

Vestas

The Vestas Sustainability Report 2019



Wind. It means the world to us.™

Contents

03 Introduction

- 06 A statement from the Vestas Executive Management Team
- 07 Our business model
- 08 Our history: then and now

09 The Vestas sustainability strategy

- 10 What areas of sustainability do we focus on?
- 10 How do we define sustainability?
- 11 The Vestas Sustainability Strategy: Sustainability in everything we do
- 12 How will we achieve these four ambitions?
- 16 How will we measure our progress?

17 Reporting on our approaches and progress in 2019

- 18 2019 at a glance
- 19 Key achievements
- 20 Our employees
- 27 Our responsibilities
- 29 Environmental sustainability
- 35 Working with local communities
- 37 Governing sustainability
- 39 Our stakeholders
- 40 Reporting on the UN SDGs
- 41 Sustainability highlights
- 42 Notes to sustainability highlights



Introduction

We think.
We feel.
We act.
We care.
We lead.
We challenge.
We inspire.
We include.
We develop.
We learn.
We transform.
We persevere.
We win.

We make
the world a
better place.

About this report



What is the purpose of this report?

At Vestas, we are working to make our company – and the world, a more sustainable place. In this report, we communicate the progress we made in 2019. This report also explains how we worked during the year to embed the 10 principles of the United Nations Global Compact into our strategies and operations.



Does Vestas use the UN Sustainable Development Goals?

On page 40, we report on our contribution in 2019 to six of the seventeen UN SDGs.



Is this the Vestas Communication on Progress 2019?

Combined with the Vestas Annual Report 2019, this Sustainability Report constitutes Vestas' Communication on Progress (COP). Pursuant to our UN Global Compact membership, we apply the option stipulated in section 99a of the Danish Financial Statements Act – concerning the statutory duty of large enterprises to report non-financial information by referring to the COP report.

“ We are working together to make Vestas, and the world, a more sustainable place. ”

The Executive Management Team of Vestas Wind Systems A/S



Members of the Executive Management from left: Anders Vedel (EVP, Vestas Power Solutions), Juan Araluce (EVP, Sales), Marika Fredriksson (EVP, Finance), Henrik Andersen (President and CEO), Kerstin Knapp (EVP People & Culture), Tommy Rahbek Nielsen (EVP, COO - interim), and Christian Venderby (EVP, Service).

A statement from the Vestas Executive Management Team

Dear reader,

Energy is the cornerstone of modern society and key to a better quality of life. At the same time, energy today accounts for around 60 percent of total global greenhouse gas emissions – making it the main contributor to the climate crisis. Moreover, the burning of fossil fuels results in millions of deaths per year caused by air pollution. Unless the world fundamentally changes the way it produces, distributes and uses energy, these figures will continue to rise as energy demand increases.

Limiting global warming to 1.5 °C above pre-industrial temperatures requires unprecedented transitions in all areas. In response to this challenge, countries, governments, states, cities and companies are beginning to introduce increasingly ambitious climate and renewable energy targets. But there is still much to be done. In 2017, human-induced warming reached approximately 1 °C above pre-industrial levels. This caused multiple changes in the climate system – reminding us that the alleviation of the climate crisis remains a long way off.

Although the road to a sustainable future is long and uncertain, renewable energy now offers a viable solution. With availability today at a scale and cost that can meet the world's energy demand, and limit the impact of human activity, the case for renewable energy has become too strong to ignore. As the leader in wind energy, Vestas is well-positioned to lead the global energy transition. But we are also aware that – although renewables are now cheaper than fossil fuels in two-thirds of the world, this transition – and Vestas' journey within it, has only just begun.

Vestas pioneered wind energy more than 40 years ago and has since displaced 1.3 billion tonnes of CO₂ from being released into the atmosphere between 1981-2019. We have also taken steps to improve our sustainability performance; for example, since 2013, we have been fully or almost entirely powered by renewable electricity.

But the landscape has changed. To remain at the forefront of the energy transition, we must do even more today to meet the growing sustainability expectations of our customers, partners, investors and employees.

Therefore, it is with great pride that we write this year's statement as we begin to significantly ramp-up our efforts on sustainability. With the launch of our sustainability strategy – "Sustainability in everything we do", we are taking the next steps on our sustainability journey. We are shifting our approach from "sustainability is the business we are in", to "sustainability in everything we do" – which is key to us becoming the global leader in sustainable energy solutions. Therefore, we are integrating sustainability holistically throughout our operations.

Ensuring a healthy planet for future generations is an essential part of what Vestas does. Consequently, we have committed ourselves to the following four goals:

- To become carbon neutral by 2030, without using carbon offsets
- To produce zero-waste wind turbines by 2040
- To become the safest, most inclusive and socially-responsible workplace in the energy industry
- Leading the transition towards a world powered by sustainable energy

We will be reporting on our progress in executing this new sustainability strategy on an annual basis.

For the overall sustainability progress we have made this year in 2019, we would like to thank every single Vestas employee – along with our customers, investors and suppliers, for their unwavering commitment. Going forward, this is a journey; in executing this new strategy, we will work closely with all our stakeholders to make Vestas, and the world, a more sustainable place.

Yours sincerely,

The Vestas Executive Management Team



Our business model

Key resources

Natural resources

Our energy solutions utilise natural resources such as wind.

Research and development

We constantly provide our customers with industry-leading technology.

Human resources

We employ the best and most passionate people.

Manufacturing capabilities

Our global manufacturing and supply chain capabilities secure high quality and efficiency.

Working capital management

Prepayments and milestone payments from customers fund our manufacturing and service operations.

Credit worthiness

Our green bond facility showcases our financial strength and serves as a business enabler for customers.

Vestas



Power solutions

With developing and manufacturing of onshore wind turbines at the core, Vestas provides sustainable energy solutions from site studies to installation.



Service

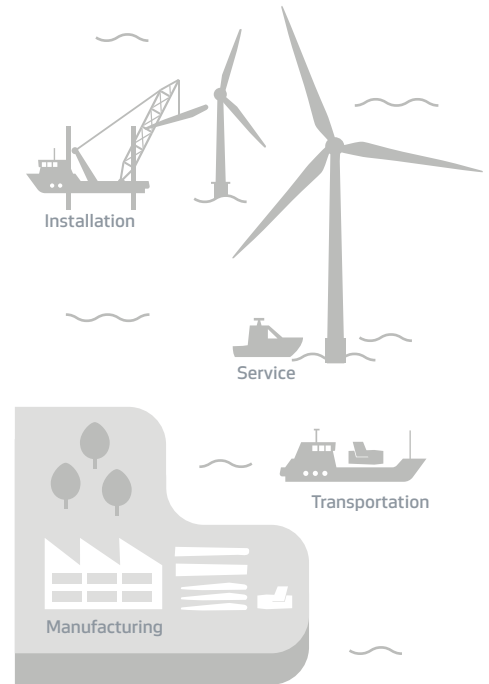
Service solutions and performance optimisation for Vestas and non-Vestas wind turbines globally to improve business case certainty.



Offshore

Through the joint venture, MHI Vestas Offshore Wind, developing, manufacturing, installing, and servicing offshore wind turbines.

MHI Vestas Offshore Wind



Value created

Return on investment

We optimise solutions for our customers to generate the highest possible return on investment.

Local community development

We engage with and create value for local communities when entering into new territories.

Safety culture

Safety is always top priority. This provides our employees with a safe working place in all parts of our operations.

Climate efficiency

A single wind turbine produces 30-50 times more energy than it uses in its entire lifetime.

Shareholder value

Through our priorities for capital allocation, we create value for our shareholders.

Our history: then and now

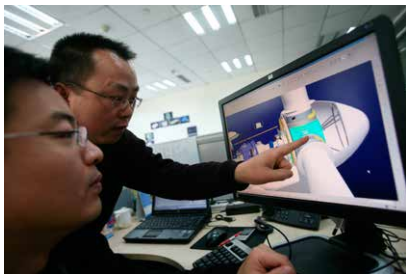


While the evolution of Vestas has followed many twists and turns, it was not until 1945 that the name Vestas first emerged.



The year 2020 now marks 75 years since our company first assumed the name Vestas – now synonymous with wind turbines and the emergence of the wind energy industry.

In 1979, our company sold and installed the first ever Vestas wind turbine. The energy capacity of that turbine was 30 KW. In 1991, we had installed our thousandth turbine.



Fast forward to 2012, and we reached the milestone of having installed 50 GW of sustainable energy solutions worldwide.

Just seven short years after – at the end of 2019, our installed base has now skyrocketed to 113 GW worldwide. In less than one quarter of our entire historical existence in

the wind energy sector, our installed base has now more than doubled – reaping value for the climate and hundreds of thousands of people worldwide.



Over the years, our company has matured and evolved into a multinational corporation, but the essence of what the original Vestas employees were doing remains the same; innovation.

What began at the time as a feat of innovation in the energy sector, has now become one of the most promising tools we have to de-carbonise the global energy supply sector.¹⁾

In 7 short years, we have gone from having installed 50 GW of installed wind energy capacity in 2012, to 113 GW of installed sustainable energy solutions at the end of 2019, worldwide.



But we haven't done this alone: we work with our customers, suppliers and partners, as well as the hard work and commitment of our employees, to actively transform the global energy sector.



As a result, today, we have installed more wind energy capacity than any other company in energy history.



But our expansion is more than a testament to our strength as a company; it is a testament to the power of sustainable energy – and there is so much more in store. We are leading the transition towards a world powered by sustainable energy, and this journey is only just beginning.



1) Source: Luderer (2019) Decarbonizing the power sector: renewable energy offers most benefits for health and environment. November 2019. Available from: <https://www.pik-potsdam.de/news/press-releases/decarbonizing-the-power-sector-renewable-energy-offers-most-benefits-for-health-and-environment>

The Vestas sustainability strategy



CONTENTS

INTRODUCTION

THE VESTAS SUSTAINABILITY STRATEGY

REPORTING ON OUR APPROACHES
AND OUR PROGRESS IN 2019

What areas of sustainability do we focus on?



Environmental sustainability



Social sustainability



Sustainability in governance

How do we define sustainability?

If a practise is socially and environmentally sustainable, it can continue over time and cause little or no harm to people or the planet.

If a practice is genuinely sustainable, it will create value in the process. When we talk of 'value', we mean the ability to improve something for the benefit of people and/or the planet.

Meanwhile, sustainability in governance requires that the process or practice be one that can continue over time, while causing little or no harm to stakeholders and those being governed. Recognised principles

and standards must be adhered to and, in turn, must catalyse progress on sustainability. At Vestas, sustainability in governance is a top priority – encompassing board structure, company processes, reporting systems, hierarchy, remuneration and company law.

In governing our work on sustainability, we hold ourselves to the same principles of creating value and being effective and efficient in our execution of the Vestas sustainability strategy and our broader work on sustainability.



The Vestas Sustainability Strategy: Sustainability in everything we do



In October 2019, the Vestas Executive Committee and the Board of Directors for Vestas Wind Systems A/S approved the Vestas sustainability strategy. Sustainability now sits at the heart of our corporate strategy. Our progress in achieving these strategic ambitions will be communicated annually.

“ We are in a time now where business as usual is not an option – not even for a company like Vestas.”

Lisa Ekstrand
Senior Director and Head of Sustainability



How will we achieve these four ambitions?

Integrating sustainability in everything we do is part of our vision to become a global leader in sustainable energy solutions.

While progress is being made around the world to reduce carbon emissions, much remains to be done if we are to meet the long-term temperature goal outlined in the 2015 Paris Agreement.

The rapid decarbonisation of the global energy supply is critical to limit global warming to 1.5 degrees Celsius above pre-industrial levels. Promisingly, wind and solar energy offer the greatest potential benefit to drive this transition and safeguard the health of the planet and all life on it.¹⁾ But we know we cannot rely on the virtue of our product alone; to meet the growing expectations of our customers, partners, investors and employees, we need to do more.

Therefore – while we continue to make and service products that help to reduce CO₂ emissions, we will now focus even more on improving our own sustainability performance. This means improving our own environmental performance – while creating value for local communities, promoting a safe, diverse and inclusive workplace, and leading the transition to a world powered by sustainable energy; in short, making sustainability part of everything we do.

With our sustainability strategy “Sustainability in everything we do”, we are taking the next steps on our sustainability journey. As we work towards becoming the global leader in sustainable energy solutions, we are ramping-up our efforts to integrate sustainability not only across our business, but throughout our operations and value chain. We will not just make products that build a more sustainable planet, but we will do so in the most sustainable way possible.

Going beyond our promise to continue developing energy solutions that reduce CO₂ emissions, we are now making sustainability part of everything we do.

Becoming carbon-neutral without using carbon offsets is our first commitment to make sustainability part of everything we do.



Sustainability in everything we do



Carbon neutral company by 2030 – without using carbon offsets

Vestas

On our journey to becoming carbon neutral, we will reduce our CO₂ emissions by 55 percent by 2025 – with the goal of reaching 100 percent by 2030. As Vestas is committed to leading the transition to a world entirely powered by sustainable energy, we will not use carbon offsets to help us achieve carbon neutrality. Instead, we will deliver CO₂ reductions through our own actions. Taking the first steps in 2020, we will replace all of our company cars with electric vehicles, start replac-



1) Source: Luderer (2019) Decarbonizing the power sector: renewable energy offers most benefits for health and environment. November 2019. Available from: <https://www.pik-potsdam.de/news/press-releases/decarbonizing-the-power-sector-renewable-energy-offers-most-benefits-for-health-and-environment>

ing our global service fleet with vehicles fuelled by renewable energy, and explore further steps to reduce heating and transport-related CO₂ emissions from our operations.

Our ambition to be the global leader in sustainable energy solutions means taking full responsibility for our environmental footprint. Therefore, we need to do more than reduce the CO₂ emissions linked to our own operations: we are also committing to reduce the CO₂ emissions from our full supply chain by 45 percent per MWh generated, by 2030. Reducing CO₂ emissions in our supply chain will be achieved in two ways. The first way will be through the efforts of our main suppliers – reducing their emissions. The second way will be within Vestas – focusing on how we design our products and the Vestas supply chain. We have chosen this specific target because it incentivises sustainability partnerships with suppliers that reduce CO₂ emissions, and allows for the continued growth of the global renewable energy sector.

These commitments are based on recommendations from the Science Based Targets initiative (SBTi) – an initiative led by the Carbon Disclosure Project, the UN Global Compact, the World Resources Institute and the WWF.

