Social and environmental performance

Sustainability inherent in Vestas’ way of working
Vestas’ vision is to be the global leader in sustainable energy solutions. This requires excellence in everything that Vestas does. In addition to creating sustainable products, Vestas also strives to produce them in a sustainable way.

Vestas believes that in the long term, it is in the best interests of the company, its employees, and its owners to be accountable for Vestas’ impact on its surroundings: the environment as well as the local, national, and global communities.

Standards, goals, and priorities
Vestas’ standards and goals within sustainability build on global certificates for the three standards: ISO 9001 for Quality, ISO 14001 for Environment, and OHSAS 18001 for Health and Safety as well as recognised conventions established by international organisations such as the UN, ILO, and OECD.

Vestas joined the UN Global Compact in 2009. The UN Global Compact is a commitment to 10 universally accepted principles in the areas of human rights, labour, environment, and anti-corruption.

These standards and goals are reflected in Vestas’ social and environmental priorities:

- The lowest possible incidence of recordable as well as lost time injuries – the ultimate goal being to avoid accidents altogether.
- CO2 impact from wind power must excel against other energy forms.
- The lowest possible percentage of waste from the wind turbines.
- Avoid or minimise negative impacts on communities where Vestas operates, whilst enhancing Vestas’ positive impacts.

The priorities and associated policies and due diligence address the principal risks related to Vestas’ operations, which are identified as: occupational injuries of employees and contractors; carbon footprint of wind turbines; and negative impacts on human rights of communities where Vestas operates.

Combined with additional information about Vestas’ sustainability initiatives at vestas.com, this annual report constitutes Vestas’ ‘Communication on Progress’ (COP) 1) under the UN Global Compact. In this way, Vestas applies 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.

To take sustainability at Vestas to the next level, a Sustainability Committee with cross-functional participation has been established. The role of the Sustainability Committee is to oversee, prioritise, and coordinate cross-functional sustainability initiatives in Vestas and ensure sustained conformity according to UN Global Compact. The Committee reports to the Executive Management and has met five times in 2016, with a planned meeting frequency of four times a year going forward.

This year the Committee conducted an internal materiality assessment to determine the focus areas in sustainability for improvement. Three areas have been identified for priority: stakeholder dialogue, supply chain management, and local community development. Separate working groups have been established for each respective area and report to the Committee on an ongoing basis. The Committee will also oversee Vestas’ work with the UN Sustainable Development Goals.

How Vestas works: Code of Conduct
In 2016, Vestas revised its Code of Conduct, dividing it into two: one dedicated to Vestas employees and one specifically for Vestas’ business partners. The revision reflects an increase in ambition level to match Vestas’ own standards and the external expectations and requirements of Vestas today as an international company. The Employee Code of Conduct and the Business Partner Code of Conduct were launched in the fourth quarter of 2016.

Vestas’ Employee Code of Conduct and the Business Partner Code of Conduct form the foundation for how Vestas does business as a global company operating in many countries. The Employee Code of Conduct and Business Partner Code of Conduct outline the rules and principles

by which the company expects its employees and business partners to behave. The Codes cover the areas of health and safety, human rights, bribery and corruption, environment, and protect company assets, information and reputation.

To support employees in understanding Vestas’ expectations, Vestas has developed new training on the Employee Code of Conduct and the Business Partner Code of Conduct. All white collar employees must take the new Employee Code of Conduct e-learning; high risk employees receive tailored face-to-face training. All new employees enrolled in Vestas must also take the training as part of their onboarding training.

Human rights and labour practices in Vestas projects

Vestas recognises its responsibility to respect human rights as set out in the UN Guiding Principles on Business and Human Rights. This commitment, which includes its expectations for Vestas’ business partners, is outlined in the Vestas Human Rights Policy and implemented across the organisation. Read more on vestas.com/about/sustainability under “Human rights and labour”.

To support Vestas’ emerging markets entry strategy, Vestas has developed a Social Due Diligence (SDD) methodology. The SDD is targeted on ensuring that social risks and impacts are identified, prevented and mitigated in Vestas’ wind power plant projects. For projects in scope, Vestas conducts an assessment of the project and the affected local communities. The assessment includes, for example, a review of stakeholder engagement and development, including whether Free, Prior, and Informed Consent (FPIC) is required, considerations of involuntary resettlement, and potential impacts on communities’ health and safety, and cultural heritage.

