

99% of Carbon Footprint from Supply Chain

On a journey to reduce scope 3 emissions

Lisa Ekstrand - Vice President & Head of Sustainability, Vestas

Vestas, the undisputed global leader in wind energy



~30,000

We employ 30,000 people worldwide and have 40 years of experience with wind energy



+57,000

We have a total of ~ 57,000 combined turbines under service, or more than 151 GW, the largest fleet in the world



+ 173 GW

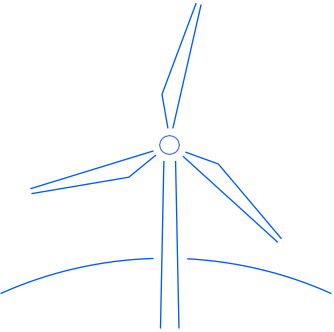
We have more than 173 GW of installed wind power capacity in 88 countries across all continents, more than any other company



€ 14.5bn

Vestas' revenue for the full year 2022 was EUR 14.5bn


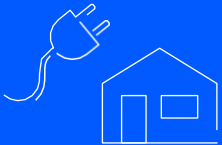

CO₂e avoided through our fleet of wind turbines



1,904

million tonnes CO₂e
avoided from 1981 - 2022

The turbines produced & shipped in 2022 are expected to avoid **408 million tonnes of CO₂e** over their lifetime, equivalent to:

| | | |
|---|--|---|
|  88 million passenger vehicles driven for one year |  79 million homes' electricity use for one year |  1.95 million km ² forest's carbon sequestering in one year |
|---|--|---|

January 2020: Vestas launches a Sustainability strategy 'Sustainability in Everything We Do'

Integrating sustainability into the full value chain



Sustainability in everything we do

| | |
|---|---|
|  Carbon neutral company by 2030 - without using carbon offsets |  Producing zero-waste wind turbines by 2040 |
|  Safest, most inclusive & socially-responsible company in the energy industry |  Leading the transition towards a world powered by sustainable energy |

From 'Sustainability is the business we are in'

to

To 'Sustainability in everything we do'

Vestas sustainability strategy

Sustainability in everything we do



Carbon neutrality

Carbon neutral company by 2030 – without using carbon offsets

Reduce CO₂e emissions in the supply chain by 45% per MWh generated by 2030



Zero-waste

Producing zero-waste wind turbines by 2040



Social responsibility

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



Leading the transition

Towards a world powered by renewable energy

CO₂e reduction initiatives

Scope 3 emissions

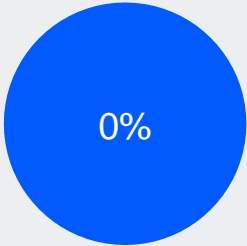


Reducing CO₂e emissions in the supply chain by 45% per MWh generated, by 2030

Scope 3 emissions

Supply chain emissions from raw materials and products sourced and upstream and downstream transportation, among others.

CO₂e reduction in the supply chain:



2019
Baseline year



2030
Mid-term target

We have set year-on-year reduction targets

Initiatives:



Sustainability partnerships to reduce the carbon intensity of our materials and transportation



Alternative materials such as near zero-emissions steel or wooden towers



Sustainability expectations for suppliers and sustainability criteria in supplier scorecards



Designing more efficient turbines, delivering more electricity per kg of CO₂e



Sustainability software to create customized turbine LCA's and monitor and improve supply chain sustainability

Projects under development to further reduce the CO₂ impact of our turbines

Blade Recycling

Currently, downcycling of legacy blades (primarily in the US and EU).

Industrialisation of a fully circular recycling process underway.



Sustainable service fleet

All new service vehicles to be electric or renewably powered by 2025.

Pilots of renewably-powered crew transfer vessels



CO₂ Reduced Steel

Scrap-based EAF steel

Near-zero emissions steel from green hydrogen under development



Wooden Towers

By early 2024, first 150-meter wooden towers.




Supplier expectations




Reducing CO₂e emissions in the supply chain by 45% per MWh generated by 2030 compared to 2019




Producing zero-waste wind turbines by 2040

September 2021 
 100% electricity consumption from renewable energy sources latest by 2030


November 2021 
 Calculating and reporting CO₂e emissions for products delivered to Vestas

January 2022 
 Setting scope 1 and 2 emission reduction targets by 2030 without using offsets