Producing zero-waste wind turbines by 2040 is our second commitment to make sustainability a part of everything we do.



Committing to zero-waste turbines means we are aiming to create a value chain that generates no waste materials. We will achieve this by developing and implementing a new waste management strategy and taking a circular economy approach to the different phases of the Vestas value chain: design, production, service and end-of-life. We will present this strategy within the next two years.

Today, Vestas wind turbines are on average 85 percent recyclable. However, our wind turbine rotors (blades and hubs) are currently comprised of non-recyclable composite materials. As a first step, therefore, we will focus on improving the recyclability of all turbine blades. We will introduce incremental targets to increase the recyclability rate of these components from 44 percent to 50 percent by 2025, and to 55 percent by 2030. We will then implement several initiatives designed to address the handling of existing blades after decommissioning. These measures will cover new recycling technologies that are optimal for composite waste, such as glass fiber recycling and plastic parts recovery. We will also be implementing a new process for the decommissioning of blades. We will also be supporting and assisting our customers; assisting them in decreasing the amount of waste material currently being sent to landfill.

In the coming years, we will also consider other aspects of the turbine life-cycle – with a view to improving the recyclability rate of blades and nacelles.

Becoming the safest, most inclusive and socially-responsible company in the energy industry is our third commitment to make sustainability a part of everything we do.

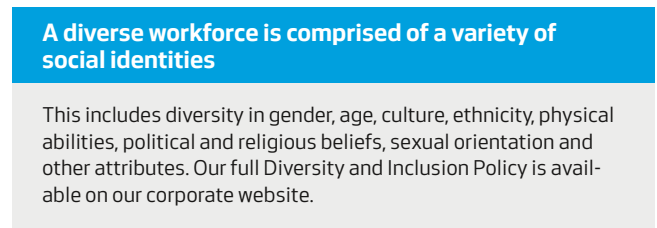


Every day, thousands of Vestas employees go to work across the world to manufacture, install and service our wind farms. For 14 years, Vestas has operated under the principle of 'safety first'. Over a 14-year period, we have successfully lowered lost-time injury rates by 96 percent, and in 2019, we reached a lost-time injury rate of 1.2 per one million hours worked.

In 2011, we began tracking Total Recordable Injury Rate (TRIR). This includes "restricted work injuries" and "medical treatment injuries" – providing greater insight to help inform our activities and initiatives to promote safety in everything we do at Vestas. The incidence of total recordable injuries decreased from 4.0 per one million working hours in 2018, to 3.9 in 2019: the incidence of total recordable injuries in 2019 of 3.9 per one million working hours constitutes a reduction from the year before. However, it is above the target of max. 3.6. The target for 2020 is 3.1.

Making sustainability part of everything we do also means increasing our focus on creating a safe environment and culture for all of our employees. Moving forward, we are introducing medium-term and long-term targets for reducing the total recordable injury rate (TRIR) to 1.5 by 2025 and 0.6 by 2030 – ensuring a 15 percent reduction in TRIR year-on-year.

Several new safety initiatives will be introduced in 2020. In addition to the existing behavioral safety programs, we are introducing other initiatives targeting safety by design. This means designing our products from a perspective that enhances safety in all phases of the value chain: manufacturing, installation and decommissioning. We are also examining our manufacturing processes with a focus on ergonomics and automation. In addition, we are piloting projects on predictive analytics and augmented reality training which is targeting construction and service site safety.





At Vestas, more than 100 nationalities work together to achieve our vision of becoming the global leader in sustainable energy solutions. The internal mix of national and local identities is a major competitive advantage for the company: it brings together multiple perspectives, levels of experience and educational backgrounds – working together to expand and deepen access to sustainable energy solutions worldwide. However, if we are to adequately represent the societies in which we operate, we must be more ambitious in our actions and initiatives surrounding diversity and inclusion.

As a first step, we are focusing on increasing the percentage of women in leadership positions in the company to 25 percent by 2025, and to 30 percent by 2030. In 2019, women occupied 19% of our leadership positions. Whilst we acknowledge that gender is only one form of social identity, we believe it to be a measurable and fair indication.

To support these targets, in 2020, we will commission an external audit of our pay equity and processes within our People and Culture (HR) Department. This will involve a review of all our recruitment procedures and processes. Training to ensure that inclusivity is embedded into the way we work as a company everyday will also be provided. In 2019, every employee in our People and Culture (HR) Department received unconscious bias training – amounting to more than 250 people. In 2021, this will become a mandatory part of all leadership and talent programmes.

In 2020, we will implement a tool designed to help managers and recruiters develop more inclusive job advertisements. This move is part of the process of training and transition to ensure we are eliminating unconscious bias as much as is possible from all Vestas recruitment practises and procedures. Research demonstrates that certain words can be perceived as inherently masculine, feminine, ageist or discriminatory on the basis of race or culture, and in turn, that the use of such words in job advertisements can attract certain candidates and discourage others from applying²⁾. Therefore, this tool will help us to attract a deeper and more diverse talent pool at Vestas.

Other initiatives include the expansion of our Vestas role model campaign to inspire career development, and increased focus on our talent and development programmes. More details about these initiatives can be found in the 'Our employees' section later in this report.

2) Source: Gaucher, Friesen and Kay: Evidence That Gendered Wording in Job Advertisements Exists and Sustains Gender Inequality. Journal of Personality and Social Psychology: American Psychological Association 2011, Vol. 101, No. 1, 109–128. 2011. Available from: <https://ideas.wharton.upenn.edu/wp-content/uploads/2018/07/Gaucher-Friesen-Kay-2011.pdf>
Source: Newman, Groom, Handelman and Pennbaker. Gender Differences in Language Use: An Analysis of 14,000 Text Samples. Discourse Processes, 45:211–236. Routledge. 2008. Available from: http://www.joycerain.com/uploads/2/3/2/0/23207256/gender_differences_in_language_use.pdf

Leading the transition towards a world powered by sustainable energy is our fourth commitment to make sustainability a part of everything we do.



This goal marks our commitment to taking a leadership role in driving decarbonisation and electrification beyond the power sector.

To achieve these ambitions, sustainability leaders need to collaborate and implement change fast.

At New York Climate Week in September 2019, we announced Vestas' participation in the Getting to Zero Coalition. The Coalition represents senior leaders within the maritime, energy, infrastructure and finance sectors, uniting to lead a push for the decarbonisation of international

shipping. Our participation in this Coalition demonstrates that we are already working collaboratively to drive decarbonisation. It also demonstrates the extent to which we see renewables as being crucial to the development of e-fuels.

On 9 September 2019, Vestas was also announced as the Principal Partner of the Mercedes-Benz EQ Formula E Team. Formula E is a motorsport championship using only electric cars. Under the tagline "Powered by Vestas", this long-term partnership provides further substantiation of Vestas' ongoing efforts to partner and drive change within sustainability. Through this partnership, we hope to unite the power of sport and the power of sustainable energy in the effort to drive electrification beyond the power sector.

In order to achieve our strategic goals, we must lead by example on a wide range of sustainability issues – as we do in the field of sustainable energy solutions.

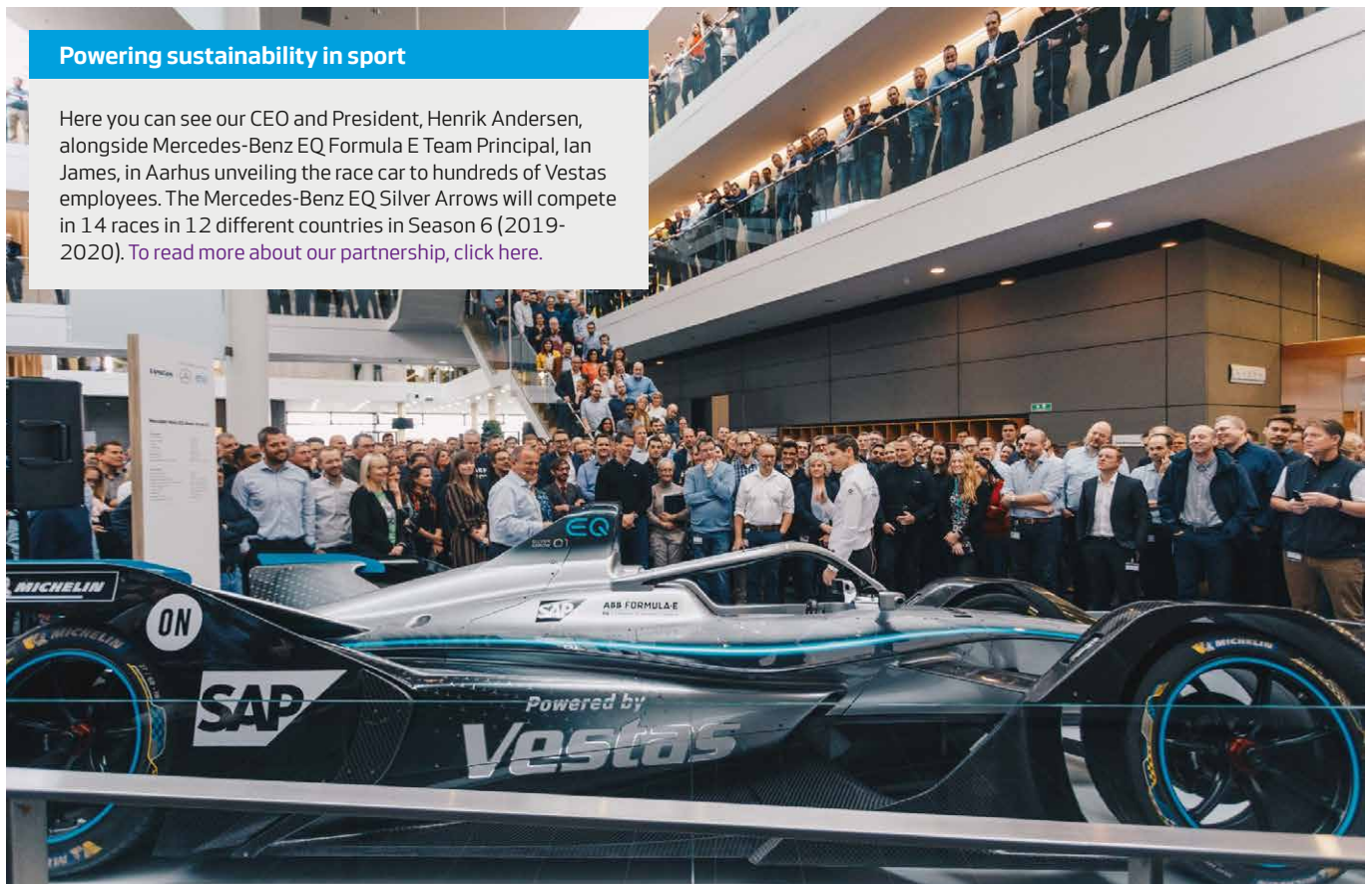
We are incredibly proud to be embarking on this journey. Following regular progress reviews, in the coming years, we will publicly share updates to the strategy and communicate any new policies or initiatives relating to our sustainability strategy.

Reporting on the progress we make in executing this strategy will be provided annually.



Powering sustainability in global shipping

The global shipping industry currently accounts for 2-3 percent of all global carbon emissions.³⁾ The mission of the Getting to Zero Coalition is to reduce these greenhouse gases by at least 50% by 2050. The Coalition is working to introduce commercially-viable deep-sea zero-emission vessels capable of running on zero-emission fuels. Vestas recently announced its participation in the Getting to Zero Coalition. [To learn more about Vestas' motivation for joining the Coalition, click here.](#)



Powering sustainability in sport





Here you can see our CEO and President, Henrik Andersen, alongside Mercedes-Benz EQ Formula E Team Principal, Ian James, in Aarhus unveiling the race car to hundreds of Vestas employees. The Mercedes-Benz EQ Silver Arrows will compete in 14 races in 12 different countries in Season 6 (2019-2020). [To read more about our partnership, click here.](#)

3) Source: Global Maritime Forum: Energy Transition: Getting to Zero Coalition. 2020. Available from: <https://www.globalmaritimeforum.org/getting-to-zero-coalition/>

How will we measure our progress?

The table below provides an overview of the Key Performance Indicators (KPIs) we have selected to monitor our progress in delivering our sustainability strategy. It also demonstrates the medium and long-term targets we are using to achieve each commitment.

The Vestas Sustainability Strategy: Sustainability in everything we do

STRATEGIC THEMES	GOAL	KPI	INITIATIVES	MEDIUM-TERM TARGET (2025)	LONG-TERM TARGET (2030)
 CARBON FOOTPRINT	To become a carbon-neutral company by 2030, without using any carbon offsets	Gram CO ₂ /kWh	<ul style="list-style-type: none"> Reducing emissions in Vestas' operations Reducing emissions in the supply chain 	Reduce absolute carbon emissions in scope 1 and 2 by 55 percent by 2025 compared to 2018, without using any carbon offsets	Reduce absolute carbon emissions in scope 1 and 2 by 100 percent - by 2030, compared to 2018, without using any carbon offsets Reduce carbon emissions in scope 3 by 45 percent per MWh generated, by 2030
 CIRCULARITY	To produce zero-waste wind turbines by 2040	Percent recyclability by weight	Increasing blade and hub recyclability	Increase blade and hub recyclability to 50 percent, by 2025	Increase blade and hub recyclability to 55 percent, by 2030
 VESTAS EMPLOYEES	To be the safest, most inclusive and socially responsible workplace in the energy industry	Per one million working hours	Reducing total recordable injuries	Reduce rate of total recordable injuries to 1.5, by 2025	Reduce rate of total recordable injuries to 0.6 by 2030
		Percent	Increasing number of women in leadership positions*	25 percent women in leadership positions by 2025	30 percent women in leadership positions by 2030
		Percent	increasing women in Vestas Wind Systems A/S' Board of Directors	37.5 percent women in Board of Directors by 2021	
		Percent	Expanding access to inclusive leadership and unconscious bias training	Inclusive leadership and unconscious bias training mandatory part of all talent and leadership training by 2021	Inclusive leadership and unconscious bias training mandatory part of all talent and leadership training
 ENERGY TRANSITION	To lead the transition towards a world powered by sustainable energy	Commitments: <ul style="list-style-type: none"> To take a leading role in driving electrification and decarbonisation beyond the power sector To team up with sustainability leaders to drive change To support our partners in their journey to become more sustainable 			

* 'Employees in leadership positions' comprise managers, specialists, project managers, and above.