The results from the SDD include mitigation actions, which are integrated into project plans to ensure integrity in the 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, ensuring that, regardless of where the customer obtains financing, Vestas supports the project’s execution according to accepted international standards.

The first contact with potential project-affected communities is taken by Vestas’ customer, with the aim to obtain the social license prior to project development. As a wind turbine supplier, Vestas strives to work closely with its customers to assist them in securing and maintaining the social license to operate during construction and operation, according to international standards. Vestas’ SDD process plays a central role in informing its dialogue with the customer concerning their social license to operate in the particular project. In addition to the ongoing dialogue with relevant stakeholders, the establishment of project-level grievance mechanisms available to workers, affected local communities and other stakeholders plays a vital role.

Ethical compliance

In 2016, Export Control & Sanctions and Competition Law was consolidated into Compliance. This has resulted in a more simplified process, as Integrity Due Diligence (IDD) and Sanctions is a joint effort, and a more focused approach towards Export Control and Competition Law.

During 2015, Vestas undertook a Bribery Risk Assessment with the purpose of raising awareness of bribery risks, determine Vestas’ risk appetite and act as a starting point for establishing an enhanced compliance programme.

Three focus areas were identified, resulting in three key activities: revising the business partner due diligence process, building awareness of bribery risks, and updating related compliance policies.

Since the completion of the Bribery Risk Assessment, Vestas has taken a number of actions to further support an ethical behaviour among its employees and business partners, including:

- Development of a revised Business Partner Compliance Programme, which includes a web-based portal to help manage Business Partner relationships and incorporates a risk based approach to the selection of Vestas business partners.
- Increasing awareness of bribery and other compliance risks through face-to-face business ethics training.
- Revision of the process for registering gifts and business entertainment through an online register.

Ethical behaviour in all Vestas does, will be maintained by introducing employee sign-off of the Employee Code of Conduct, launch new targeted e-learning in the business ethics areas, continue face-to-face awareness and training sessions.

EthicsLine

Vestas’ employees, business partners, and stakeholders should feel empowered to report unethical behaviour – anonymously or openly. Vestas continued to raise awareness of the EthicsLine throughout 2016. The revised Employee Code of Conduct makes it mandatory for managers to report compliance violations to EthicsLine and employees are strongly advised to speak up. Vestas aims to ensure that inappropriate behaviour or incidents are always brought forward and handled immediately.

Vestas received a total of 111 cases/reports through EthicsLine in 2016 compared to 91 in 2015.

The substantiated cases closed in 2016 have led to various disciplinary actions such as 5 warnings and 15 dismissals.

<table>
<thead>
<tr>
<th>Reporting categories</th>
<th>2016</th>
<th>2015*</th>
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</tr>
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<tr>
<td>Total</td>
<td>111</td>
<td>91</td>
</tr>
</tbody>
</table>

* 2015 cases have been updated with status at end of 2016.

Suppliers

Vestas works closely with sub-suppliers of components and raw materials to improve the sustainability of Vestas’ products. The risk management covers the whole process from qualifying and developing suppliers to the daily business. The expected conduct of its suppliers is described both in the Business Partner Code of Conduct as well as in purchase agreements. Vestas takes action to ensure that suppliers comply with its policies by screening significant suppliers on sustainability issues, including human rights and labour standards using the supplier assessment tool.

In 2016, 104 suppliers were assessed on site by Vestas in all regions. Of these 92 were approved, 3 were rejected and 9 are under approval. Similar assessments are conducted for service, installation, and transportation contractors. Furthermore 17 Code of Conduct audits were provided by third parties.

Health & Safety

Through the dedicated efforts of its employees and supervised contractors, Vestas reduced the rate of total recordable injuries in 2016. At the end of 2016, the incidence rate was 6.9 compared to 8.7 in 2015. The target for 2016 was 8.0 total recordable injuries per million working hours and the target was reached. The target for 2017 is 6.0. In 2016, the incidence of lost time injuries was 1.9 per one
While the overall incidence rate on injuries was kept at a satisfactory low level, during 2016 an employee of a Vestas contractor sadly suffered fatal injuries. The root cause of the incident has been identified as human errors due to lack of compliance with existing safety processes.

