Press release
Madrid, April 21, 2023

Siemens Gamesa leads wind circularity with the launch of a tower made of greener steel

Today Siemens Gamesa announced the GreenerTower, a wind turbine tower made of more sustainable steel. Towers consist of approximately 80% steel plates. The new GreenerTower will ensure a CO₂ reduction of at least 63% in the tower steel plates compared to conventional steel. Siemens Gamesa’s new thorough qualification process will verify that only a maximum of 0.7 tons of CO₂-equivalent emissions are permitted per ton of steel, while maintaining the same steel properties and quality.

“Wind power is one of the cornerstones of the green energy transition. With more than 600 GW of new capacity to be installed worldwide in the next five years, it is important for the wind industry to reduce its carbon footprint. Our project to address emissions with greener steel is one such solution. With the launch of the GreenerTower, Siemens Gamesa leads the efforts to further push wind circularity and net-zero emissions,” says Maximilian Schnippering, Head of Sustainability at Siemens Gamesa.

Today, tower production accounts for more than one-third of all wind-turbine-related CO₂ emissions. If all towers installed by the company in one year were exchanged with GreenerTowers, it would be the same as removing more than 466,000 cars from the roads in Europe for a year. This new CO₂-reduced tower will be available as an option for both onshore and offshore wind turbines for projects to be installed from 2024 onward.

The GreenerTower has already closed its first order. RWE and Siemens Gamesa have agreed to introduce 36 GreenerTowers at the 1,000-MW Thor offshore wind power project in Denmark. In total, 72 SG 14-236 DD offshore wind turbines are planned to be installed starting in 2026. Sven Utermöhlen, CEO RWE Offshore Wind: “Offshore Wind already has one of the lowest life-cycle carbon footprints of power generation technologies. At RWE we are fully committed to working towards circularity and net-zero emissions. We are already testing the world’s first recyclable wind turbine blades by Siemens Gamesa under real-life conditions. By piloting the GreenerTower at our Thor offshore wind farm, RWE is now once again taking the lead by helping to significantly reduce the carbon footprint of wind turbines.”
The German steel manufacturing company Salzgitter AG, with its heavy plate mill Ilsenburger Grobblech GmbH, is the first supplier to be qualified, something which has also been reinforced by third-party certification. The process to produce greener steel entails increased use of scrap steel, less energy-intensive steel manufacturing processes, and an increased use of renewable energy sources. As one of the measures to decarbonize steel production, for example, the electric arc furnace will be fed with green electricity from offshore wind projects.

On average, 1.91 tons of CO₂ are emitted during the manufacturing process for every ton of steel. By setting an ambitious threshold of 0.7 tons CO₂-equivalent emissions per ton of steel, Siemens Gamesa significantly reduces the footprint of the largest component in terms of CO₂-equivalent emissions.

For more information about the GreenerTower, please visit this link.

About Siemens Gamesa Renewable Energy

Siemens Gamesa unlocks the power of wind. For more than 40 years, we have been a pioneer and leader of the wind industry, and today our team of more than 29,000 colleagues work at the center of the global energy revolution to tackle the most significant challenge of our generation: the climate crisis. With a leading position in onshore, offshore, and service, we engineer, build and deliver powerful and reliable wind energy solutions in strong partnership with our customers. A global business with local impact, we have installed more than 130 GW and provide access to clean, affordable and sustainable energy that keeps the lights on across the world. To find out more, visit www.siemensgamesa.com and connect with us on social media.

Contact for journalists

Verónica Díaz
+34 616 348 735
veronica.diaz@siemensgamesa.com