Reporting on our approaches and progress in 2019

Making Vestas and the world more sustainable



2019 at a glance

Our company

25,542
employees

104
nationalities

13.9% female
and **86.1%** male
employees

Passionate about sustainable energy

113 GW
of installed sustainable
energy capacity worldwide

151 million tonnes
of CO₂ displaced
in 2019

1.3 billion tonnes
of CO₂ emissions displaced
by Vestas sustainable energy
solutions (1981-2019)

Ethics & Compliance

A Vestas Anti-Bribery and
Corruption Compliance Campaign
rolled out to over 8,700 office
employees worldwide

Mandatory Data Privacy / GDPR
training provided to all employees with
permanent or regular access to
personal data

Environmental sustainability

51%
of Vestas waste
recycled

82%
of all electricity used by Vestas
in 2019 from renewable sources

40%
of total energy used by Vestas
in 2019 was renewable

Corporate Social Responsibility

Vestas partnered with **8 NGOs**
to create local impact in India,
Senegal and Mexico

Vestas' human rights approach presented
at **45 events** globally to share knowledge
and interact with stakeholders

Safety

3.9
total recordable injuries
per million working hours

1.2
lost time injuries per
million working hours

Key achievements



2019 financial performance within guidance

	Realised	Guidance
Revenue (bnEUR)	12,147	11.0-12.25
EBIT margin before special items (%)	8.3	8-9
Total Investments* (mEUR)	729	approx. 800

* Excl. any investments in marketable securities, short-term financial investments, and the acquisition of SoWiTec Group GmbH.

All-time high order backlog

Power solutions (bnEUR)



Service (bnEUR)



Service duration increases

– average length on new contracts signed

18 years

Dividend

EUR 211m

The Board recommends a dividend of DKK 7.93 per share be paid for the financial year 2019.

Share buy-back programme

EUR 201m

Bought back 2.3 million Vestas shares at a total value of EUR 201m.

Highest order intake ever

17.9 GW

Launch of ambitious sustainability strategy



Reduction in injuries

Total recordable injury rate at

3.9

Our employees

There are 25,542 Vestas employees working with passion around the world to drive the global energy transition.

It is our responsibility to ensure that each of these employees benefits from a working culture that is consistently safe, inclusive and collaborative. We want our employees to have the freedom and support to thrive and reach their full potential.

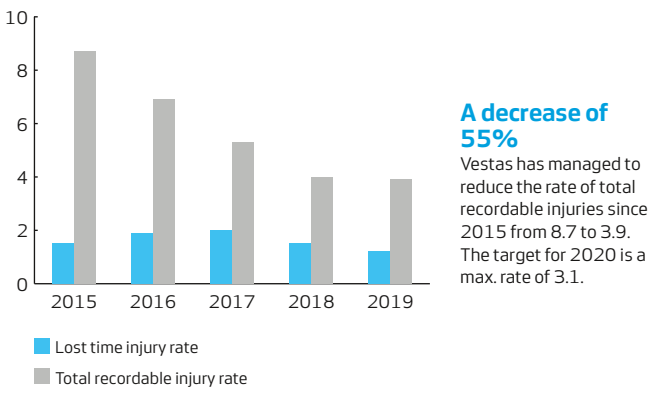
Health and safety

Safety

Working with wind turbines naturally presents potential risks and hazards. Remote locations, heavy components, heights and demanding processes can make for a challenging working environment. Thanks to our unique experience in the wind industry, we work to ensure these risks are identified early and, where achievable, eliminated by design. We meticulously assess unavoidable residual risks and mitigate them to the lowest levels possible.

Incidence of injuries

Per one million working hours



In 2019, we reduced lost-time injuries per one million hours worked from 1.5 in 2018, to 1.2.

The incidence of total recordable injuries also decreased in 2019 – from 4.0 per one million working hours in 2018, to 3.9 in 2019, however not meeting the target of 3.6. Total Recordable Injury Rate (TRIR) includes “restricted work injuries” and “medical treatment injuries”. The target for 2020 is 3.1.

During the year, we continued to focus on incidents with high potential for serious injury or fatality. Our approach is to prioritise such incidents and act upon them immediately to eliminate any potential risk to life. Thereafter, subsequent control mechanisms are implemented to ensure there is no reoccurrence.

Despite this focus, in 2019, a Vestas employee and a subcontractor both suffered fatal injuries. Full investigations have been conducted and we have implemented action plans based on the findings to prevent such tragedies from happening in the future.

The road to zero injuries

In recent years, significant improvements have been made in reducing injury rates across the organisation. When incidents do occur, we work proactively to take remedial action and ensure compliance with the most effective control measurements to prevent reoccurrence. To increase our maturity in this area, we are now placing significant focus on incidents with high potential for injury and/or fatality. Industry studies¹⁾ have identified that in approximately 20 percent of all incidents, company employees could be exposed to life-threatening situations.

With this in mind, we have devised a process we call ‘Life Incidents with Fatal Exposure’ – or ‘LIFE’. This framework leverages well-established lifesaving rules to identify potential exposure to life-threatening situations. For every incident, employees apply each lifesaving rule individually to establish whether that rule has been contravened. All identified LIFE incidents must be prioritised and immediately acted upon to ensure any potential risk to life is eliminated. This approach also ensures that control mechanisms are reinforced or created, with a view to preventing reoccurrence of that specific LIFE incident.

At Vestas, we are committed to raising awareness about the danger of complacency. Our seven life-saving rules are now firmly embedded in the Vestas safety culture – serving as a permanent reminder to employees that non-compliance or complacency could result in a serious injury or fatality.



First aid can save lives

In Autumn 2019, 30 Vestas employees from our Assembly Factory in Ringkøbing, Denmark, completed annual first aid training.

The refresher training session lasted a full 8-hour day. Here you can see two of our employees practising mouth-to-mouth resuscitation.

Safety awareness

Widespread awareness is integral to the management and prevention of safety hazards. Since 2007, we have deployed a Safety Awareness Program for employees and managers. The ultimate objective of this program is to eliminate all lost-time injuries. To further strengthen our safety culture and encourage good safety behaviours, all operational managers and team leaders in factories, offices, service and construction sites also attended safety courses – amounting to at least 2,000 employees globally.

1) DEKRA Insights 2016, PREVENTING SERIOUS INJURIES AND FATALITIES (SIFs): A NEW STUDY REVEALS PRECURSORS AND PARADIGMS WHITE PAPER By Donald K. Martin and Alison Black



Our senior management demonstrated the commitment of Vestas top management to safety by participating in safety awareness programs and Safety Walks. A Safety Walk is an opportunity for managers to engage in constructive dialogue and discuss safe behaviour with employees. They help to identify new ways of improving safety with employees in their actual job functions. The programme has been successfully running since 2007. In 2019, senior managers conducted 23,000 safety walks – meeting our goal set in 2006 of an average of 12 safety Safety Walks per manager in scope per year.

Focusing on behaviour

Behaviour is identified as the main root cause of workplace incidents and injuries. Our 'My Team My Responsibility' (MTMR) programme builds on a strong foundation of employee engagement with safety issues. Front line managers and supervisors work with their teams to select the behaviours they want to improve together. They take ownership as a team and drive change and improvement.

The 'Vestas Behavioural Change' (VBC) programme is an employee-led safety observation scheme. It actively encourages employees to observe each other's behaviour while carrying out specific work-related tasks – with safe behaviours recognised and rewarded. Equally, any identified risk-prone behaviours are stopped, assessed and improved to remove the risk. The programme also encourages open, honest and constructive safety dialogue between colleagues. In particular, it emphasises the collective responsibility of Vestas employees to promote safe behaviour across the company.

Contractor safety

As the company's safety performance has improved significantly over the years, the performance of contractors has become an increasingly important focus area to maintain expected safety levels. Measures we have implemented to improve contractor performance include; pre-qualifications, standardisation of safety requirements and intensified tracking of safety performance.

We also continue to collaborate with external partners to drive and improve performance across the industry. Contractor and supply networks are often shared and improving our partners' safety performance

is considered extremely important. In 2019, we delivered Safety Workshops for contractors in Europe, China, US, Brazil, Chile, India and Australia. We also invited regional key account customers to attend the sessions and deliver presentations. We did so, to further strengthen our bond with these customers and to prioritise safety considerations.

Throughout 2019, we continued to support the Global Wind Organisation (GWO) – providing resource competency, support and market insight, and enabling the development of industry-wide safety training courses. This approach ensures a minimum standard of competence is achieved by relevant Vestas employees or contractors – prior to any work taking place onsite. In September 2019, a GWO futures summit identified five work streams to help implement GWO safety training globally and enhance the quality of delivery.

Occupational health

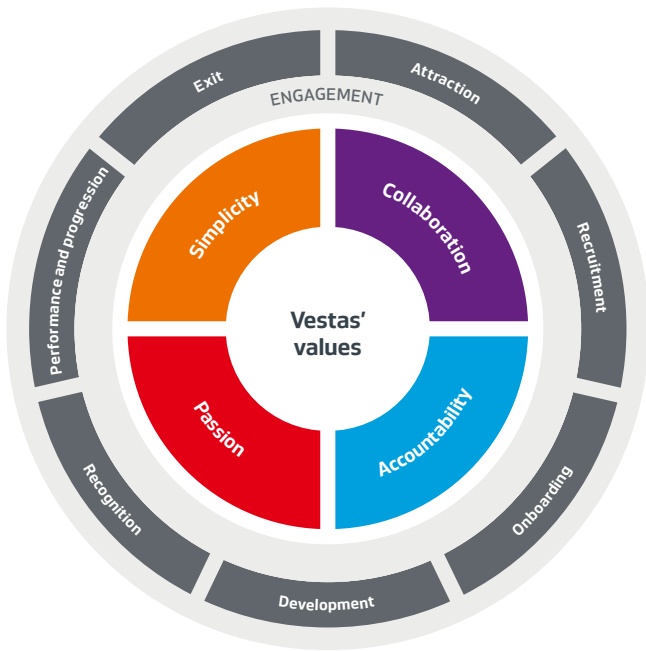
Our ambition is that all Vestas employees look back at their careers with the knowledge that their physical and mental wellbeing was protected at all times.

Based on the analysis of existing data and information, we have identified and prioritised two main work streams for occupational health; potential chemical exposure and ergonomic hazards. We are currently examining measures within each area. In 2019, the Epoxy Vision project aimed to visualise and demonstrate what exposure to epoxy looks like. Epoxy is any class of plastic, adhesives or other materials that are polymers of epoxides. We developed and installed a visualisation cabin and began data collection. The project will continue until 2021, with ergonomic improvements and training taking place in selected factories in 2020.

Working at Vestas Employee lifecycle

Vestas utilises a 'lifecycle approach' to employment. It focuses on the different phases employees go through while working at our company. From recruitment, onboarding and development, through to final departure to (see figure next page), Vestas offers opportunities to ensure engagement, respect and recognition at all times.

Employee life cycle



At Vestas, we're passionate about sustainability

All Vestas employees were involved in suggesting and voting for our newest company value.

On 15 August 2019, it was announced that our colleagues voted overwhelmingly for passion as our newest value – adding to our three existing Vestas values; simplicity, accountability and collaboration.

With the addition of our fourth value, passion, we were able to further anchor our purpose as a company and the pride we all have working in the renewable energy sector.

Values and leadership behaviours

For Vestas to achieve its vision of becoming the global leader in sustainable energy solutions, it is essential we have a strong foundation of organisational values and leadership behaviour. Therefore, in 2019, we placed increased emphasis on these aspects of our culture, with our leadership team playing an active role in anchoring our values in the company.

The four company values that drive the way we work, and set standards for our working behaviours – and the behaviour of our leaders, are; accountability, simplicity, collaboration and passion.

In 2019, we worked hard to further activate the values worldwide across our company. In practise, this has meant that the Vestas People and Culture Department have collaborated with leadership and other employees to increase awareness about the values. It has been impor-

tant during this process to describe what these values look like when they are put into practise in an everyday Vestas working environment.

A concrete example here is a workshop organised at the Executive Leadership Team Forum in November, 2019. Here, over fifty of the most senior Vestas employees worked together to learn more about how to disseminate these values in practise within their Functions, and how to lead by example every day.

This is particularly important, because our company also uses the four Vestas values during employee assessment processes. In fact, 50 percent of the score delivered during the employee review processes is based on the performance of employees in living and breathing the Vestas values in their work.

Employee survey

Each year, we conduct an employee survey to measure employee engagement and satisfaction. The survey explores how Vestas employees feel about their daily lives in and around the workplace. In 2019, the following subject areas were selected by Vestas as areas to place special focus on in the employee survey; diversity and inclusion, and our corporate values. These are also areas selected by our company to create awareness and foster progress within our company. Our 2019 employee survey achieved a strong response rate of 93 percent. The overall satisfaction and motivation score was 71, which is the same as 2018.

In response, we also received more than 8000 individual comments from our employees in this year's employee survey. These comments were read in full and directly inform the work we do on our journey to make Vestas an even better place to work.

This level of employee engagement is a testament to the passion of our employees, and the extent to which they use their voices to flag key issues and subsequently bring about change in the company. This tool serves as means to ensure accountability and collaboration – initiated by key trends in the employee survey.

Attracting talent

We place great value on external collaboration and engagement in talent communities, universities and vocational schools. We are committed to doing everything we can to attract the brightest and the best candidates. We must therefore invest time in developing our future workforces worldwide.



Copenhagen Business School case competition

In 2019, we initiated a partnership with the Copenhagen Business School (CBS). Our responsibility was to act as 'final case partner' during one of CBS's case competitions. The 100+ participants were organised into small groups and given a Vestas challenge to resolve. Vestas colleagues assisted in the preparation of each case, and listened to each presentation. After, our colleagues gave constructive feedback to the students – focusing on areas of strength and improvement. Congratulations to everyone who took part.



Recruiting talent

Attraction and talent recruitment are essential for our ambitions to grow, thrive, reach new markets and drive the energy transition. However, to enhance our attractiveness as an employer and recruit the best talent, we have to increase gender diversity within the company. That is why in 2019, we introduced targets to increase the share of women in leadership positions. While other forms of diversity are important, gender diversity is a specific challenge and focus area for Vestas. The initial section of this report describes more about this target and the initiatives planned for 2020 related to its achievement.

