Selected accounts that match the Taxonomy definition of OPEX have been classified based on specific business activities and summed up to calculate the numerator and the denominator. Each account is added to the sum only once to avoid double counting.

In 2022, the method to calculate eligible OPEX was changed. In 2021, OPEX comprised all production cost, research and development cost, distribution cost and special items and administration cost, excluding depreciation. In 2022, most production costs are not eligible as OPEX as per the definition of OPEX in Article 8(2) of the Delegated Act. The eligible OPEX for 2022 is based on selected accounts in production, research and development, and distribution cost.

Taxonomy-aligned CAPEX

91 percent of our capital expenditure (CAPEX) is aligned for 2022. All CAPEX relating to assets in manufacturing, technology, sales, and service is aligned. 72 percent of the aligned CAPEX is related to Activity 3.1 and 19 percent of the aligned CAPEX is related Activity 7.6.

CAPEX not Taxonomy-aligned

7 percent of our CAPEX is eligible but not aligned as it stems from the Development business and Sale of spare parts.

The remaining 2 percent of our CAPEX is non-eligible as it is related to supporting administrative functions not directly linked to our eligible business activities.

Accounting principles - CAPEX

Vestas has fixed assets presented as Intangible assets and Property, Plant and Equipment in the Balance Sheet as specified on page 75 in the Annual Report. Any additions to these asset categories are considered as CAPEX. Refer to accounting policies in the Consolidated Financial Statements, Notes 3.1 on page 96 of the Annual Report for intangible assets and 3.2 on page 98 of the Annual Report for property, plant, and equipment.

For Taxonomy reporting, the assets considered as CAPEX are: software, other intangible assets, development projects in progress, land and buildings, plant and machinery, other fixtures and fittings, tools and equipment in progress and right-of-use assets. Both cash and non-cash additions to these assets are considered as CAPEX. The denominator includes all CAPEX for the assets mentioned above. The numerator includes CAPEX directly linked to aligned business activities and therefore excludes any CAPEX related to the Development business, Sale of spare parts, and assets owned by support functions.

To avoid double counting, we have calculated the percentage of aligned CAPEX by excluding non-aligned CAPEX from total CAPEX for all asset classes.

Revenue

	Absolute revenue (3)	mEUR	%	%	Substantial Contribution criteria			DNSH criteria ('Does Not Significantly Harm')						Category (enabling activity or (20))	Category (transitional activity) (21)	Category (21)				
					Climate change mitigation (5)	Climate change adaptation (6)	Water and marine resources (7)	Circular economy (8)	Pollution (9)	Biodiversity and ecosystems (10)	Climate change adaptation (12)	Water and marine resources (13)	Climate change mitigation (11)	Circular economy (14)	Pollution (15)	Biodiversity and ecosystems (16)	Minimum safeguards (17)	Taxonomy-aligned proportion of revenue 2021 (19)	Taxonomy-aligned proportion of revenue 2022 (18)	E
Economic activities																				
A. Taxonomy-eligible activities																				
A.1. Environmentally sustainable activities (Taxonomy-aligned)																				
3.1. Manufacture of renewable energy technologies ¹	10,308	71	100	0	0	0	0	0	0	N/A	Y	Y	Y	Y	Y	Y	71	N/A	E	-
7.6 Installation, maintenance and repair of renewable energy technologies ²	3,567	25	100	0	0	0	0	0	0	N/A	Y	N/A	N/A	N/A	N/A	Y	25	N/A	E	-
Revenue of environmentally sustainable activities (Taxonomy-aligned) (A.1)	13,875	96	100	0	0	0	0	0	0	N/A	-	-	-	-	-	-	96	N/A	E	-
A.2 Taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned)																				
3.1. Manufacture of renewable energy technologies ¹	(42)	0	100	0	0	0	0	0	0	N/A	N	N	N	N	N	Y	0	N/A	E	-
7.6 Installation, maintenance and repair of renewable energy technologies ²	653	4	100	0	0	0	0	0	0	N/A	N	N/A	N/A	N/A	N/A	Y	0	N/A	E	-
Revenue of Taxonomy-eligible but not environmentally sustainable activities (Not Taxonomy-aligned) (A.2)	611	4	100	0	0	0	0	0	0	N/A	-	-	-	-	-	-	0	N/A	E	-
Total (A1 + A2)	14,486	100	100	0	0	0	0	0	0	N/A	-	-	-	-	-	-	96	N/A	E	-
B. Taxonomy non-eligible activities																				
Revenue of Taxonomy-non-eligible activities (B)	0	0																		
Total (A + B)	14,486	100																		

¹ Codes: C25,C27,C28.

