Leadership through unprecedented change

Energy is the cornerstone of modern society and the key to a better quality of life for those living in less developed areas. At the same time, energy today accounts for two-thirds of total global greenhouse gas emissions, making it the main contributor to the climate crisis. Moreover, 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.

To limit global warming to 1.5°C 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 approx. 1°C above pre-industrial levels, causing 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, and the risk of irreversible environmental damage is increasing, renewables now offer 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 renewables has become too strong to ignore. As the leader and pioneer in wind energy, Vestas is well positioned to lead the global energy transition. But the company is also aware that although renewables are now cheaper than fossil fuel in two-thirds of the world, this transition – and Vestas’ journey within it – has only just begun.

For the last 40 years, Vestas has worked passionately to develop solutions to address both the climate crisis and the world’s growing need for energy. Along the way, Vestas has installed more than 113 GW, preventing the release of 1.3 billion tonnes of CO₂ into the atmosphere. Today, as Vestas works towards becoming the global leader in sustainable energy solutions, with wind at its core, Vestas remains as committed to protecting the environment as Vestas was in 1979, when it installed the very first wind turbine. Ensuring a healthy planet for future generations is a key part of what Vestas does – it is Vestas’ purpose as a company and as individuals.

To guide its efforts in the future, Vestas has introduced a goal: To lead the transition towards a world powered by sustainable energy.

Through this goal, Vestas commits to taking a leading role in driving electrification and decarbonisation beyond the power sector; to team up with sustainability leaders to drive change and; to support Vestas’ partners in their journey to become more sustainable.

But preventing the release of billions of tonnes of CO₂ into the atmosphere is not enough. Vestas therefore expands its ambitions beyond leading the global energy transition and introduces three additional goals that will ensure sustainability in everything Vestas does. They are:

- Carbon neutrality, without carbon offsets, by 2030
- Zero-waste wind turbines by 2040
- The safest, most inclusive, and socially responsible workplace in the industry

Through these goals, Vestas aims to integrate sustainability across and through all businesses and operations. Vestas will also use them to explore the real meaning of its vision of being the Global Leader in Sustainable Energy Solutions. In doing so, Vestas will embark on the next phase of its journey.

The greatest challenge and opportunity of our time

Without doubt, the climate crisis is the greatest challenge facing humankind today. But it also presents a unique opportunity. Put simply, the world needs more sustainable and affordable energy. Efforts to generate and distribute this energy have resulted in the largest human-made transition in history: the global energy transition. As this transition accelerates, with demand increasing and technology advancing, the growth potential for renewables is huge.

A 62 percent increase in electricity demand globally will almost triple global generation capacity, attracting USD 13.3 trillion in investments by 2050, of which USD 5.3 trillion and USD 4.2 trillion are expected to go to wind and solar energy respectively. Annual investments into new wind capacity are expected to roughly be doubled in the years 2031-35 compared to 2019-20.

3) Source: The Intergovernmental Panel on Climate Change (IPCC) Special Report - Global warming of 1.5°C. 2018.

With renewables being the cheapest source of electricity in two-thirds of the world today, and set to beat coal and gas on cost almost everywhere by 2030, these investments will see wind and solar providing 50 percent of the world’s electricity in 2050. Compared to 2018, growth and electrification of the energy system is also expected to require 40 percent more electricity consumption by 2035, which will necessitate a five-fold increase in total renewable generation.6)

As part of its efforts to lead the global energy transition, Vestas aims to bring sustainable energy into the mainstream. To this end, in 2019 Vestas began to engage more directly with electrification, which is key to driving decarbonisation, increasing wind’s penetration of the energy system. To create a sustainable energy system, electrification of transport, heating, cooling, and industrial processes is absolutely pivotal and Vestas will work to increase the attention around this aspect of the energy transition. During the year, Vestas partnered with the Mercedes Benz EQ Formula E team to explore opportunities for innovation and collaboration in the area of electric cars and motorsport. The transportation sector generally, as a large greenhouse gas emitter, offers great potential to showcase electrification as an impactful means of addressing the climate crisis, and its electrification will be a focus for Vestas going forward.

In addition to the adoption of electric vehicles, the electrification of heating, cooling, and industrial processes will stimulate extraordinary growth in demand for sustainable electricity. In emerging countries, for example, population and GDP growth, including uptake in air-conditioning is expected to increase overall electricity demand by 93 percent from 2018 to 2050.6)

Renewables to expand electricity capacity
In 2035, renewables are set to account for more than 30 percent of the global electricity consumption.


Strategic focus areas
Vestas is driving the energy transition forward by focusing on three core business areas: onshore wind, service solutions and offshore wind. Vestas is present in all key markets globally and offer the most compelling and sustainable wind power plant and service solutions, thereby expanding the global reach of renewable energy.