Onboarding

The overall purpose of onboarding is to enhance the experience of new Vestas employees. Onboarding is initiated immediately after completing the recruitment process. It ensures that new employees are as fully prepared as possible for their first day of work.

Development

In the area of employee development, our Continuous Performance and Development process (CPD) is a key tool in the employee lifecycle.

Through the CPD, all employees receive feedback on their performance and behaviour for the year, with performance objectives set for the coming 12 months. In addition to shining a light on daily tasks and objectives, it also provides an opportunity for leaders to discuss work-life balance with employees.

Alongside the CPD, our People Review provides insight into employee performance and potential. Throughout the organisation, reviews for corporate leadership employees are mandatory – although many business units choose to review all employees regardless of their level of authority within our company.

Talent management

Our annual performance calibration focuses on the development and deployment of high-potential employees. We aim to ensure that the organisation has the right people in the right positions at the right time. We also set clear expectations for our key positions and strategic capabilities – making it possible to match current and potential talent with our business needs and long-term outlook. To support these efforts, Vestas conducts a number of in-house talent programmes:

- The Vestas Graduate Programme is a two-year international programme aimed at talented young professionals aspiring to hold key positions in the company. Participants work on two different assignments throughout the programme, with a progressive increase in challenge and responsibility.
- The Regional Talent Programme is a programme for regional talents identified globally. Regional talents are identified during the people review process – with people leaders nominating employees as part of individual performance evaluations. The programme lasts for 18 months and works specifically to leverage the talents of the individual employee and develop them within a specific Vestas team.

- The Rising Executives Programme focuses on developing employees with extraordinarily high leadership potential. Over a two-year period, participants are challenged with tailored development opportunities and learning activities in order to prepare them for future leadership positions.
- The Vestas Executive Leadership Programme is intended to develop and enhance the strategic capabilities of Vestas' current leaders. The programme consists of three modules within a period of nine months. Creating a sustainable work culture is also a core leadership task, and we need to develop our leaders' skills and capabilities in this area.

Training

At Vestas, we know we need to ensure that our employees can keep learning, thriving and receiving training.

In the context of learning, we follow the '3E learning model'. That means we emphasise that learning and development happens through work experiences and employee learning is often something that happens in the planning and execution of projects, and through hands-on tasks.

In 2019, we had spent 568.785 hours on office worker training – averaging 65 hours of training per full-time employee; this excludes 'on the job' training. Vestas trained 766 leaders on leadership focusing on innovation. Service and Manufacturing employees received a total of 1.390.672 hours of training – equalling 84 hours per employee. In total, 1.959.457 hours of training was supplied to Vestas employees – equalling 81 hours per full-time employee.

Recognition

Aside from a competitive salary, working for Vestas comes hand-in-hand with a range of other benefits.

Depending on the local market conditions, we offer employees a pension, insurance plans, health insurance, subsidised lunch, gym access and work/life policies – for example; flexible work arrangements. We also offer free fruit in the offices, IT equipment and competitive vacation policies. Our compensation packages are benchmarked against local market salaries for each position – to ensure equal and fair pay regardless of social identity. Annual salary reviews are linked to performance evaluation and calibrations – ensuring strong alignment between performance, pay and the external environment.

A unique element in the monetary recognition of Vestas employees is our global bonus programme. Everyone with a Vestas employment contract benefits from this program and is entitled to an annual bonus rewarded for company performance. We use bonus scorecards to calculate the exact amount to be allocated each year and the bonus is paid out when and if the minimum condition for the Group profit is met.

Exit

Vestas employees should leave satisfied – aware of the impact they have made within the company – and in driving the energy transition globally.

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.

Finding their successor can be a subject of priority during this process. Naturally, it is important for Vestas to ensure the right talent pipeline – planning for a sustainable handover of responsibilities during this process.

In other instances, an employee chooses to submit their resignation: Their manager can then initiate an interview during the exit process. The aim of these interviews is to capture ideas for improvement for Vestas as an employer. When we have to terminate a contract with an employee, we focus on providing equitable market-level severance packages.

During September and October 2019, changes in our product portfolio called for a scale-down in both our blades and assembly factories in Denmark. While we continued to invest in other blade types, such as the V117 and V150, this move resulted in the contract termination of approximately 135 employees (all hourly paid). As always, we worked to ensure that those affected were supported in the best way possible. It is important to us that employee exits are conducted with dignity and respect, and in this instance, we offered outplacement sessions to help those impacted by the factory closures in their search for new employment.

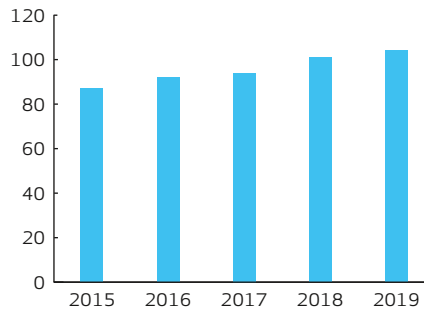
Diversity and inclusion

In 2019, we continued our efforts to create and sustain an environment that actively embraces diversity and inclusion in all areas. Why? Because a lack of diversity in the Vestas workforce represents a loss of talent.

Diversity is found in any social context. It includes gender, age, culture, ethnicity, physical abilities, political and religious beliefs, sexual orientation and other attributes. More details about the Vestas definition of diversity can be found in the Vestas Diversity and Inclusion Policy on our corporate website.²⁾

Vestas currently has 25,542 employees. The data in the graph to the right provides a breakdown of employee demographics and excludes data from Utopus Insights and Sowitec.³⁾

Employee Demographics
Number of nationalities at Vestas



By promoting and encouraging diversity and inclusion, our company is working to change behaviours, challenge perceptions and ensure that equality of opportunity and access is prevalent throughout the organisation. However, our work in this area is about more than representing the societies in which we operate; we know that a diverse workforce will improve teamwork and collaboration, ensure a focus on innovation and creativity, and foster organisational responsiveness and agility.



2) Source: Vestas: Corporate Documents. Online document: https://www.vestas.com/en/investor/corporate_governance#/corporate-documents
3) Utopus Insights is an energy analytics provider acquired by Vestas.

Gender equality in leadership and representation across the company

The Vestas definition of diversity includes – but is not restricted to, gender identity. Gender balance in the workforce is a key focus for the company; but as with other companies operating in the STEM (Science, Technology, Engineering and Mathematics) field, it remains a challenge and focus for us.

Overall, of the individuals employed by Vestas at the end of 2019, 13.9 percent were women. Of the individuals employed as part of the Vestas Executive Management, 17 percent were women – a figure which is due to rise to 29 percent by January 2020.

In addition, female representation in our 'leadership tracks' was 19 percent in 2019. A leadership track comprises a number of positions, from specialists, project managers, managers and above, including those with and without people leadership responsibilities. Positions covering general leadership responsibilities for functions, projects, departments or expertise are considered key drivers of our values and leadership behaviours.

While the introduction of the Vestas sustainability strategy goes further to address our workforce gender balance, in 2019, we continued to progress key activities that had already been initiated.



Let's get talking

One of our own Service employees attended a speed-networking event at a school in Cheshire, England. The purpose of the event was to inspire teenage students to pursue study and careers in Science, Technology, Engineering and Mathematics (STEM). Our colleague was there to answer questions, describe her career path, provide advice and explain what it is like to work at a company like Vestas.

Unconscious bias training

In 2019, we rolled out unconscious bias training to all People and Culture (HR) employees at Vestas – reaching an estimated 250 employees worldwide. Unconscious bias training aims to help our employees become aware of their own bias and that of other people. During this training, employees work with one another to establish how bias can be engaged with in a constructive manner.

It should be noted that unconscious bias training is not without its criticism. For example, it has been suggested that unconscious bias training can be detached from the reality of day-to-day work, and that unconscious bias training should not be delivered without additional leadership training.

For this reason, in 2019, we also rolled out a programme of inclusive leadership training. Inclusive leadership training is delivered through a workshop and focusses on helping employees identify potential blind-spots that may be restricting their efforts to become more inclusive leaders. During the year, we also delivered 'blind-spot' training to all people leaders in the Vestas Americas SBU – reaching roughly 200 employees in total.

To maximise the value of the training on offer, we also engaged with research experts in the field of diversity and inclusion. We subsequently adjusted our approach to unconscious bias and inclusive leadership training upon these recommendations: thereafter, our aim is to ensure all training is embedded in the general development of Vestas employees and linked closely to our purpose as a company. Going forward, all Vestas talent and development programmes will include mandatory unconscious bias and inclusive leadership training. The goal is to ensure these learnings are embedded into the general skillset and behaviours required from, and embodied by, all of our employees.

The training programmes are available through the Vestas training portal and can be accessed by teams or individuals looking for training outside standard development programmes. We also offer an online tool on 'cultural awareness' – designed to help employees develop a better understanding of other cultures worldwide, work styles, feedback cultures and collaborative approaches.

The Diversity and Inclusion Advisory Board

In 2019, members of the Vestas Diversity and Inclusion Advisory Board continued to examine Vestas' D&I data, reflect on trends and best practice, explore new initiatives and targets, and act as ambassadors in their business areas.

The Advisory Board consisted of six company employees for the year – representing all six of the company's business areas. The Board members themselves represented the following departments: Finance, Sales, Manufacturing, Power Solutions, Service and the CEO Office. The membership of this Board rotates once a year and will change again in 2020.

The D&I Advisory Board met five times in 2019, sharing regional and global progress in every meeting.

In addition to the D&I Advisory Board, we appointed dedicated regional D&I partners in each of our five 5 People and Culture (HR) regions. These partners ensured the D&I agenda progressed quickly and efficiently with understanding and respect for regional differences. This process enabled us to align multiple initiatives to local business challenges and legislative updates, while reinforcing the need for local insight to shape recruitment, branding and development opportunities.

D&I learning and progress

Overall, it was a year of learning and progress in the area of diversity and inclusion. Our sustainability strategy now places diversity and inclusion at the heart of our corporate strategy and allows us to build on the impact created in 2019.



Vestas wins the 'Great place to work' award

Vestas Wind Technology India received a 'Great Place to Work' certification – for the period April 2018, to March 2019. Following the announcement, employees enjoyed two days of celebration in the factory and offices.

Vestas Employees 2019

Employees by region and function¹⁾

Number

	Europe, Middle East, and Africa	Americas	Asia Pacific	Total
Manufacturing & Global Sourcing	3,176	4,345	3,409	10,930
Sales and service	1,932	6,544	2,431	10,907
Power Solutions	471	1,473	35	1,979
Others	537	774	116	1,427
Total	6,116	13,136	5,991	25,243

Employees by age group and gender¹⁾

Percent

	<30 years	30-50 years	>50 years	Total
Female	3.2%	8.4%	2.3%	13.9%
Male	19.8%	56.5%	9.8%	86.1%
Total	23.0%	64.9%	12.1%	100.0%

Employees by employment contract and gender¹⁾

Number

	Standard employment	Temporary	Total
Female	3,340	160	3,500
Male	20,807	936	21,743
Total	24,147	1,096	25,243

Employees (standard employment) by employment type and gender¹⁾

Number

	Full time	Part time	Total
Female	3,456	44	3,500
Male	21,710	33	21,743
Total	25,166	77	25,243

New employees by region and gender²⁾

Number

	Europe, Middle East, and Africa	Americas	Asia Pacific	Total
Female	340	196	137	673
Male	1,864	1,091	693	3,648
Total	2,204	1,287	830	4,321

New employees by age group and gender²⁾

Number

	<30 years	30-50 years	>50 years	Total
Female	331	304	38	673
Male	1,759	1,735	154	3,648
Total	2,090	2,039	192	4,321

Turnover by region³⁾

Number · Percent

	Europe, Middle East, and Africa	Americas	Asia Pacific	Total
No. employees	12,048	6,029	5,649	23,726
No. employees leaving	1,030	1,692	548	3,270
Turnover	8.5%	28.1%	9.7%	13.8%

Turnover by gender³⁾

Number · Percent

	Female	Male	Total
No. employees	3,233	20,476	23,708
No. employees leaving	434	2,836	3,270
Turnover	13.4%	13.9%	13.8%

Turnover by age³⁾

Number · Percent

	<30 years	30-50 years	>50 years	Total
No. employees	6,207	14,554	2,947	23,708
No. employees leaving	1,383	1,619	268	3,270
Turnover	22.3%	11.1%	9.1%	13.8%

Employees by level and age¹⁾

Percent

	<30 years	30-50 years	>50 years	Total
Leadership positions	0.2%	10.5%	2.3%	13.0%
Other	22.7%	54.4%	9.9%	87.0%
Total	22.9%	64.9%	12.2%	100%

Employees by level and gender¹⁾

Percent

	Female	Male	Total
Leadership positions	2.5%	10.5%	13.0%
Other	11.4%	75.6%	87.0%
Total	13.9%	86.1%	100%

Board of Directors by age group and gender⁴⁾

Percent

	<30 years	30-50 years	>50 years	Total
Female	0%	14.3%	14.3%	28.6%
Male	0%	14.3%	57.1%	71.4%
Total	0%	28.6%	71.4%	100%

1) Frozen report end 2019. Full time employment is FTE 0.9 and above. Utopus and Sowitec not included.

2) Entries report (employees hired January 2019 to December 2019, report not frozen)

3) Turnover report (report not frozen)

4) Only Board members elected by the general meeting are included. See http://www.vestas.com/en/investor/corporate_governance#|bd

Our responsibilities

Human rights

We recognise our responsibility to respect human rights as set out in the UN Guiding Principles on Business and Human Rights. As part of our continuous efforts to improve performance in this area, in December 2019, we revised our Human Rights Policy Statement¹⁾ to reflect both changing external expectations and internal updates.