² Codes: F42,F43,M71.

Operating expenditure (OPEX)

	Absolute OPEX (3) mEUR	Substantial Contribution criteria						DNSH criteria ('Does Not Significantly Harm')						Biodiversity and eco-systems (16) Y/N	Minimum safeguards (17) Y/N	Taxonomy-aligned proportion of OPEX 2021 (19) %	Taxonomy-aligned proportion of OPEX 2022 (18) %	Category (enabling activity or (20)) E	Category (transitional activity) (21) T	
		Proportion of OPEX (4) %	Climate change mitigation (5) %	Climate change adaptation (6) %	Water and marine resources (7) %	Circular economy (8) %	Pollution (9) %	Biodiversity and ecosystems (10) %	Climate change mitigation (11) Y/N	Water and marine resources (13) Y/N	Circular economy (14) Y/N	Pollution (15) Y/N	Y/N							
Economic activities																				
A. Taxonomy-eligible activities																				
A.1. Environmentally sustainable activities (Taxonomy-aligned)																				
3.1. Manufacture of renewable energy technologies ¹	107	23	100	0	0	0	0	0	N/A	Y	Y	Y	Y	Y	23	N/A	E	-		
7.6 Installation, maintenance and repair of renewable energy technologies ²	322	71	100	0	0	0	0	0	N/A	Y	N/A	N/A	N/A	Y	71	N/A	E	-		
OPEX of environmentally sustainable activities (Taxonomy-aligned) (A.1)	429	94	100	0	0	0	0	0	N/A	-	-	-	-	-	94	N/A	E	-		
A.2 Taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned)																				
3.1. Manufacture of renewable energy technologies ¹	4	1	100	0	0	0	0	0	N/A	N	N	N	N	Y	0	N/A	E	-		
7.6 Installation, maintenance and repair of renewable energy technologies ²	0	0	0	0	0	0	0	0	N/A	N	N/A	N/A	N/A	Y	0	N/A	E	-		
OPEX of Taxonomy-eligible but not environmentally sustainable activities (Not Taxonomy-aligned) (A.2)	4	1	100	0	0	0	0	0	N/A	-	-	-	-	-	0	N/A	E	-		
Total (A1 + A2)	433	95	100	0	0	0	0	0	N/A	-	-	-	-	-	94	N/A	E	-		
B. Taxonomy non-eligible activities																				
OPEX of Taxonomy-non-eligible activities (B)	23	5																		
Total (A + B)	456	100																		

1 Codes: C25,C27,C28.

2 Codes: F42,F43,M71.

Capital expenditure (CAPEX)

	Absolute CAPEX (3) mEUR	Substantial Contribution criteria						DNSH criteria ('Does Not Significantly Harm')						Category (enabling activity or (transitional activity) (21)	Category (20)	Taxonomy-aligned proportion of CAPEX 2021 (19)	Taxonomy-aligned proportion of CAPEX 2022 (18)	
		Proportion of CAPEX (4) %	Climate change miti- gation (5) %	Climate change adap- tion (6) %	Water and marine resources (7) %	Circular economy (8) %	Pollution (9) %	Biodiversity and eco- systems (10) %	Climate change adap- tion (11) Y/N	Water and marine resources (13) Y/N	Circular economy (14) Y/N	Pollution (15) Y/N	Biodiversity and eco- systems (16) Y/N	Minimum safeguards (17) Y/N				
Economic activities																		
A. Taxonomy-eligible activities																		
A.1. Environmentally sustainable activities (Taxonomy-aligned)																		
3.1. Manufacture of renewable energy technologies ¹	685	72	100	0	0	0	0	0	N/A	Y	Y	Y	Y	Y	72	N/A	E	-
7.6 Installation, maintenance and repair of renewable energy technologies ²	180	19	100	0	0	0	0	0	N/A	Y	N/A	N/A	N/A	Y	19	N/A	E	-
CAPEX of environmentally sustainable activities (Taxonomy-aligned) (A.1)	865	91	100	0	0	0	0	0	N/A	-	-	-	-	-	91	N/A	E	-
A.2 Taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned)																		
3.1. Manufacture of renewable energy technologies ¹	21	2	100	0	0	0	0	0	N/A	N	N	N	N	Y	0	N/A	E	-
7.6 Installation, maintenance and repair of renewable energy technologies ²	50	5	100	0	0	0	0	0	N/A	N	N/A	N/A	N/A	Y	0	N/A	E	-
CAPEX of Taxonomy-eligible but not environmentally sustainable activities (Not Taxonomy-aligned) (A.2)	71	7	100	0	0	0	0	0	N/A	-	-	-	-	-	0	N/A	E	-
Total (A1 + A2)	936	98	100	0	0	0	0	0	N/A	-	-	-	-	-	91	N/A	E	-
B. Taxonomy non-eligible activities																		
CAPEX of Taxonomy-non-eligible activities (B)	15	2																
Total (A + B)	951	100																