Through its operational scope and efficiency, as well as its investments and innovations, Vestas is able to keep pushing the technology and economics of wind power. In particular, Vestas’ global scale and operating model are critical to driving supply chain industrialisation and sustaining cost leadership. With localisation becoming a requirement in an increasing number of markets, close partnerships with suppliers and local governments remain key to sustaining Vestas’ competitiveness across the globe. Because of its stable leadership position, Vestas is able to re-invest more of its profit into new technology than any other player in the renewables sector. As the industry continues to consolidate, its ability to generate sustainable profits, which can be reinvested to drive innovation, becomes increasingly important, and Vestas remains committed to sustaining its industry-leading profitability and investing in new technology. In this way, Vestas is able to maintain and expand its leadership – for the benefit of the planet, Vestas’ customers and shareholders.
Global leader in onshore wind energy solutions – outlook and priorities

Vestas’ legacy and current position as the global leader in wind power is measured on scale, market reach, innovation, and global footprint. Vestas uses this position to expand the reach of wind energy and develop, sell, and deliver superior onshore wind power plant solutions. These solutions ensure enhanced performance for both owners of wind power plants and operators of broader electricity systems. In 2019, for example, Vestas introduced the EnVentus™ platform, leveraging its unparalleled scale, research and development investments, and experience to deliver further improvements in the annual output, cost and value of wind energy.

During 2019, the wind energy industry underwent significant change and consolidation. This was the result of both short-term margin pressures – driven by the introduction of auctions and a worsening global trade environment – and the fast-paced transition to more advanced wind turbine technology. In the near-term, however, the onshore segment is seeing strong growth in global installed volumes and is expected to make a step-change to more than 40 GW or more a year from 2020 onwards compared to less than 30 GW in 2018, excl. China.7)

Besides the large, well-known markets such as the USA, China, and Germany, and the EU’s proposed renewable energy target of more than 50 percent by 2030, global activity is increasingly shaped by the emergence of new sizable markets – for example, Colombia, Russia, Brazil, and India. The broadening of global demand provides further stability and reinforces the value of Vestas’ global sales, service, and supply chain footprint.

To maximise the value of Vestas’ leading onshore wind energy position, its priorities are to:

• Continue growing faster than the market to further strengthen its global leadership and ensure presence in key growth segments, while sustaining profitability and capital efficiency.
• Expand its solutions offering to address critical steps in the renewable energy value chain, such as turnkey (EPC) projects and co-development solutions, helping customers to solve bottlenecks while capturing additional value for Vestas.
• Sustain its leading wind turbine portfolio through the successful introduction and development of the EnVentus™ platform, offering leading cost and value performance.
• Optimise operations to sustain the most cost-effective, flexible and reliable supply chain, offering superior quality, safety, and sustainability across its own operations and through close collaboration with suppliers. Modular product development plays a key role in optimising Vestas’ operations as it will create further scale advantages and pave the way for close collaboration with key suppliers, which could lead to single or joint partnerships.
• Pioneer the development and launch of new technology, solutions, and business models that help maximise power plant economics and further unlock the significant long-term potential of renewables. This includes more advanced grid integration and cyber-security solutions, as well as hybrid solutions leveraging wind, storage and/or other generation sources.


The building blocks of the corporate strategy

Global leader in wind energy service solutions – outlook and priorities

With a tremendous short- and long-term outlook for renewables, there is also a major growth potential for wind energy service solutions. The value of the service solutions market is expected to continue growing at a rate of more than 5 percent a year towards 2025\(^8\), driven by growth in the number of wind turbines globally and the need for predictable energy production and revenues.

Being the service partner of choice for customers, asset owners, and operators therefore puts Vestas on a strong value and growth trajectory. To sustain its position and accelerate its growth in the service segment, Vestas aims to enhance customer and shareholder value through expanded offerings, service scope, and more integrated digitised operations and solutions.

To maximise Vestas’ service growth and value, its priorities are to:

\(\cdot\) Provide further value to Vestas’ customers and create new revenue streams by expanding its service sales approach. Vestas will also meet emerging needs related to increased energy market exposure and asset life extension.

\(\cdot\) Cover all its customers’ service needs for their diversified fleets, by expanding its multi-brand offering and building further capabilities to service non-Vestas wind turbines.

\(\cdot\) Optimise its service operating model by increasing the deployment of digital tools. This will enable Vestas to focus further on servicing individual customers’ needs, while capturing the full cost benefit of Vestas’ scale and operational efficiency.

\(\cdot\) Secure Vestas’ position as the digital leader in renewables by deploying a broader range of digital services. Vestas’ aim here is to access new revenue streams and enhance its competitiveness for all customers, including self-performers. This work includes, but is not limited to, rolling out more advanced solutions, including predictive and prescriptive maintenance, via its subsidiary, Utopus Insights, Inc. This will enable asset owners and operators to monitor, orchestrate, and optimise their fleets.

\(\cdot\) Execute in core markets, such as the UK, Germany, the Netherlands, and Scandinavia – and successfully deliver on volumes in new markets.

\(\cdot\) Develop a global sales, service and supply chain organisation, leveraging both Vestas’ and Mitsubishi Heavy Industry’s global experience.