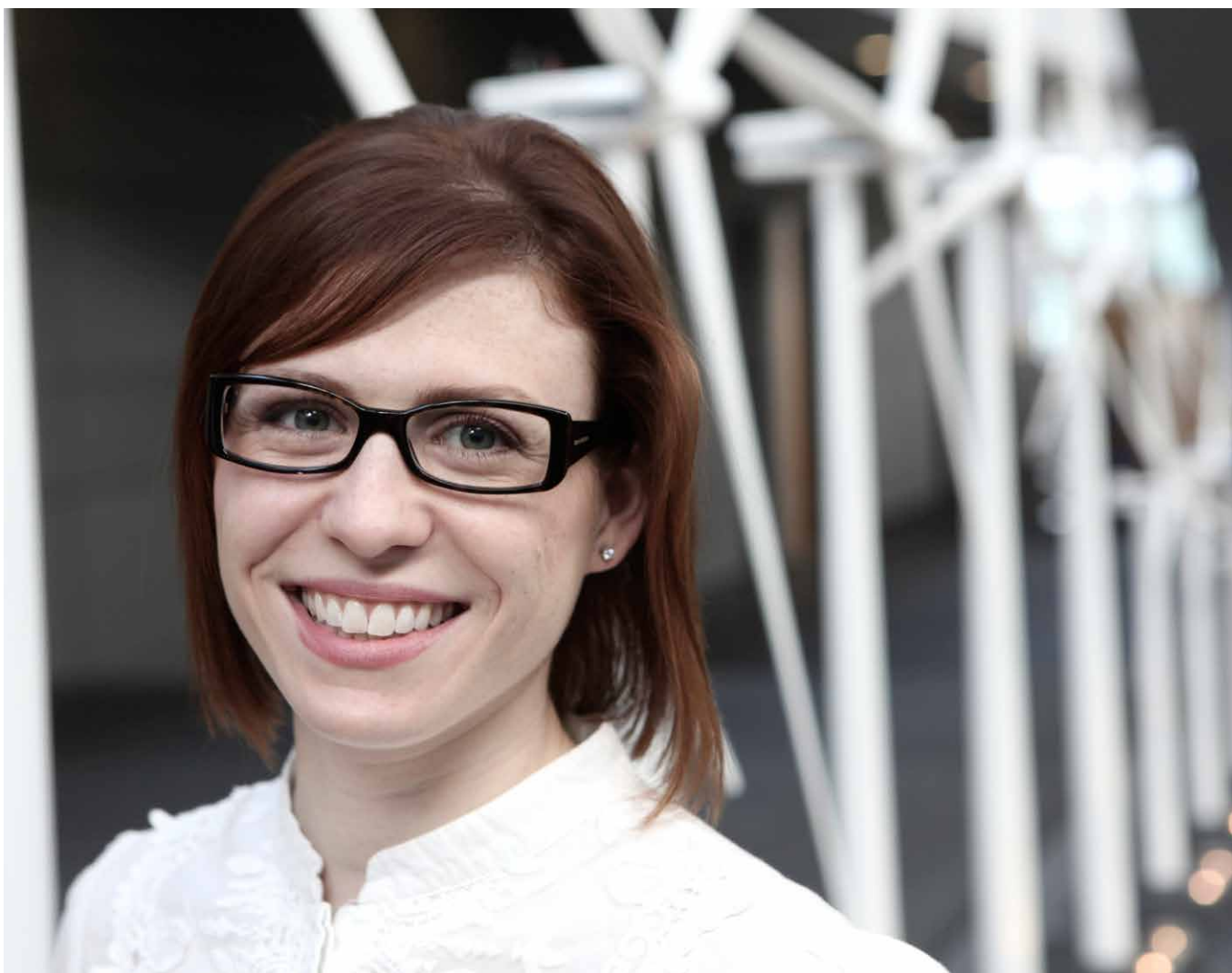
This Statement outlines our commitment to respect all human rights and includes our expectations for business partners. As an extension of the corporate-wide Human Rights Impact Assessment conducted in 2018 – in 2019, we adopted key recommendations to address the most salient human rights impacts.

One of the focus areas is collaborating on a cross-functional level to strengthen the risk evaluation of suppliers and review the onboarding process. We will progress this work in an effort to continuously improve our responsible supply chain programme.

Business ethics

We understand that building an effective business ethics programme requires continuous focus on strengthening both policies and procedures – while fostering a compliance culture. In 2019, we strengthened our anti-bribery and corruption programme by restructuring it and ensuring alignment with the relevant regional programmes (anchored in the Vestas Sales Business Units).

In addition, we strengthened, cross-regional coordination via the Vestas compliance network's bimonthly meetings. We also continued to focus on activities addressing both risk mitigation and prevention efforts, such as training and awareness. Engaging cross-regionally on compliance issues has proven to be beneficial – particularly when it comes to sharing knowledge and developing a robust compliance culture, which is anchored in a strong policy foundation.



1) Vestas (2019) Human Right Policy. Available from: https://www.vestas.com/~/_media/vestas/about/sustainability/pdfs/vestas%20human%20rights%20policy%202019%20signed.pdf

Global Anti-Bribery & Corruption Campaign

In November 2019, Vestas launched a global campaign to increase internal awareness about anti-bribery and corruption compliance, and enable managers to continue the conversation on this topic within their teams. The campaign was kicked off by our CEO and rolled out over four weeks – with a strong focus on employee engagement. The campaign was rolled out to over 8700 employees. With high levels of exposure and engagement, Vestas will continue to set focus on this topic in 2020.



EthicsLine

EthicsLine cases Number

	2019	2018	2017	2016	2015
Questions submitted to EthicsLine	2	8	14	8	4
Compliance cases reported	224	165	105	103	87
– hereof substantiated	44	42	31	19	21
– hereof non-substantiated	145	92	74	68	53
Cases under investigation end of year	35	31	19	16	13

In support of good governance, at Vestas, we use the whistle-blower hotline, EthicsLine. Since 2007, EthicsLine has helped ensure that compliance violations are always brought forward and dealt with appropriately.

The primary purpose of EthicsLine is to provide Vestas employees, business partners – or anyone associated with Vestas, with a place to report inappropriate behaviour or practices experienced within the workplace. In addition, it is also a source of information and provides guidance for employees in doubt about ethical issues.

It is mandatory for managers to report Code of Conduct compliance violations through EthicsLine. We also strongly encourage employees to use it to report compliance violations, or to go directly to their managers.

EthicsLine can be used to:

- report observed or suspected malpractice
- ask questions about our policies or sensitive issues relating to behaviour or ethics

The system supporting EthicsLine is hosted by an independent company. This allows anyone using EthicsLine to remain anonymous – except in instances when this would be specifically prohibited by local law. Subject to applicable laws, all matters reported through the Vestas EthicsLine are investigated and everyone involved is treated fairly. We will not tolerate retaliation against anyone who files a report in good faith, regardless of whether or not the claim can be substantiated.

Substantiated cases closed in 2019 – (including cases originating from 2018, but closed in 2019), led to disciplinary actions including 25 warnings and 26 dismissals.

It is our view that the increase in EthicsLine cases from 2018 onwards is an indication that more employees have become aware of the this whistle-blower hotline. It also gives credibility to the view that employees trust that cases will be handled fairly and anonymously, where needed.

Suppliers

The Vestas supply chain is broad and complex. A wind turbine consists of several thousand components - each with its own supplier. At any one time, we are likely to have thousands of partners and construction sites operating in several different countries.

Our business partners play an important role in helping us achieve our sustainability goals, and in promoting wind energy as a beneficial solution for society as a whole. The supply of components and raw materials currently makes up more than 80 percent of the energy consumed in the product manufacturing process. So, in order to improve the sustainability of our products, we will continue to work closely with suppliers to improve shared processes and practices.

It is crucial that the health and safety of everyone involved in the turbine installation and service process is protected. For this reason, every customer and supplier must be both aware of – and follow, the Vestas safety rules and procedures.

The Vestas Business Partner Code of Conduct has been prepared in accordance with the UN Global Compact, the International Bill of Human Rights and International Labour Organization conventions. Our employees work hard to ensure that partners understand and adhere to our Code of Conduct. This makes it easier to prioritise business partners who are dedicated to the Vestas view on sustainability.

Responsible supplier management

Vestas is devoted to responsible supplier management. Purchase agreements with our suppliers today include a requirement to comply with Vestas Business Partner Code of Conduct. With 94 per cent of our signed purchase agreements based on Vestas templates, and with all of these including either directly or by reference the above principles, we believe we are well on the way.

Vestas has continued its business partner screening and due diligence processes covering business ethics and sanctions. In 2019, Vestas performed 2,943 business partner screenings – assuring that our business partners live up to legal requirements.

Vestas takes further action to ensure that suppliers comply with its Business Partner Code of Conduct by screening suppliers on compliance with the Code of Conduct through the standards in Vestas' supplier assessment tool. The first screening of suppliers is a self-assessment, which is then included in a following risk assessment based on country and business potential. The risk assessment determines if the supplier should be assessed onsite.

In 2019, 157 new suppliers were assessed onsite globally by Vestas on quality and sustainability parameters. Of these, 117 were approved, 5 were rejected, and 35 are under approval. Furthermore, 15 audit assessments of suppliers' compliance with the Code of Conduct were executed by an external company. When so-called 'red flags' are identified – indicating that suppliers are not living up to the Vestas standards, the suppliers are requested to take corrective action.

Vestas has a formal target on sustainability, which is monitored on monthly basis where suppliers' safety and sustainability maturity are some of the elements being evaluated in an overall supplier performance scoring system. Currently, 159 key suppliers – from a strategic point of view, are being tracked. The supplier's scorecard performance and agreed development activities are evaluated in monthly performance dialogue meetings.

Environmental sustainability

Climate crisis

The climate crisis poses a serious challenge for humankind. The predicted effects could be both devastating and irreversible. According to the Intergovernmental Panel on Climate Change (IPCC), the effects of climate change will be broad – affecting water supplies, ecosystems, food availability, health and the economy, including the potential devastation of coastal regions.¹⁾ It is crucial that greenhouse gas emissions are lowered and that low carbon energy generation technologies take over the provision of power to more sectors.²⁾

Fossil fuel-based power generation causes poor air quality, consumes significant amounts of water, and contributes to global climate change.³⁾ Global power generation must become low-carbon, and more sectors such as transport and heating need to utilise low-carbon power sources. Furthermore, wherever water is scarce or expected to become scarce, power generation must minimise water usage. Wind power plants do not consume water or emit climate-changing greenhouse gases during operation. Wind, and renewable energy more broadly, is therefore key to solving the challenges our world faces today.

Sustainable energy for all

More than a billion people across the globe still lack access to affordable and reliable electricity – with dramatic consequences for human health, education and economic wellbeing. These numbers show that there is still much work to be done to ensure a sustainable global energy supply.



AFRICA INVESTMENTS FORUM & AWARDS

GOLDEN AWARD
Best Growing International Company in Africa

Vestas

2019

Vestas – the Best Growing International Company in Africa

In 2019, Vestas was awarded Best Growing International Company in Africa (as a Co-Winner with Schneider-Electric). In the last three years, we have concluded four wind projects representing 608 MW in Africa. An award of this kind is a testament to the hard work of Vestas employees, and external stakeholders, in driving the energy transition in Africa.

Vestas actively supports partnerships and collaborative efforts intended to advance the sustainability agenda. One of our most notable partnerships is with the UN as a member of the Global Compact.

Looking to the years ahead, there is no doubt that the UN Sustainable Development Goals (SDGs) will be a key driver for the transition to a

sustainable and clean energy economy. The SDGs offer a universal plan to address the economic, social and environmental dimensions of sustainable development.



No progress without innovation

Vestas has partnered with the Technical University of Denmark to challenge conventional thinking about turbines. In particular, we want to counter the assumption that turbines need to increase in rotor size in order to reduce the levelised cost of energy. In the image, you can see a multi-rotor prototype. [To read more about this collaboration and the potential benefits of this future technology, click here.](#)

Sustainable products

A single Vestas wind turbine generates around 30 to 50 times more energy than it consumes during its entire lifecycle - delivering a significantly higher yield of value back to society. This level of efficiency creates enormous potential for reducing carbon emissions when implemented widely in power systems. A single Vestas wind turbine only emits around one percent of carbon dioxide per kilowatt generated, compared to a coal power plant. Alongside the significantly reduced rate of carbon emissions, some of our solutions do harbour minor negative environmental impacts. At Vestas, mitigating these impacts is paramount. We are working closely with our suppliers and customers to enhance the environmental performance of our solutions and to improve business case certainty.

In 2019, the CO₂ savings over a lifetime for the 12.6 GW of turbines produced and shipped by Vestas during the year amounted to 322 million tons – an increase of 17 percent compared to 2018. This was primarily due to a significant increase in MW produced and shipped.

Environmental impacts of Vestas sustainable energy solutions

Critically, the grams of CO₂ emitted per kWh for a Vestas wind turbine is minimal in comparison to the world average for electricity generation. The world average for electricity generation stands at 485 grams per kWh, while in 2019 Vestas turbines emitted an average of 4-8 grams of CO₂ per kWh.

1) The IPCC: Reports. 2019. Available from: <https://www.ipcc.ch/reports/>

2) Source: Bruckner T., I.A. Bashmakov, Y. Mulugetta, H. Chum, A. de la Vega Navarro, J. Edmonds, A. Faaij, B. Fungtammasan, A. Garg, E. Hertwich, D. Honnery, D. Infield, M. Kainuma, S. Khenas, S. Kim, H.B. Nimir, K. Riahi, N. Strachan, R. Wiser, and X. Zhang, 2014: Energy Systems. In: Climate Change 2014: Mitigation of Climate Change. Contribution of Working Group III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change [Edenhofer, O., R. Pichs-Madruga, Y. Sokona, E. Farahani, S. Kadner, K. Seyboth, A. Adler, I. Baum, S. Brunner, P. Eickemeier, B. Kriemann, J. Savolainen, S. Schlömer, C. von Stechow, T. Zwickel and J.C. Minx (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA.

3) Source: I.R.E.H. Sims, R.N. Schock, A. Adegbululge, J. Fenhann, I. Konstantinaviciute, W. Moomaw, H.B. Nimir, B. Schlamadinger, J. Torres-Martinez, C. Turner, Y. Uchiyama, S.J.V. Vuori, N. Wamukonya, X. Zhang, 2007: Energy supply. In Climate Change 2007: Mitigation. Contribution of Working Group III to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change [B. Metz, O.R. Davidson, P.R. Bosch, R. Dave, L.A. Meyer (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA. Source: IPCC: Strengthening and implementing the global response. Available from: <https://www.ipcc.ch/sr15/chapter/chapter-4/>

Vestas 2020 product targets

Since 2010, we have used two essential parameters to assess the environmental impact of Vestas wind turbines: product carbon footprint and product waste. Our targets are informed by Life Cycle Assessments (LCAs) that measure the 'cradle to grave' environmental impacts of our products and activities through the lifetime of a wind power plant.⁴⁾

In 2019, we reached our 2020 target of a 10 percent reduction in product carbon footprint. With the LCAs of the 4 MW Platform, we also exceeded our goal achieving a 27 percent reduction in product carbon footprint between 2017 and 2020. We achieved this reduction through increased power production and turbine optimisation to reduce material requirements per kWh delivered.