In 2016, absence due to illness increased by 0.3 percentage points for hourly-paid and increased by 0.1 percentage points for salaried employees compared to 2015.

**New safety initiatives implemented**

Vestas continually raises safety awareness regarding the dangers of complacency. As a direct result of the fatality in Denmark in October 2015 a safety dialogue was initiated, involving more than 15,000 employees across Vestas. The safety dialogue enabled Vestas to identify seven lifesaving rules that will contribute to the prevention of fatalities and serious incidents in the future. The seven rules have been implemented throughout Vestas and is now a part of the mandatory safety training.

To support the lifesaving rules and have global alignment on lifting activities such as equipment, tools, procedures, and training, a global craning committee is introduced with subject matter experts available to support the manufacturing organisation.

Vestas continuously focuses on the safety of its employees, both at and away from work. Following the tragic fatality of an employee while driving home, Vestas implemented a Safe Driving tool box, which also supports the lifesaving rules. "My Team, My Responsibility", a framework to achieve consistent safety behaviour standards across Vestas was launched in 2016 and will be rolled out in 2017.

An occupational health and safety strategy has been identified and will be implemented in 2017. A Global Occupational Health Committee has been established with the overall ambition that when employees leave or retire from employment with Vestas they should be able to reflect on their career and consider that their physical and mental well-being has been enhanced due to the conscientious focus Vestas places on occupational health and safety.

**Employees**

Throughout 2016, Vestas has experienced an increase in activity level within the production area. As a result, Vestas has increased the number of full time employees (FTE) with 1,317 compared to 2015. The increase can primarily be attributed to an increase in the amount of hourly-paid employees.

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The Board of Directors pursues the goal of having members representing multiple nationalities as well as both genders. In addition, the Board of Directors focuses on having a diverse age distribution. However, these goals must not compromise the other recruitment criteria.

The Board of Directors consists of eight members elected by the shareholders:

- two women and six men;
- one from Finland, three from Sweden, and four from Denmark; and
- mean age of approx 54.

The Board of Directors’ ambition regarding diversity is unchanged – the under-represented gender should constitute two to three board members elected by the general meeting no later than in 2017.

The Board of Directors of Vestas’ subsidiaries

Among the Group’s Danish subsidiaries five companies are subject to the reporting requirement for the underrepresented gender according to Article 99b in the Danish Financial Statements Act.

Four subsidiaries have set a target to reach equal gender distribution no later than 2017, and the fifth company has already achieved equitable gender distribution in the company’s board of directors, and is therefore not subject to the requirement to set a target.

The directors in the boards in the subsidiaries is appointed based on key positions in Vestas Wind Systems A/S, and the current constitution of the boards is therefore reflecting who is currently holding these positions within Vestas Wind Systems A/S.

Environmental footprint

A single Vestas wind turbine will generate around 25 to 40 times more energy than it uses in its entire lifecycle. A single Vestas wind turbine only emits around 1 percent of carbon dioxide when compared to a coal power plant.

As the wind power industry is expected to account for a growing share of the future energy mix, it is important that Vestas acknowledge that when producing solutions to harness wind energy a small negative impact on the environment is made.

Vestas is committed to reducing this impact to the extent possible together with its suppliers and customers and believe that it is a prerequisite for Vestas’ continued development.

Life Cycle Assessment

In 2016, 96 percent of the MW delivered by Vestas was covered by a publicly available, full ISO 14040/44 Life Cycle Assessment (LCA). LCA is used to identify and evaluate the environmental impact throughout the lifetime of a wind power plant. Based on the LCA, informed decisions are made to minimise overall environmental impacts.

Environmental strategy

Vestas’ environmental strategy for 2016-2020 aims to support our business offering and operational excellence.

Carbon footprint

The target for reduction in product carbon footprint will be 5 percent by 2020 from a baseline of 6.9 grams CO2 per kWh in 2015. In order to further reduce carbon footprint, Vestas continues to improve and optimise wind turbine performance through technology development and innovation.