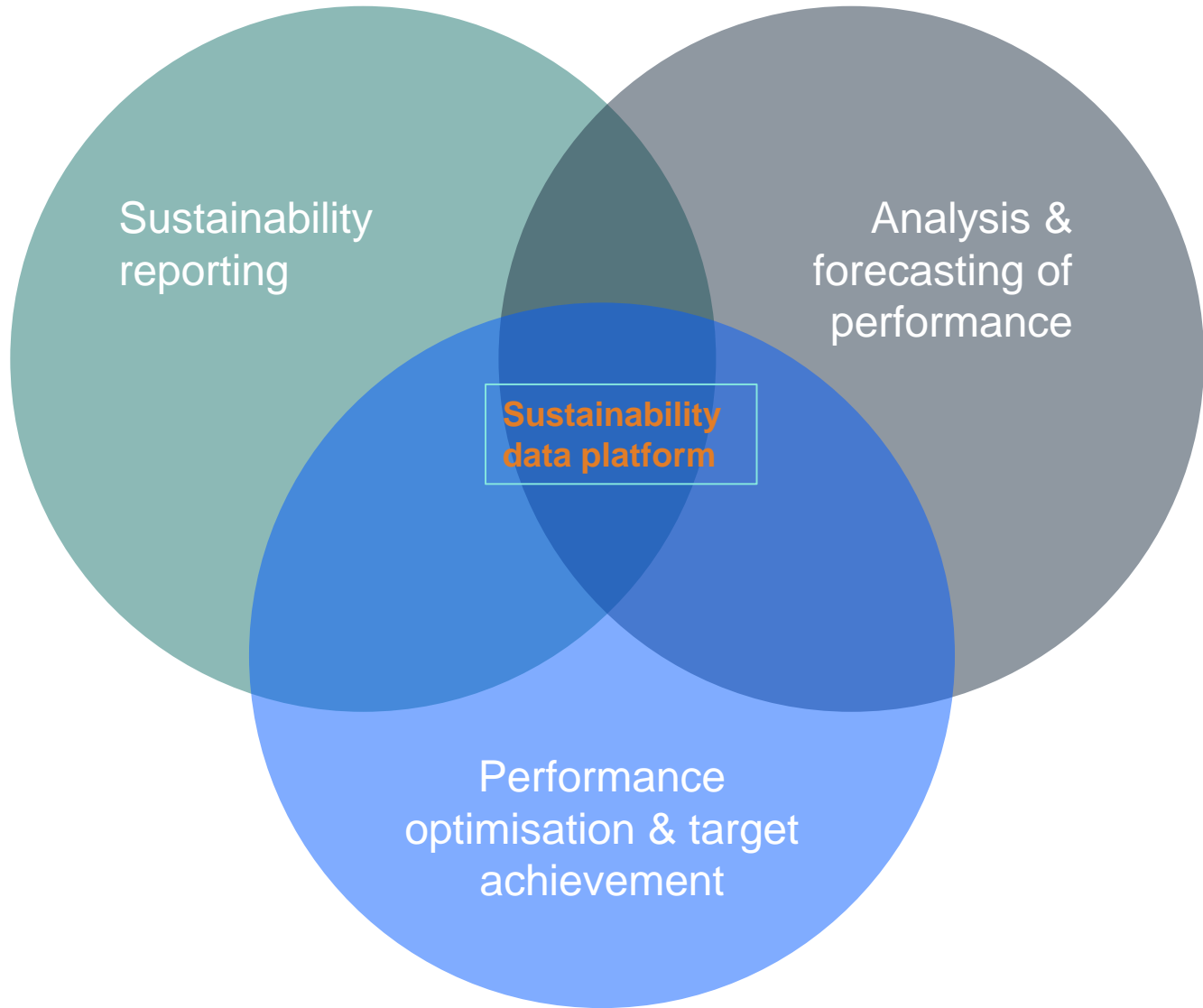
December 2021 
 Start measuring and reporting on production of waste

October 2022 
 Set targets for own operations' waste reduction by 2030, without pushing to Tier 1 suppliers

March 2022 
 50% reduction in waste from products delivered to Vestas by 2030

October 2024 
 Calculate and set targets for Tier 1 suppliers' waste reduction

Improving accuracy of scope 3 data and performance with new data platform



Capabilities of our sustainability data platform currently being implemented

- Emissions related to Vesta's products
- Renewable energy usage
- Other sustainability data



Suppliers



Databases

- Spend transactions
- Turbine Bill of Materials
- Environmental impact data



Sustainability data platform



Supplier performance monitoring



Vestas supply chain reporting



Product environmental assessments

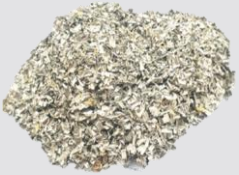


Component environmental assessments

Still a lot to do: areas requiring additional focus

Supply chain impacts

1. Decarbonising raw materials, especially:



Aluminum



Copper



Iron



Cement



Composites

2. Full supply chain transparency, especially:



Environmental impacts from mining



Human rights impacts from mining



Risk of forced labour from component suppliers

Project specific impacts

1. Construction – reducing waste and emissions, and building community support during construction or repowering



2. Biodiversity – mitigating impacts to nature through careful siting and technology improvements



3. Transport – renewably-powered transport throughout the turbine lifecycle, including manufacturing, construction, and service phases



VESTAS ESG RATINGS

THANK
YOU!

The Voice for Clean Capitalism
Corporate Knights

*Vestas ranked as the
world's most
sustainable energy
company*

CDP
DISCLOSURE INSIGHT ACTION

*Climate
score
A -*


**Dow Jones
Sustainability Indexes**

*Score
73 – Index
Europe*

MSCI

*Score
AAA*

 **SUSTAINALYTICS**

*Low risk
14.7 - Rank 5 of 217*

ISS ESG

*Rating
B+*