In 2016, we set a target to reduce product waste by 3 percent by 2020: upon meeting this target in 2017 – with a 12.5 percent reduction, we set a further and more ambitious target of a 7 percent reduction for the 4 MW Platform. However, the LCAs of the 4 MW Platform turbines showed a 4.5 percent reduction of product waste between 2017 and 2020 - falling short of the 7 percent reduction target.

In line with our new sustainability strategy, we aim to achieve 50 percent recyclability (by weight) of wind turbine rotors by 2025 - compared to a baseline of 44 percent. The rotor consists of the turbine hub and blades and the target aims to address the largest non-recyclable components of our turbines. For towers, the current 96 percent recyclability will be maintained, and for nacelles we want to increase recyclability from 89 percent to 89.5 percent by 2025.

From 2020 onwards, the sustainability strategy will replace these targets.

End-of-life solutions

Simultaneously lowering the Cost of Energy and environmental impact of wind power is the focus of end-of-life solutions. We are exploring the optimal approach to recycling the various components of a wind turbine after its power production ceases. This investigation involves extensive research and the development of strategic partnerships. It is integral to enhancing the overall environmental performance of the company from a lifecycle perspective.

Increasing our knowledge and developing new solutions helps us to continue designing the next generation of wind turbines from an environmental perspective. It also helps us to gain the most end-of-life value from existing turbines.

The composite materials of turbine blades comprise the largest component yet to be made recyclable. To address this issue, Vestas continued to participate in the DreamWind project (Designing Recyclable Advanced Materials for Wind Energy) throughout 2019. The project aims to develop new sustainable composite materials for blades.



Did you know?

Within the first 4 months of being connected to the power grid, the V150-4.2 MW has offset the equivalent CO₂ emissions from the manufacture and operation of the wind plant over its entire life cycle. From that point onwards, the turbine will effectively still deliver CO₂-free electricity to society for an average lifetime of 20 years or longer.⁵⁾

Life cycle assessment

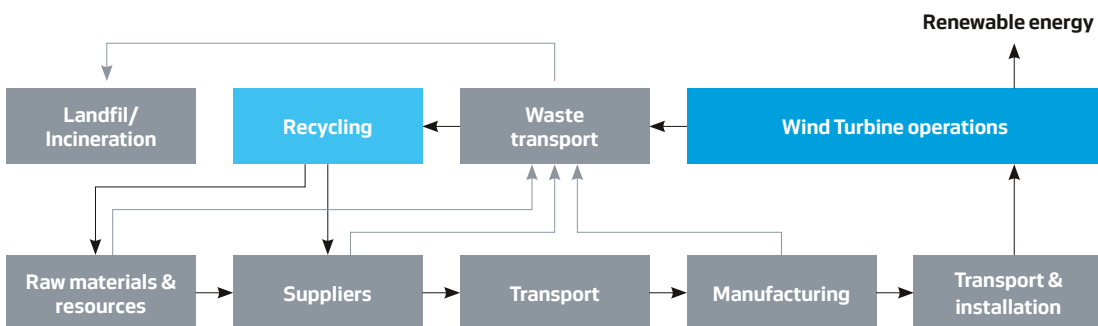
Vestas uses LCAs to develop increasingly energy-efficient products and production, while mitigating environmental impacts throughout a turbine's lifetime. Transparency, especially in regard to the environmental impacts and benefits of wind power, is vital to affirm Vestas' product performance and financial competitiveness when stating the Cost of Energy.

Since 1999, we have been developing wind power LCAs to give a 'cradle to grave' evaluation of the environmental impacts of our products and activities. These concentrate on two key actions:

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

The studies assess a wind turbine's entire bill-of-materials – accounting for the approximately 25,000 parts that make up a wind turbine. In an LCA, a complete wind power plant is assessed up to the point of the electricity grid. This includes the wind turbine itself, its foundation, site cabling and transformer station.

Life Cycle Assessment scope



4) 99.9 percent of MW delivered by Vestas are covered by LCAs based on ISO 14040/44 and are publicly available at: Vestas (2019) Available reports. Available from: www.vestas.com/en/about/sustainability/#available-reports

5) The offset is calculated compared to global average electricity of 485 grams CO₂ per kWh

Available reports
Current Portfolio

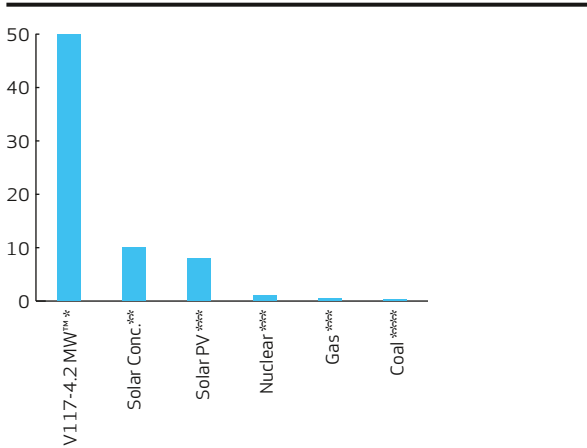
	Year
V90-1.8/2.0 MW	2011
V100-2.0 MW	2015
V110-2.0 MW	2015
V116-2.0 MW	2018
V120-2.0 MW	2018
V105-3.45 MW	2017
V112-3.45 MW	2017
V117-3.45 MW	2017
V126-3.45 MW	2017
V136-3.45 MW	2017
V117-4.2 MW	2019
V136-4.2 MW	2019
V150-4.2 MW	2019

Energy payback

The energy balance of a wind power plant shows the relationship between the energy requirement over the whole life cycle of the power plant (i.e. manufacture, operation, service and disposal) and the energy it generates. This energy payback period is measured in 'months to achieve payback', and is reached when the energy requirement for the life cycle of the power plant equals the energy it has produced.

Alternatively, energy payback may be measured by 'number of times payback'. This is how many times more energy the wind plant generates over its lifetime compared to the amount consumed.

Energy payback by energy source
Number of times



Sources:

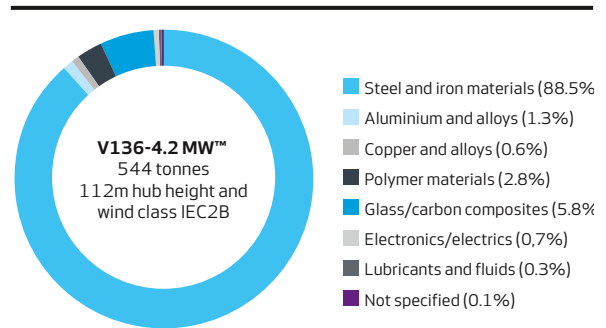
- * Vestas, (2019). Life Cycle Assessment of Electricity Production from an onshore V117-4.2 MW Wind Plant – 1 November 2019. Vestas Wind Systems A/S, Hedeager 42, Aarhus N, 8200, Denmark.
- ** The Offshore Valuation: A valuation of the UK's offshore renewable energy resource. Published in the United Kingdom 2010 by the Public Interest Research Centre. ISBN 978-0-9503648-8-9.
- *** PE International (2012). PE International – GaBi 6 databases 2011, LBP, University of Stuttgart and PE INTERNATIONAL GmbH.
- **** World Coal Association. Coal & the Environment – Coal Use & the Environment – Improving Efficiencies.

For Vestas wind turbines, the breakeven period generally ranges from around five to 12 months. For instance, a V117-4.2 MW wind power plant has a payback period of under five months for high wind conditions. Over its life cycle, a V117-4.2 MW wind power plant returns 50 times more energy back to society than it consumes. So when 1 kWh is invested in a wind energy solution, a 50 kWh return is achieved. Alternatively, an investment of 1 kWh in coal will typically result in a 0.28 kWh in return.⁶⁾

Material use

By knowing how our products and materials contribute to the environmental performance of the wind plant, we are able to make fact-based and informed decisions that will minimise overall environmental impacts. We use LCAs to provide the necessary insight regarding the material composition of wind plants from a life cycle perspective. The figure below shows the typical material breakdown of Vestas turbines. Typically, for example, a V136-4.2 MW turbine is composed of around 90% metals (e.g. steel, iron, copper and aluminium), 9% polymers and composite materials, with the remainder being a mixture of electronics/electrical items, lubricants and fluids.

Material breakdown of a V136-4.2MW™ wind turbine
Percent



Source: Vestas, (2019). Life Cycle Assessment of Electricity Production from an onshore V136-4.2 MW Wind Plant – 1 November 2019, Vestas Wind Systems A/S, Hedeager 42, Aarhus N, 8200, Denmark.

Rare earth elements from an LCA perspective

Rare earths elements are naturally occurring elements that - once mined and processed, can be used in a variety of industrial applications. They are found in high-tech applications – such as; permanent magnets in wind turbines, hybrid car motors and components for military hardware.

At Vestas, rare earth elements are used in the magnets found in the towers of all new models of Vestas turbines, whereas rare earth elements used in permanent-magnet generators are used in the older GridStreamer™ turbine models (i.e. the V112-3.0 MW and the 2.0 MW GridStreamer™ platform) and are used in the EnVentus platform.

Rare earth elements improve the performance of turbines by making the generators more efficient and more grid-compatible. This allows us to reduce the overall size of the generator and powertrain and use smaller amounts of other resources (such as steel and structural materials), contributing to a smaller carbon footprint.

It is important to understand the difference between different types of turbine designs and how each design uses rare earth elements. Two types of turbine drive train concepts and use these materials: conventional geared drive trains and direct-drives (without a gearbox). The amount of rare earth elements used in direct-drive turbines is up to 10 times higher than the amounts used in a conventional drive train. Today, all Vestas turbines are based on proven technology using conventional drive trains.

6) World Coal Association. Coal & the Environment - Coal Use & the Environment - Improving Efficiencies.



The contribution of rare earth elements used in the turbine generator magnets, as well as the magnets used in the tower, make a negligible contribution to total resource depletion - contributing below 0.1% of total life cycle impacts.⁷⁾

Product responsibility

When designing our products, we consider sustainability requirements throughout our development process; which we call the 'Vestas Way to Market' global framework. We use this framework for planning, managing and executing technology and product development - as well as actively involving the entire value chain in our company. As such, we always aim for these projects to start and end with customer requirements in focus. 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 our stage-gate process - with a group of gatekeepers positioned at each milestone. This approach enables us to decide whether to progress a project to the next stage or not. This guarantees that specification requirements are always met. The specifications are based on internal Vestas commitments (such as the Vestas' chemical black list), international legislation (such as the European directives), and internationally-recognised codes and standards like the ASMA, ISO and IEC.

Green Friday

In 2019, Vestas participated in 'Green Friday' - the more sustainable alternative to 'Black Friday'. We donated 100 trees for each transaction within a one-week period, made on Shop.Vestas.com - our webshop for spare parts and services. During that week, we received a record-breaking number of visitors to our webshop. In total, we donated 7100 trees to be planted in the Brazilian rainforest.

Chemical management

Being in control of the chemicals and hazardous substances used in the development, manufacture and service of turbines is part of our management system and is essential for our sustainability performance. By actively working on finding safer and more environmentally friendly products, we ensure a healthy workplace for our employees and minimal impact on the environment.

Chemical management at Vestas includes global procedures for the approval of new chemicals, local instructions for handling, transporting and storing chemicals, and a global chemical database for sharing knowledge from suppliers.

In order to adapt to continuously changing chemical legislation globally, like GHS/CLP and REACH, we keep two lists. The **Material and Chemical Blacklist** identifies different substances that are prohibited by law. We also follow a **Material Restricted list** to phase out substances in our product, manufacturing and service processes. This list is based on the decision by Vestas management to limit the use of certain substances.

We require our suppliers to fulfil the requirements on the Chemical and Material Blacklist for all products delivered. Vestas does not buy products containing substances that are prohibited. If the product contains chemicals or materials outlined on the Vestas Material Restricted list, an HSE evaluation must be performed by the supplier to ensure correct use of chemicals and materials. Furthermore, it is expected that the supplier creates an action plan for phasing out these restricted substances and finding alternatives. In parallel, we assess if a time-bound dispensation can be signed off and/or if the product can be substituted.

Impact assessment

When establishing a wind plant, the planning process should always include an assessment of the proposed location and how the project could potentially impact the surrounding environment. In many countries, environmental impact assessments are required by law, or they are part of the environmental requirements of international financial institutions which support infrastructure projects.

In most cases, our customers have the primary responsibility for undertaking the environmental assessment and developing the environmental management system for the wind plant. We work closely with our customers throughout every stage of the project.

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

7) Vestas, (2014). Life Cycle Assessment of Electricity Production from an onshore V112-3.3 MW Wind Plant - 6 June 2014, Version 1.0. Vestas Wind Systems A/S, Hedeager 42, Aarhus N, 8200, Denmark.



- Landscape and visual impressions
- Flora
- Fauna (e.g. birds and bats)
- Noise
- Shadows

Environmental impact of operations

The LCAs show that our operations typically account for 5-10 percent of the carbon footprint of a wind turbine through its entire lifecycle. For Vestas' activities, performance is reported in terms of inputs of resources and outputs of CO₂ emissions and waste. Total energy consumption, mainly from Vestas' manufacturing and service activities increased in 2019 to 638 GWh (2018: 614 Wh)

For the service business, the energy consumption and waste generation increased relatively less than the increase in activity levels. The water consumption however, increased more than the activity level

In manufacturing, the energy consumption and waste generation increased relatively more than the production level. Water consumption increased in line with the increase in production. It should be noted that overall environmental performance of the manufacturing facilities varies globally and depends largely on turbine variants and as well the frequency of introduction of new turbine variants.



As a member of RE100, Vestas remains committed to sourcing 100 percent of its electricity from renewable sources. Since 2013, this has been achieved partly by purchasing renewable electricity and certificates for renewable energy and partly by compensating for the consumption of non-renewable electricity with Vestas-owned wind power plants.

In 2019, more renewable electricity was bought and non-renewable electricity is no longer compensated with Vestas' own wind farms bringing the renewable electricity from 68% in 2018, to 82%. In 2020, Vestas will increase the share of renewable electricity to reach 100%. The change in compensation and increase in renewable electricity also affects the share of renewable energy, which increased from 34% in 2018, to 40% in 2019.