1 Codes: C25,C27,C28.

2 Codes: F42,F43,M71.

UN SDGs



Where we can create positive impacts with our customers and value chain

Goal: Ensure access to affordable, reliable, sustainable and modern energy for all

UN Target (Indicator)

- 7.1: By 2030, ensure universal access to affordable, reliable and modern energy services (7.1.1 Proportion of population with access to electricity; 7.1.2: Proportion of population with primary reliance on clean fuels and technology)

Our contributions

- Being a pioneer and leader in wind energy solutions for several decades, we worked to make wind a competitive source of energy. On average, electricity from onshore wind is produced with one of the lowest levelised costs of energy. This achievement is supported by our global service business, improving our customers' business cases and enabling a stable supply of renewable electricity.

UN Target (Indicator)

- 7.2: By 2030, increase substantially the share of renewable energy in the global energy mix (7.2.1 Renewable energy share in the total final energy consumption)

Our contributions

- We remain at the forefront of the transition towards affordable and clean energy – delivering between 30 and 50 units of energy back to society for every unit needed in the life cycle of a Vestas wind turbine.
- By the end of 2022, the company has collaborated with its closest stakeholders to install wind turbines in 87 countries, adding up to a total capacity installed of more than 164 GW.
- In 2022, Vestas sourced 100 percent of its electricity consumption from renewable sources.



Where we can create positive impacts with our customers and value chain

Goal: Take urgent action to combat climate change and its impacts

UN Target (Indicator)

- 13.2: Integrate climate change measures into national policies, strategies and planning (13.2.1 Number of countries that have communicated the establishment or operationalisation of an integrated policy/strategy/plan which increases their ability to adapt to the adverse impacts of climate change, and foster climate resilience and low greenhouse gas emissions development in a manner that does not threaten food production)

Our contributions

- With 164 GW of installed wind energy, we along with our stakeholders have avoided the emission of 1.9 billion tonnes of CO₂e.
- At COP27, we took a strong public stance to hasten the transition to renewable electricity to meet Paris Climate Targets.



Where we can create positive impacts with our customers and value chain

Goal: Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

UN Target (Indicator)

8.1: Sustain per capita economic growth in accordance with national circumstances and, in particular, at least X percent gross domestic product growth per annum in the least developed countries (Annual growth rate of real GDP per capita)

Our contributions

- As our industry scales to meet the world's sustainable energy demands, Vestas has grown its revenue by X percent in the last X years. This growth creates even more jobs in our supply chain and affiliated industries.

UN Target (Indicator)

8.2: Achieve higher levels of economic productivity through diversification, technological upgrading and innovation, including through a focus on high-value added and labour-intensive sectors (8.2.1 Annual growth rate of real GDP per employed person)

Our contributions

- Adding renewable energy capacity increases jobs faster than investing in fossil fuels as renewables are more labour intensive and are quicker to build than thermal power plants. Per USD 10 million investment, renewable energy creates 75 jobs (direct and indirect), as compared to 27 from fossil fuels.¹
- In 2022, we invested EUR X m in R&D related to the further scale-up of clean energy.

UN Target (Indicator)

8.5: By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value (8.5.1 Average hourly earnings of female and male employees, by occupation, age and persons with disabilities)

Our contributions

- Aside from a competitive salary, working for Vestas comes hand-in-hand with a range of other benefits (depending on the local market conditions): pension, insurance plans, health insurance, subsidised lunch, gym access and work/life policies. Our compensation packages are benchmarked against local market salaries for each position – to ensure equal and fair pay regardless of social identity.

