



JOTUN

Jotun Protects Property

Global wind expansion

Are global wind projects built
to weather a harsh reality?

Abbreviated
version

WIND ENERGY REPORT

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Introduction

The global transition toward a decarbonised energy system has placed wind power at the core of international climate strategy. Pathways outlined by the International Energy Agency (IEA) and the International Renewable Energy Agency (IRENA) indicate that offshore and onshore wind capacity must reach multi-terawatt scales by mid-century to achieve global net-zero goals.

However, the momentum required to meet these ambitious targets is facing severe structural headwinds. Across the globe, wind project developers and asset operators are facing financial volatility, acute supply chain bottlenecks, and critical workforce shortages.

The fundamental challenge for the sector is no longer simply scaling nominal capacity, but ensuring the long-term structural integrity and economic viability of infrastructure deployed in often extreme operating environments.

The severity of these operational pressures is highlighted by a wave of recent project delays and cancellations. High capital expenditures, elevated interest rates, and inflationary pressures across raw material supply chains have disrupted the long-held industry assumption that wind energy costs would continuously decline.

In the United States, acute supply chain bottlenecks and shortages of specialised installation vessels culminated in the abandonment of Ørsted's Ocean Wind 1 and 2 projects. Similarly, unsustainable global supply chain costs led to the strategic cancellation of

the 2.4 GW Hornsea 4 offshore project in the UK. Compounded by legacy geopolitical friction, like Brexit and ongoing maritime transit disruptions in the Middle East, industry leaders are starting to understand that current supply chain constraints directly threaten national energy security targets.

Supply chain pressure is also widening the technical skills gap that threatens operational continuity, with wind projects facing headwinds from shortages of skilled labour, even in established energy markets.

The labour bottleneck is becoming more acute in the wake of project cancellations in regions like Denmark, causing vital technical expertise to leak out of the sector. This shortage is particularly heightened in offshore maintenance, where logistical complexity, weather dependence, and specialised vessel requirements push turbine maintenance costs up higher than onshore equivalents.

As a result, many are also acknowledging that maintenance schedules are being compromised due to staffing shortages, and relying on frequent, labour-intensive servicing is no longer a viable long-term operational strategy.

Another, perhaps more surprising challenge, relates to the operation of onshore projects. As massive next-generation turbines are adopted, onshore operators are encountering offshore-style logistical challenges, and over half of onshore survey respondents reported budget overruns due to unplanned coating degradation.

Methodology

To develop a global picture of the wind market, Jotun carried out research exploring the attitudes of wind energy experts to macroeconomic and microeconomic factors influencing the industry and their projects.

The research was conducted by Censuswide, among a sample of 650 wind energy component manufacturers and wind-farm operators across 13 countries between 12th May 2026 and 2nd July 2026. Censuswide abides by and employs members of the Market Research Society and follows the MRS code of conduct and ESOMAR principles. Censuswide is also a member of the British Polling Council.

Survey respondents operate in the following regions:

UK	The Netherlands
China	France
South Korea	Spain
Taiwan	Japan
India	UAE
Germany	USA
Denmark	

Qualitative interviews were also conducted with five professionals from across the wind industry, including individuals from wind energy operators, industry bodies and individuals from Jotun’s global internal network of experts. These interviews provided wider insights, additional market context and examples of the issues faced by the industry in practice.

Interviews took place between 8th July 2026 and 18th August 2026 and were conducted by Weber Shandwick, on behalf of Jotun.

Executive summary

The global wind industry is facing a perfect storm of macroeconomic and operational headwinds. Inflationary pressures, rising interest rates, acute supply chain bottlenecks, and severe workforce deficits have disrupted traditional growth models, resulting in high-profile project delays and cancellations across key markets.

Rather than seeing a continuous decline in levelised cost of energy (LCOE), operators and developers are facing tight capital margins and rising operational expenditures (OpEx).

This report, which includes findings from a quantitative survey of global industry decision-makers supported by a series of interviews, highlights the systemic nature of these challenges:

- **77%** of global respondents report that supply chain disruptions have directly damaged project profitability over the past 18 months. Furthermore, **64%** state that these constraints actively threaten national energy security goals.
- **80%** of projects are negatively impacted by shortages of skilled personnel. Consequently, **63%** of operators acknowledge compromising maintenance schedules due to labour shortages.
- Initial assumptions that onshore maintenance is low risk and low priority have proven costly, with **more than half (55%)** of onshore operators reporting budget overruns driven by unplanned coating degradation, compared to **39%** in offshore environments.

Addressing these challenges while maintaining project profitability requires a strategic reorientation. As price is either negotiated through bids or set by the market, the only option to improve profitability is on the cost side.

Rather than minimising upfront costs, operators and developers must prioritise lifecycle resilience by designing projects to run reliably for decades with minimal intervention. The data supports this pivot:

- **67%** of operators say they prioritise reducing maintenance shutdowns to maximise lifetime energy yield.
- **66%** of operators recognise that initial investments in advanced protective coatings are fully offset by long-term OpEx savings and reduced downtime.

The wind industry’s next competitive advantage is durability, not speed or scale. In a market fractured by supply chain chaos and skilled labour scarcity, the projects that succeed will be those engineered to minimise external dependencies. These are projects that require fewer maintenance interventions, fewer specialised technicians and fewer supply chain rescues.

By committing to durability-first asset design and advanced protective specifications from inception, the wind industry can eliminate hidden maintenance and degradation costs that currently erode profitability. It can reduce operational labour dependencies when skilled technicians are scarce. It can build supply chain certainty where fragmentation is now the default. And it can unlock the sustained profitability required to fund larger, more ambitious future projects, enabling the future of energy.

Enabling the future of energy



PIRELLA GÖTTSCHE LOWE