In April 2019, Vestas announced its signature to the Science Based Targets initiative. This aligns with the goals laid out in our new sustainability strategy to be carbon neutral in our own operations by 2030. For more details please see the sustainability strategy section.

The first step will be phasing-out company cars powered by fossil fuels. All new vehicle leases in 2020 will be either electric vehicles or plug-in hybrids. By January 2025, Vestas will only have zero-emission benefit cars.

For service vans, a number of pilot projects in 2020 will introduce vehicles powered by renewable energy. This is the start of a transition to a service fleet entirely powered by renewable energy, with the aim of all new service vans being zero emission from 2025.

As a company, Vestas is on the road to zero CO₂ emissions from its operations by 2030. Improvements in energy efficiency and a transition to renewable energy in manufacturing operations and offices will also be implemented within this timeframe.

Selected environmental data for 2019

Vestas' energy consumption was divided into the following categories:

Energy consumption by source

1,000 MWh

	2019
Fuels for heating (direct energy)	
Oil	15
Gas	134
Indirect energy	
Electricity (82% renewable)	278
Heat (71% renewable)	35
Fuels for transportation	
Liquefied petroleum gas (LPG)	0.3
Diesel oil	132
Petrol	44

Vestas' water consumption was divided into the following categories:

Water consumption by source

1,000 m³

	2019
Fresh water withdrawal	
From municipal water supplies or other water utilities	389
From ground water	82
Fresh water from surface water, including water from wetlands, rivers and lakes	2
Non-fresh water withdrawal	
From surface water, including water from wetlands and oceans	0
Cooling water	
From surface water, including water from wetlands, rivers, lakes, and oceans	0

Vestas emitted waste water to the following destinations:

Waste water

1,000 m³

	2019
Treated by Vestas to public treatment facility	56
Treated by Vestas directly to environment	41
Non-treated waste water to public treatment facility	241
Non-treated waste water directly to environment	17

Vestas' waste disposal was divided into:

Waste disposal

1,000 Tonnes

	2019
Non-hazardous	78
Hazardous	7

Vestas disposed waste to the following destinations:

Waste disposal

1,000 Tonnes

	2019
Recycling	43
Incineration	18
Landfill	24

Vestas recorded the following air emissions:

Air emissions

Tonnes

	2019
VOC	270



A dress fit for Paris, and Vestas

Our product brochures are an important tool for the branding and selling of our products. We are proud that our products are contributing to the creation of a more sustainable world. Nonetheless, digitalisation efforts are under way, and some Vestas locations are already working on going paper-free. In the meantime, guess what one of our colleagues did to repurpose leftover platform products (the clue is in the picture)?

Working with local communities

Investing in the social licence

Vestas understands the importance of investing in the social licence to operate – both to build project bankability, and to create value for society through community development. Reducing community opposition to wind farms is a key component of building bankable projects, particularly in challenging markets worldwide. As a wind turbine supplier and engineering, procurement and construction contractor, we are uniquely placed to support project developers and financiers in successfully delivering renewable energy projects on time and on budget. Proactively working to engage with communities and lead development activities on the ground will only enhance our unique position further.

Due diligence

To support our emerging markets entry strategy, we have developed a Social Due Diligence (SDD) methodology. The SDD identifies social risks and impacts linked to wind power plant projects and sets in motion the processes needed to prevent and mitigate them. For projects in scope, we conduct an assessment of the project and the affected local communities.

The results from the SDD include mitigation actions, which are integrated into project plans to ensure integrity in project execution. The SDD is based on the International Finance Corporation's Environmental and Social Performance Standards and the World Bank Group's Environmental, Health, and Safety Guidelines for Wind Energy. This means that, regardless of where a customer obtains financing, we will support the project's execution in line with accepted international standards.

As an industry-leading global wind turbine supplier, Vestas works closely with customers to assist them in securing and maintaining their social licence to operate during construction and operation, according to international standards.

A core component in this approach to building and maintaining the social licence to operate is our investment in local community development initiatives.

Initiatives of this kind, from 2019, include:



India: Vestas continued earlier community development programmes in several Vestas facilities and sites, in addition to launching new activities.

These activities included:

- A month-long skills training in traditional art and handicraft for 80 young rural women – from 3 villages, near the Kutch wind farm in Gujarat.
- Working to improve the learning environment in rural schools for children near the Kutch wind farm in Gujarat. This included distributing learning kits, organising a science fair, and renovating sanitation and drinking water facilities. Collectively, these efforts have impacted the lives of over 1 400 school children.
- Running cattle health check camps in local villages and organising health and hygiene related sessions with adolescent girls, for the communities living near the Taralkatti wind farm in Karnataka.
- Launching an integrated education programme this year in Chennai, Tamil Nadu, that aims to help 2000 adolescents from low-income backgrounds to complete secondary education. The programme aims to promote higher levels of employability and improved life skills.



Senegal

We focused on building a strong relationship with the host community and to create jobs. In collaboration with Vestas' contractors, the EPC wind power project Taiba has succeeded in creating 873 positions at peak during construction. 33 percent of jobs were given to host communities, 61 percent of jobs were given to Senegalese workers, and 8 percent were expatriate positions. Our company was also actively involved in community development projects. These projects included upgrading dirt roads, constructing public toilets, and building a public square. We have also initiated the donation of stoves to 500 households to reduce the use of firewood and charcoal.



Tamaulipas, Mexico

We also partnered with our customer AES, a local university, and NGO 500RPM, to build a 350 W wind turbine. It was installed in the local rural school Lic. Fermín Legorreta. 36 students from the Technical University Victoria and the Technical School CBTIS 271 were trained by the NGO to produce the turbine for installation. Focus was placed on strengthening the technical skills of the students; providing 64 hours of training and promoting general knowledge about renewable energy. The entire school will benefit from the renewable energy supplied, which will also improve the school's energy consumption efficiency for at least 15 years.

Powering learning, sustainably

Vestas CSR in Latin America partnered with our customer, local NGOs and local schools to build and erect a community 350 W wind turbine at a local rural school close to the Los Guzmancito Wind Farm in the Dominican Republic.

With the objective of bringing clean energy and storage to the local community, this community wind farm will ensure that power intermittency does not affect educational activities.

In the process, this project also trained 34 students from the local schools so that they could – in future, make their own community turbines.

This was the third successful initiative of this type, and will be replicated going forward – including in other regions.



“ In leading a responsible and inclusive energy transition, local initiatives are a key component to driving positive impact. This is part of Vestas’ CSR strategy in respecting human rights in our business.”

Kristian Heydenreich
Senior Director of Compliance and CSR



Governing sustainability

To be successful in the execution of our sustainability strategy, we need to have the right management systems in place. This section describes how sustainability is managed and governed at Vestas, and the progress made in 2019.

The Vestas Sustainability Committee

The Vestas Sustainability Committee prioritises, oversees, and coordinates cross-functional sustainability initiatives across the entire organisation. The Sustainability Committee also ensures our company conforms with, and lives up to, its international responsibilities as a member of the UN Global Compact.

At the end of 2019, there were eight members of the Vestas Sustainability Committee. It is important for the Committee to effectively represent Vestas as an organisation, so each member speaks for the function or department in which they work. Moving forward into 2020, the following Vestas Functions are represented in the Committee: Investor Relations, Corporate Social Responsibility and Compliance, Sustainability, People & Culture, Service, Sales, Procurement, Quality, Safety & Environment, and Power Solutions.

Reporting to the Vestas Executive Management team, the Committee held a total of nine meetings in 2019. This frequency will remain the same in 2020. During 2019, a large priority for the Sustainability Committee was the discussion and approval of the sustainability strategy. The new strategy was approved by the Executive Management team and the Board of Directors in October.

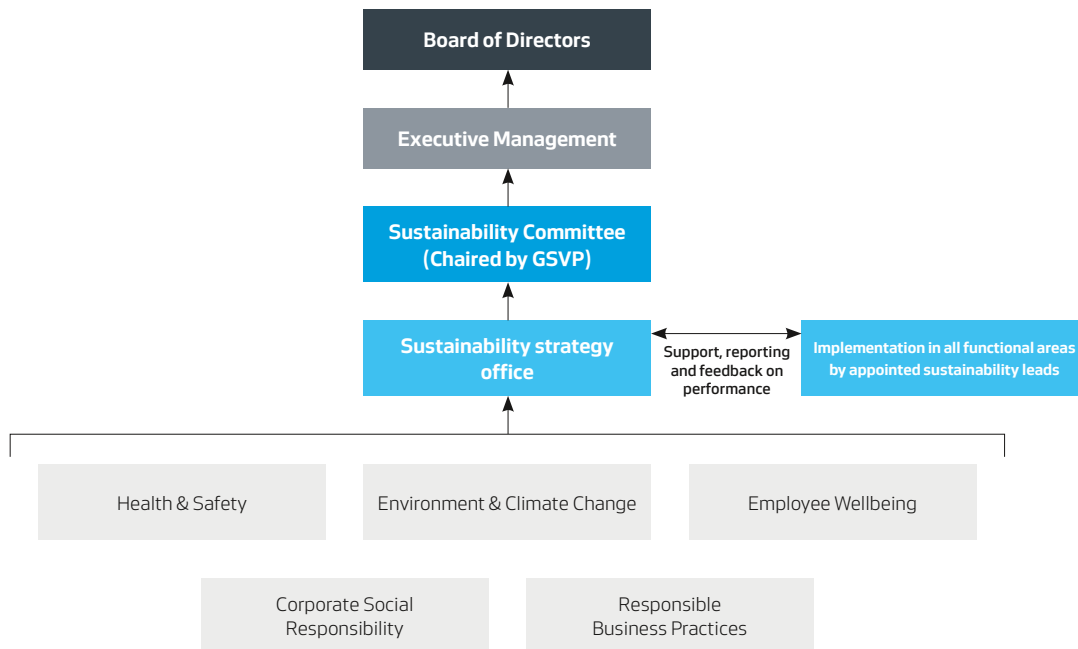
In April 2019, we established the Vestas Sustainability department. The department operates from the Vestas CEO Office – within Global Marketing, Communications and Public Affairs. It is responsible for preparing, coordinating – and in close collaboration with the functional areas, driving, and practically supporting on the execution of the sustainability strategy. The Sustainability department will report on progress at least once a year to Executive Management and the Board of Directors.

Ultimately, responsibility for the sustainability performance of Vestas as a whole lies with our company line organisation – supported by the Sustainability department.

In 2019, we appointed sustainability leads in most areas of the business. In 2019, these individuals – with support from the sustainability department, will define action plans and resource allocation to support the achievement of our global sustainability goals and targets. In addition, individual departments are responsible for specific global policies, procedures and overall guidance related to sustainability: Health, safety and environment are managed by the Global Quality, Safety & Environment (QSE) Department; while Corporate Social Responsibility and Business Ethics are managed by the Legal & Compliance Department.

In 2020, the Sustainability Committee, alongside the new Sustainability Department, will continue to oversee the execution of our sustainability strategy and help the company work towards its sustainability goals and targets.

Vestas' Sustainability Governance



The Board of Directors of Vestas Wind Systems A/S

The Vestas Board of Directors (BoD) consists of the board members elected at the General Meeting of Vestas Wind Systems A/S and Group and/or Company representatives elected by Vestas employees. To read more about the BoD, please visit our corporate website¹⁾.

There are three committees, comprised of members of the BoD, overseeing our sustainability performance: the Audit Committee, the Nomination & Compensation Committee and the Technology & Manufacturing Committee.

The Audit Committee evaluates the adequacy and effectiveness of our ethics and anti-corruption programme, in accordance with both the Vestas Code of Conduct and the World Economic Forum Partnering Against Corruption Initiative (PACI). The cases filed in our whistleblower system, Vestas EthicsLine, are reported to the Audit Committee.

The Nomination & Compensation Committee supports the Board of Directors in overall staff-related topics, including diversity and inclusion. Meanwhile, the Technology & Manufacturing Committee evaluates sustainability performance.

In 2019, the Board of Directors held five Audit Committee meetings, six Nomination & Compensation Committee meetings, and four Technology & Manufacturing Committee meetings.

Embedding sustainability into the way we work

As a signatory to international initiatives like the UN Global Compact and the World Economic Forum PACI, it is important that our global commitments are reflected in the way every part of our company operates. The rules and principles by which all of our employees and business partners are expected to behave are outlined in the Vestas Employee Code of Conduct and Business Partner Code of Conduct²⁾.

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 OHSAS 18001 for Health and Safety.



Codes of Conduct

Integrity underpins every decision made and every action taken at Vestas. Integrity, in this context, means making the right choices when faced with difficult situations and ensuring that what we do always matches the values of accountability, collaboration, simplicity and passion. As a global company of more than 25,000 employees operating in over 50 countries, it is essential that our Codes of Conduct embody this commitment and are supported by top management.

Our Employee Code of Conduct is a set of rules and principles for how Vestas employees should act as part of a global company. It goes beyond national borders, cultures and local traditions, and sets a standard for all employees wherever they operate.

All salaried employees joining Vestas are required to become signatories of the Employee Code of Conduct. This means we can be confident that everyone in our organisation has formally acknowledged that they have familiarised themselves with, and understood, exactly what is expected of them in their daily work.

The second of the two codes is the Business Partner Code of Conduct. This outlines the minimum requirements that our Business Partners need to respect and comply with when conducting business with us.

For more information about our policies, please visit:

- [The Vestas Employee Code of Conduct](#)
- [The Vestas Decision Tree](#)
- [The Vestas Business Partner Code of Conduct](#)
- [The Vestas Business Partner Code of Conduct Guidelines](#)
- [The Vestas Quality, Health, Safety and Environmental policy](#)
- [The Vestas Human Rights Policy](#)
- [The Vestas Freedom of Association Policy](#)

UN Global Compact

The United Nations Global Compact is a strategic policy initiative for businesses committed to aligning their operations and strategies with ten universally accepted principles in the areas of human rights, labour, the environment and anti-corruption. Vestas signed up in 2009, reporting and publishing its progress on implementing these principles on an annual basis. Working to achieve targets guided by these principles is an integral part of the Vestas Management System.

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 central part of our intent to make sustainability an integral component of all business processes.

