Top 10 Current Trends
in the Wind Energy Sector

DEKRA

As the global shift towards sustainable energy gathers momentum, wind energy stands at the forefront of innovative and transformative solutions. This overview delves into the top 10 current trends shaping the wind energy sector today.

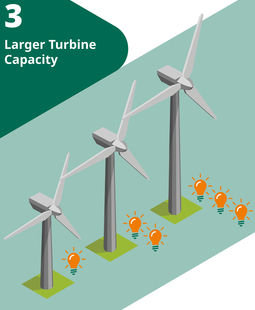
1 Increase in Offshore Wind Farms

Significant growth in the development of offshore wind farms due to restrictions and space availability for new onshore wind turbines.

2 Floating Wind Turbines

Technological advances are enabling the deployment of floating platforms for wind turbines, expanding wind energy to deeper waters.

3 Larger Turbine Capacity

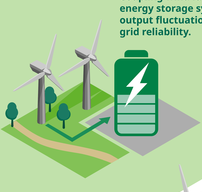


Continued trend towards larger wind turbines, as bigger turbines are more efficient in energy production.

4 Digitalization and IoT

Enhanced use of digital technologies, including IoT sensors and machine learning for predictive maintenance and operation optimization.

5 Integration with Energy Storage



Coupling wind farms with energy storage systems to manage output fluctuations and increase grid reliability.

6 Green Hydrogen Production

Using excess wind power to produce hydrogen, supporting the global shift towards green energy solutions.

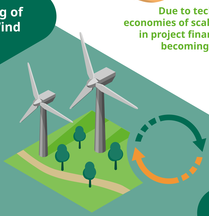
7 Recycling of Turbine Materials

Focus on sustainability is leading to new methods for recycling old turbine blades and other components.

8 Declining Costs

Due to technological advances, economies of scale and improvements in project financing, wind energy is becoming more accessible and financially viable.

9 Repowering of Onshore Wind Turbines



Existing onshore wind turbines are reaching the end of warranty and are increasingly being replaced by more powerful turbines.

10 Global Market Expansion

Expansion into new markets, especially in regions like Africa, Asia and Latin America where wind energy was previously underutilized.

Continuous change is what drives us at DEKRA to find new ways to keep wind turbines safe and reliable at every stage of their wind energy life cycle. Our wind energy services are designed to guide you through the complexities of this rapidly evolving industry with both innovation and sound experience.

Discover more!