\(\cdot\) Innovate products, services, and solutions that drive down Levelised Cost of Energy and improve grid integration in order to ensure MHI Vestas Offshore Wind A/S’ competitiveness in established and new offshore markets.

Global leader in offshore wind energy solutions – outlook and priorities

Within wind energy, the offshore segment is set to expand by 13 per cent per year under current investment plans and policies, becoming a USD 1 trillion business by 2040.\(^9\) The outlook for offshore wind power is underpinned by volume certainty (linked to long-term planning horizons) extending to the mid-to-late 2020s. Annual installed volumes are expected to experience double-digit percentage growth until late 2020s.\(^10\)

The impressive expansion of offshore wind power is being driven by rapid reductions in cost of energy. Investor appetite and regulatory support are also strong due to the size of projects and the consistency and predictability of electricity generation. This has led to increased offshore capacity and land area allocations in established markets, plus growth in new markets such as the USA, Taiwan, and Japan.

Vestas’ joint venture with Mitsubishi Heavy Industries Ltd, MHI Vestas Offshore Wind A/S, provides a leading product platform and global footprint and its aim is to become a market leader in offshore wind power.

To maximise the growth and value of Vestas’ offshore wind energy position, its priorities are to:

\(\cdot\) Develop a more advanced and competitive product portfolio, and offer solutions that drive down Levelised Cost of Energy and improve grid integration in order to ensure MHI Vestas Offshore Wind A/S’ competitiveness in established and new offshore markets.

\(\cdot\) Establish a global sales, service and supply chain organisation, leveraging both Vestas’ and Mitsubishi Heavy Industry’s global experience.

\(\cdot\) Innovate products, services, and solutions that drive down Levelised Cost of Energy and improve grid integration in order to ensure MHI Vestas Offshore Wind A/S’ competitiveness in established and new offshore markets.

\(\cdot\) Secure Vestas’ position as the digital leader in renewables by deploying a broader range of digital services. Vestas’ aim here is to access new revenue streams and enhance its competitiveness for all customers, including self-performers. This work includes, but is not limited to, rolling out more advanced solutions, including predictive and prescriptive maintenance, via its subsidiary, Utopus Insights, Inc. This will enable asset owners and operators to monitor, orchestrate, and optimise their fleets.


Capital structure strategy

Financial management
In connection with financial management it is the Board of Directors of Vestas Wind Systems A/S’ (the Board) objective to create the necessary stability to implement strategic development work while in the long term achieving a competitive return for the company’s shareholders. At the same time, Vestas has the objective of reducing cost of capital.

Capital structure targets
As a player in a market where projects, customers, and wind energy investors are becoming larger, Vestas aims to be a strong financial counterpart. Capital resources will be maintained to secure compliance with Vestas’ capital structure target: Net interest bearing debt/EBITDA ratio below 1x at any point in the cycle – as well as related dividend policy, linked to the strategic aspirations of the company.

Capital allocation priorities
The main priority when it comes to the allocation of capital is the required investments and research and development to realise Vestas’ corporate strategy and its long-term vision of being Global Leader in Sustainable Energy Solutions.

Available capital resources may also be used for bolt-on acquisitions to accelerate or increase profitable growth prospects. All investments in organic growth and acquisitions must support Vestas in achieving its long-term financial ambition for return on capital employed.

Any decision to distribute cash to shareholders will be made in appropriate consideration of the capital structure target and availability of excess cash. Determining the level of excess cash will be based on the company’s growth plans and liquidity requirements.

The dividend policy reflects the general intention of the Board to recommend a dividend of 25-30 percent of the year’s net result after tax, which will be paid out following approval by the shareholders at the annual general meeting.

In addition, Vestas may from time to time supplement with share buy-back programmes to adjust the capital structure. Such share buy-backs, if any, will likely be initiated in the second half of the year based on realised performance. In years without major investments, most of the free cash flow may be distributed to shareholders through dividends and share buy-backs.

The Board continuously evaluates to what extent the company’s capital structure, share structure, and capital resources are reasonable, in consideration of Vestas’ operations and the stakeholders’ interests.

The Board and Executive Management consider that the current capital and share structure of Vestas serves the interests of the shareholders and the company well, providing strategic flexibility to pursue Vestas’ vision.

Priorities and capital allocation in 2019

<table>
<thead>
<tr>
<th>Priority</th>
<th>Description</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st priority</td>
<td>Organic growth - Investments, Research and development</td>
<td>EUR 729m</td>
</tr>
<tr>
<td>2nd priority</td>
<td>Acquisitions - Bolt-on acquisitions</td>
<td>EUR 20m</td>
</tr>
<tr>
<td>3rd priority</td>
<td>Dividend - 25-30 percent of the net result of the year after tax</td>
<td>EUR 211m*</td>
</tr>
<tr>
<td>4th priority</td>
<td>Share buy-back - From time to time to adjust capital structure</td>
<td>EUR 201m</td>
</tr>
</tbody>
</table>

* Based on recommended dividend for the financial year 2019.