Local networks

We have demonstrated our sustainability leadership locally through our participation in the UN Global Compact Nordic Network working groups on human rights and SDGs. This is an opportunity to promote stronger sustainability efforts for businesses in their local context.

Memberships

- [Global Wind Energy Council \(GWEC\)](#)
- [WindEurope](#)
- [RE100](#)
- [World Economic Forum](#)
- [P4G Partnering for Green Growth and the Global Goals 2030](#)
- 20 national wind associations around the world

1) Source: Vestas. Board of Directors. Website. 2019: https://www.vestas.com/en/investor/corporate_governance#!board-of-directors

2) Source: Vestas. Employee Code of Conduct: <https://www.vestas.com/~media/vestas/about/sustainability/pdfs/vestas%20employee%20coc%202016.pdf>

Source: Vestas Business Partner Code of Conduct: <https://www.vestas.com/~media/vestas/about/sustainability/pdfs/vestas%20business%20partner%20coc%20guidelines.pdf>

Our stakeholders

Stakeholder engagement

As a global company, Vestas interacts with many stakeholder groups. These include customers, shareholders, employees, policy makers, suppliers, non-governmental organisations, local communities and the media. We understand that 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.

At the Group level, we have both categorised and prioritised stakeholders to rationalise and focus our engagement efforts. Initially, we categorise stakeholders based on their relationship with Vestas. Then, we consider each stakeholder in the context of various criteria to determine how relevant our sustainability performance is to them and vice versa. Engagement ranges from forming active partnerships to address common sustainability issues, to more passive engagement through, for example, the publication of the Vestas Annual 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 different engagement efforts. We publicly disclose key sustainability information in our Sustainability Report. Additionally, we regularly have more detailed dialogue with key stakeholders as well as day-to-day contact with customers and annual events like our Supplier Forum.

We collaborate with stakeholders to positively influence not only our own sustainability performance, but also that of the wider communities in which we operate. For example, Vestas has been a driving force in establishing the Sustainability Working Group in WindEurope¹⁾ – consolidating best practice in the wind power industry and driving improvements. As a first outcome, two public papers were published in spring 2017 amalgamating insights on “blade waste” and “circular economy”. Blade recycling was a core focus for the Group in 2019 and advancing wind turbine recycling will be a priority going forward.

Working closely with political stakeholders is critical for driving the market for wind energy. The energy industry is highly regulated, making the ongoing dialogue we maintain with governments, political leaders, civil servants, interest groups and non-governmental organisations all over the world an incredibly valuable resource. We strive to be a valuable source of expertise and insight on the benefits and potential of wind power, continuously engaging with policy makers in the regions and countries where we operate to advocate for reforms and offer guidance. Our ambition to build closer partnerships and support our stakeholders is reflected in the Vestas materiality analysis.

Material issues

Understanding our stakeholders' opinions and priorities enables better decision making and ensures that we are both a successful company and a responsible member of the community. We therefore engage with internal and external stakeholders to define what matters to them. This process has helped us to identify the sustainability issues that are most material to Vestas.

A materiality analysis focuses on mapping topics and indicators that reflect the organisation's significant economic, environmental and social impacts. Identifying material issues allows us to focus our sustainability programmes on the areas that are most important to our organisation and our stakeholders. The materiality analysis also influences how we report on sustainability issues. For example, we com-



ment on the most material issues in our Annual Report²⁾ and provide additional information and updates on Vestas.com.³⁾

We identify material issues through internal stakeholder consultation, involving many parts of the organisation. To prioritise issues, we use internal knowledge of stakeholder expectations, including Vestas surveys, external stakeholder sustainability reports, consultant input and global sustainability studies.

The materiality analysis is enhanced by consulting directly with external stakeholders like customers and investors. This gives us additional insight into their priorities and provides a useful platform for meaningful dialogue.

In our latest materiality assessment from 2016, we identified a range of sustainability issues, including Business Performance, Innovation, Health & Safety, Product Environmental Performance and Local Community Development. A new materiality assessment is being planned.







1) Source: Wind Europe. Website. 2019. Available from: <https://windeurope.org/>

2) In the Sustainability Section of the Vestas Annual Report 2019

3) Source: Vestas. Sustainability Commitments. 2019: <https://www.vestas.com/en/about/sustainability#commitments>

Reporting on the UN SDGs

Vestas' contribution to the UN Sustainable Development Goals in 2019

SDG	GOAL	VESTAS' CONTRIBUTIONS
	Ensure access to affordable, reliable, sustainable and modern energy for all	<ul style="list-style-type: none"> By the end of 2019, the company has collaborated with its closest stakeholders to install more than 71,400 wind turbines in 81 countries, across six regions. Vestas remains 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.
	Take urgent action to combat climate change and its impacts	<ul style="list-style-type: none"> By the end of 2019, Vestas has cut its own product carbon footprint by a total of 27 percent. With 113 GW of installed wind energy, Vestas and its stakeholders have also disrupted the emission of 1.3 billion tonnes of CO₂ along the way.
	Ensure sustainable consumption and production patterns	<ul style="list-style-type: none"> In its electricity consumption, Vestas has in 2019 sourced 82 percent of its electricity from renewable sources.
	Strengthen the means of implementation and revitalize the global partnership for sustainable development	<ul style="list-style-type: none"> The announced participation of Vestas in the Getting to Zero Coalition, and its role as the Principal Partner of the Mercedes-Benz EQ Formula E Team, exemplifies the commitment of Vestas in 2019 to take a leading role in promoting electrification of the transport sector. Vestas has increased its focus on local partnerships to strengthen its CSR approach, and has in 2019 directly collaborated with eight NGOs globally, with emphasis on activities in India, Mexico, and Senegal.
	Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all	<ul style="list-style-type: none"> In 2019, Vestas focused on the education and training of local stakeholders in a number of nations, including Mexico. One of the initiatives was to train students in Tamaulipas to build a 350 W turbine to understand the technology, and to benefit from renewable energy and a higher electricity capacity in the local area. Vestas prioritises attracting and training new talent, and – as an example – completed a two-year Graduate Programme in 2019, which onboarded five male and six female graduates from seven different nationalities and located in eight different locations in their first year at Vestas. Nine out of the 11 Graduates continued employment in other positions.
	Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all	<ul style="list-style-type: none"> In 2019, Vestas continued its work to reduce the lost time injury rate per one million hours worked, achieving an overall reduction of 20 percent. In 2019, Vestas worked to reduce the total recordable injury rate – but missed the target of 3.6 total recordable injuries per one million hours worked. The rate at the end of 2019 was 3.9.

Sustainability highlights

	2019	2018	2017	2016	2015
SOCIAL AND ENVIRONMENTAL KEY FIGURES					
OCCUPATIONAL HEALTH & SAFETY					
Total recordable injuries (number)	213	210	243	303	335
– of which lost time injuries (number)	67	80	92	82	56
– of which fatal injuries (number)	1	0	1	0	1
CONSUMPTION OF RESOURCES					
Consumption of energy (GWh)	638	614	569	567	516
– of which renewable energy (GWh) ¹⁾	258	211	204	215	199
– of which renewable electricity (GWh) ¹⁾	227	178	175	186	173
Consumption of fresh water (1,000 m ³)	473	470	454	428	427
WASTE DISPOSAL					
Volume of waste (1,000 tonnes)	85	81	71	75	67
– of which collected for recycling (1,000 tonnes)	43	42	39	37	33
EMISSIONS					
Direct emissions of CO ₂ (1,000 tonnes)	71	69	60	58	49
Indirect emissions of CO ₂ (1,000 tonnes) ¹⁾	38	61	70	66	67
LOCAL COMMUNITY					
Environmental accidents (number)	0	0	0	0	0
Breaches of internal inspection conditions (number)	0	0	0	1	0
EMPLOYEES					
Average number of employees	24,964	24,221	22,504	21,625	18,986
Number of employees at the end of the period	25,542	24,648	23,303	21,824	20,507
SOCIAL AND ENVIRONMENTAL INDICATORS					
OCCUPATIONAL HEALTH & SAFETY					
Incidence of total recordable injuries per one million working hours	3.9	4.0	5.3	6.9	8.7
Incidence of lost time injuries per one million working hours	1.2	1.5	2.0	1.9	1.5
Absence due to illness among hourly-paid employees (%)	2.0	2.1	2.3	2.2	1.9
Absence due to illness among salaried employees (%)	1.0	1.1	1.2	1.2	1.1
PRODUCTS					
CO ₂ savings over the lifetime of the MW produced and shipped (million tonnes of CO ₂)	322	275	317	281	224
UTILISATION OF RESOURCES					
Renewable energy (%) ¹⁾	40	34	36	38	39
Renewable electricity for own activities (%) ¹⁾	82	68	66	70	68
EMPLOYEES					
Women in Board of Directors ²⁾ and Executive Management at the end of the period (%)	23	15	23	23	23
Women in leadership positions at the end of the period (%) ³⁾	19	19	19	19	18

1) Calculation changed to the effect that non-renewable electricity is no longer compensated with Vestas-owned wind power plants.

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

3) Employees in leadership positions comprise managers, specialists, project managers, and above.

Notes to sustainability highlights

Basis for preparation of the statement

General reporting standards

The below description of accounting policies of social and environmental performance refers to the social and environmental key figures and indicators presented on page 034.

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

Defining materiality

Vestas bases its materiality assessment on an analysis of significant economic, environmental, and social impacts of Vestas' 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 Vestas' COP.

Vestas has previously selected a number of social and environmental key figures that are relevant to understand Vestas' development, results and financial position. These key figures have been maintained after the materiality assessment. The status of the key figures is monitored closely and for relevant key indicators, specific targets have been defined.

Change in accounting policies

The calculation of indirect CO₂ emissions has been adjusted to follow criteria for setting Science Based Targets for reducing CO₂ emissions in the value chain.

The calculation of renewable electricity and energy has been changed to the effect that the consumption of non-renewable electricity is no longer compensated with Vestas-owned wind farms.

Social performance

Occupational health and safety

Occupational health and safety is measured for all activities under the organisational structure. Lost time injuries of all employees are stated on the basis of registration of incidents that have caused at least one workday of absence after the day of the injury. Total recordable injuries include lost time injuries, restricted work injuries and medical treatment injuries.

Injuries and working hours for externally supervised employees are also included. The incidence of injuries is defined as the number of lost time injuries including fatalities per one million working hours. The number of working hours is measured on the basis of daily time cards registered in the payroll system for hourly-paid employees and prescribed working hours for salaried employees. For externally supervised employees, the injuries are reported by Vestas, and working hours are reported by the external suppliers.

Absence due to illness does not include absence caused by lost time injuries, maternity leave and child's illness leave. Absence due to illness is measured by means of registrations in the payroll system based on daily time cards for hourly-paid employees and absence records for salaried employees, respectively.

Employees

The number of employees is calculated as the number of full time equivalents (FTE) with a direct contract with Vestas. Employee information is determined on the basis of extracts from the company's ordinary registration systems with specification of nationality, gender and leadership position. Employee indicators are calculated based on head counts.

Environmental performance

Energy consumption, water consumption, waste generation and CO₂ emission are reported on the basis of significance. All production facilities are included as well as larger offices, warehouses and other facilities ensuring a comprehensive and sufficient statement of these environmental aspects.

Utilisation of resources

Electricity, gas and district heating are measured on the basis of quantities consumed according to direct meter readings per site including related administration. Consumption of electricity comprises electricity purchased externally and consumption of production from own wind turbines. Oil for heating is stated on the basis of external purchases adjusted for inventories at the beginning and at the end of the period. Fuel for transport has been recognised on the basis of supplier statements. Electricity from renewable energy sources is calculated on the basis of supplier statements. Only 100 percent renewable electricity is counted as renewable electricity.

Renewable energy is energy generated from natural resources, which are all naturally replenished – such as wind, sunlight, water and geothermal heat. Nuclear power is not considered to be renewable energy.

The consumption of water is stated as measured consumption of fresh water. Cooling water from streams, rivers, lakes, etc. that is solely used for cooling and released to the stream after use without further contamination than a higher temperature, is not included.

Waste disposal

Waste is stated on the basis of weight slips received from the waste recipients for deliveries affected in the accounting period, apart from a few types of waste and non-significant volumes which are estimated on the basis of subscription arrangement and load. Waste disposal is based on supplier statements.

Emissions of CO₂

Direct emission of CO₂ is calculated on the basis of determined amounts of fuel for own transport and the direct consumption of oil and gas, with the usage of standard factors published by the UK Department for Environment, Food & Rural Affairs. Indirect emission of CO₂ from consumption of electricity outside Europe is calculated, with the usage of national grid emissions factors published by International Energy Agency. Indirect CO₂ emission from consumption of electricity in Europe is calculated with residual mix emission factors from Association of Issuing Bodies. Indirect CO₂ emission from district heating is calculated with the usage of emission factor from the UK Department for Environment, Food & Rural Affairs.

Local community

Environmental accidents are accidental releases of substance and chemicals which are considered by Vestas to have a significant impact on the environment. Breaches of internal inspection conditions are stated as the conditions for which measurements are required, and where measurements show breaches of stated conditions.

Products

CO₂ savings from the produced and shipped MW are calculated on the basis of a capacity factor of 30 percent of the produced and shipped MW, an expected lifetime of 20 years of the produced and shipped MW, and the latest updated standard factor from the International Energy Agency of average CO₂ emission for electricity in the world, at present 485 grams of CO₂ per kWh.

What did you think of this report?



Do you have questions?

Reach out to us on: vestassustainability@vestas.com



Stay connected:

Want to get involved and stay up to date?



@vestas



@vestas



@vestas



/vestas



Do you want to join us?

Discover our advertised employment positions on the 'Career' and 'Job openings' section of our corporate website.

“ Thank you to all Vestas employees across the organisation for your hard work. Our progress this year would not have been possible without your passion, dedication, hard work and collaboration. Also, thank you to you for reading the 2019 Vestas Sustainability Report. Here’s to another great year.”

Henrik Andersen
Group President & CEO



©Vestas 2020

This document was created by Vestas Wind Systems A/S and contains copyrighted material, trademarks and other proprietary information. All rights reserved. No part of the document may be reproduced or copied in any form or by any means such as graphic, electronic or mechanical, including photocopying, taping or information storage and retrieval systems, without the prior written permission of Vestas Wind Systems A/S. All specifications are for information only and are subject to change without notice. Vestas does not make any representations or extend any warranties, expressed or implied, as to the adequacy or accuracy of this information.