UN Target (Indicator)

8.7: Take immediate and effective measures to eradicate forced labour, end modern slavery and human trafficking and secure the prohibition and elimination of the worst forms of child labour, including recruitment and use of child soldiers, and by 2025 end child labour in all its forms (8.7.1 Proportion and number of children aged 5-17 years engaged in child labour, by sex and age)

Our contributions

- For the past decade, we have been working to develop and promote a unique approach to respecting human rights. In our Human Rights Policy, we recognise our responsibility to respect human rights as set out in the United Nations Universal Declaration of Human Rights and according to the framework outlined in the UN Guiding Principles on Business and Human Rights. Our Supplier Code of Conduct outlines this expectation to all our stakeholders, and we publicly endorse and advocate for mandatory human rights due diligence. Through our Social Due Diligence Process and supplier screening, we work to end forced labour, modern slavery and child labour as part of our ambition to be the most socially responsible company in the energy industry.

UN Target (Indicator)

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 (8.8.1 Frequency rates of fatal and non-fatal occupational injuries, by sex and migrant status)

Our contributions

- In our Freedom of Association Policy, we commit to respecting employee's rights to freedom of association and collective bargaining.
- We continue our work to reduce the total recordable injury rate – achieving Total Recordable Injury Rate (TRIR) of 3.3 per million working hours in 2022. By 2025 we want to demonstrate a TRIR of 1.5, on our trajectory to become the safest workplace in the energy industry.

¹ Sources: McKinsey & Company, How a post-pandemic stimulus can both create jobs and help the climate, 05/2020, <https://www.mckinsey.com/business-functions/sustainability/our-insights/how-a-post-pandemic-stimulus-can-both-create-jobs-and-help-the-climate#>; Irena, Global Renewables Outlook, 04/2020, <https://www.irena.org/publications/2020/Apr/Global-Renewables-Outlook-2020>



Where we can reduce the negative impacts of our operations

Goal: Ensure sustainable consumption and production patterns

UN Target (Indicator)

12.2: By 2030, achieve the sustainable management and efficient use of natural resources (12.2.1 Material footprint, material footprint per capita, and material footprint per GDP)

Our contributions

- With our Circularity Roadmap, we are the first company to release a holistic plan for circularity in the wind industry.
- Today, all our turbines are based on proven technology using drive trains that have a minimal use of rare earths. The contribution of rare earth elements used in the turbine generator magnets, and also in the magnets used in the tower contribute with below 0.1 percent of total life cycle impacts (Vestas 2014).

UN Target (Indicator)

2.5: By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse (National recycling rate, tons of material recycled)

Our contributions

- We have the ambition to build zero-waste wind turbines by 2040. This means that we are aiming to create a value chain that generates no waste materials. In 2021, we launched our Circularity Roadmap, which includes our commitment to landfill less than 1 percent and recycle more than 94 percent of waste by 2030.

UN Target (Indicator)

12.6: Encourage companies, especially large and transnational companies, to adopt sustainable practices and to integrate sustainability information into their reporting cycle (12.6.1 Number of companies publishing sustainability reports)

Our contributions

- We value transparent communication with our stakeholders. In our Annual Sustainability Report, we provide information about our sustainability strategy and performance.



How we can influence society at large

Goal: Strengthen the means of implementation and revitalize the global partnership for sustainable development

UN Target (Indicator)

17.1: Strengthen domestic resource mobilization, including through international support to developing countries, to improve domestic capacity for tax and other revenue collection (17.1.2 Proportion of domestic budget funded by domestic taxes)

Our contributions

- In 2022, we publicly released our tax contribution for every country we operate in. We support the harmonization of international tax rules and collaboration between governments to ensure a fair tax environment, where international trade is facilitated, corporations contribute their fair share, and tax disputes are handled in an efficient manner under due process.

UN Target (Indicator)

17.17 Encourage and promote effective public-private and civil society partnerships, building on the experience and resourcing strategies of partnerships (17.17.1 Amount of United States dollars committed to public-private and civil society partnerships)

Our contributions

- We seek a partnership approach to sustainable development and are engaged in various supplier and customer collaborations to improve environmental performance in our operations and products as well as to drive the sustainable energy transition.

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