The next generation of 3 MW wind turbines offers higher power rating at 3.45 MW and increased energy production in all wind classes. For example, the new V136-3.45 MW™ combines Vestas’ most advanced aerfoil design to date with the proven 3 MW nacelle and Large Diameter Steel Tower (LDST) technology, to deliver a 16 percent increase in annual energy production. Currently, the ISO life cycle assessment of the new range is under completion and results will be available in 2017.

Product waste

Vestas’ aim within product waste is that a wind turbine will be at least 3 percent more efficient compared to the 2015 baseline by 2020, and that it will generate no more than 3.9 grams of waste per kWh.

Nearly all parts of a Vestas wind turbine are recyclable. The composite materials of the blades are the largest barrier to achieving 100 percent recyclability. To address this issue, Vestas has engaged in development projects funded by the Innovation Fund of Denmark.

One project called Genvind ended November 2016 and aimed at developing and demonstrating technologies for reusing and recycling end of life composite materials.

In Genvind, valuable knowledge and lessons were learned from investigating potential applications of composites in e.g. furniture or building materials. These composites were either used directly, after pre-treatment and shaping or even after advanced recovering and cleaning of fibers. Potential future solutions were demonstrated but at the same time technical and market driven barriers were also revealed.

Another newly established project called DreamWind (Designing Recyclable Advanced Materials for Wind Energy) aims at focusing on developing sustainable composite materials for blades. Furthermore Vestas is cooperating with the Ellen MacArthur Foundation on circular economy and retaining materials that create value – even after the product’s end of life.

Renewable energy

The target for Vestas’ energy consumption is to reach a 60 percent share of renewable energy in 2020 from 55 percent in 2015. The road to the target will be both improvements in energy efficiency and further transition to renewable energy. The non-renewable energy is used in equal share in Manufacturing and Service. The target is challenging given the growth of Service and limited availability of suitable vehicles able to use non-fossil fuel.

Vestas has defined a goal that 100 percent of electricity consumption in Vestas must come from renewable energy sources, subject to availability, which continued to be fulfilled in 2016. This was achieved partly by purchasing renewable electricity where available, partly by compensating for the consumption of non-renewable electricity with Vestas-owned wind power plants.

Vestas activities

For Vestas’ activities in designing, manufacturing, installing and servicing wind turbines, performance is reported in terms of inputs of resources and outputs of CO2 emissions and waste. Increased production and service in 2016 compared to 2015 was not to the same degree reflected in the consumption of water and energy and in the emissions of CO2 and waste, which increased relatively less than the increased production level due to improved efficiency.

Resource utilisation

In 2016, Vestas’ total energy consumption increased by 10 percent. When index-linked to MW produced and shipped, Vestas’ energy consumption decreased 1.2 percent compared to 2015. The share of renewable energy in Vestas’ total energy consumption decreased from 55 percent in 2015 to 52 percent in 2016 due to increased consumption of fuel for transport. In 2016, the MW serviced by Vestas increased 24 percent compared to 2015. Since 2012, the MW under service has increased by 60 percent.

In 2016, water consumption increased by 0.2 percent. When index-linked to MW produced and shipped, water consumption decreased 20 percent compared to 2015.
Waste disposal
In 2016, the amount of waste increased by 12 percent compared to 2015. When index-linked to MW produced and shipped in 2016, Vestas decreased its amount of waste by 11 percent compared to 2015.

In 2016, 49 percent of the total volume of waste was recycled, the same share as the year before. In 2016, the share of hazardous waste was 5,862 tonnes compared to 5,930 tonnes in 2015.

CO₂ emissions
Vestas increased its direct CO₂ emissions by 18 percent in 2016, and the indirect CO₂ emissions by 4 percent. When index-linked to MW produced and shipped in 2016, Vestas decreased its CO₂ emissions by 10 percent compared to 2015.

Local community
In the first quarter of 2016, a breach of the internal inspection conditions was observed at the towers factory in the USA as air emissions exceeded permit levels. The root cause has been identified and corrected to ensure proper control of the emissions levels.

Products
A wind turbine in operation saves CO₂ emissions. The CO₂ savings over the lifetime for the MW produced and shipped in 2016 will be 281 m tonnes, an increase of 25 percent compared to 2015, due to a higher amount of MW produced and shipped in 2016.

Accounting policies
Accounting policies for health & safety, employees, resource utilisation, waste disposal, CO₂ emissions, local community, and products are available on page 052.