



How Wind Repowering Became a High-Stakes Investment Decision:

From Technical Upgrade to Tax-Critical Strategy

For much of the past decade, wind energy generation project repowering provided an opportunity to increase annual energy production and requalify for the US federal Production Tax Credit (PTC). Tax incentives through Revenue Ruling 94-31 provides the guidelines and requirements in qualifying for the PTC.

Qualifying for repowering has changed.

Today, repowering has evolved into a regulatory- and valuation-driven investment strategy, where early decisions determine whether a project qualifies as a “new” facility for repowering purposes, or loses eligibility entirely. Construction timing, fair market value determinations, component classification, and documentation rigor sits at the center of repowering economics. A misstep in any one of these areas can erase the tax incentives that make repowering viable.

These realities were front and center during the Wind Repowering Webinar held on January 22, 2026, hosted by the Trade Council of Denmark with contributions from Marshall & Stevens and Holland & Knight. The discussion highlighted how compressed tax credit timelines, new sourcing restrictions, and heightened scrutiny around valuation have fundamentally reshaped the repowering landscape.

In the period leading up to July 4, 2026, the industry is operating under a compressed timeline, with owners and developers racing to qualify projects for the federal tax credit four-year safe harbor. What were once viewed as early planning considerations have become threshold decisions that directly affect eligibility.

A clear message emerged: Owners bear long-term tax, asset, construction, and regulatory compliance risks. Alignment between these perspectives is no longer optional; it is decisive.

Developer Insights

Why Execution Now Determines Eligibility

Construction Start Has Become the Gating Issue

Under current law, wind and solar facility repowering must begin construction before July 4, 2026, to preserve eligibility for Production or Investment Tax Credits beyond 2027. The physical work test is now the only pathway to safe harbor for wind and solar projects, requiring physical work of a significant nature, supported by contemporaneous documentation.

Preliminary activities including planning, design, and permitting do not suffice.

The implication: Construction start is no longer a scheduling milestone. It is the threshold question that determines whether a project works at all.

The webinar underscored that qualifying physical work may take place both on-site and off-site. Manufacturing activities, component fabrication, and other off-site efforts may contribute to satisfying the Physical Work Test, provided they are of a significant nature and well documented. With the 5% safe harbor unavailable, wind and solar projects must rely exclusively on this pathway.

Supply Chain Choices Are Now Tax Choices

Foreign Entity of Concern (FEOC) rules and rising domestic content requirements have transformed procurement strategy. Repowering projects, which often rely on globally sourced blades, electronics, and subcomponents, are particularly exposed.

The implication: Supply chain decisions now directly affect tax eligibility, not just cost and logistics.

The discussion also highlighted the dynamic nature of FEOC compliance. Lists of affected countries, regions, or entities may change with limited notice, introducing additional uncertainty into supply chain planning, particularly for repowering projects dependent on international sourcing.



Repowering May Affect Contractual and Interconnection Risk

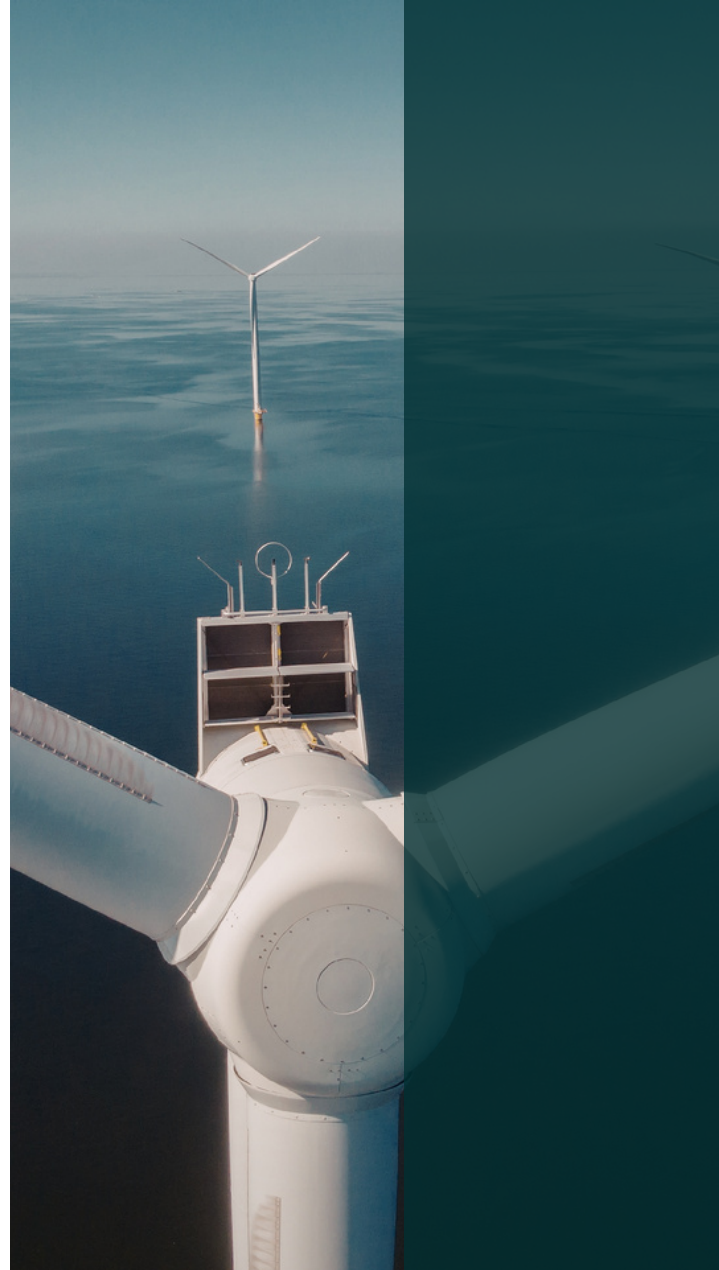
Increases in installed capacity, annual energy production, and turbine replacements may trigger amendments to power purchase agreements and interconnection agreements. Network upgrades and lender consents can also introduce delays that threaten placed-in-service timing, even when construction has technically begun.

The implication: Execution risk extends well beyond construction and must be actively managed across all counterparties.

Historical Cost Assumptions No Longer Hold

Rising labor costs, extended equipment lead times, and constrained availability of specialized crews continue to pressure repowering economics.

The implication: Economic models based on prior repowering cycles underestimate today's execution risk and cost structure.



Supplier and Market Implications

From a supplier perspective, the webinar emphasized that not having well-defined plans for specific projects prior to July 4, 2026 does not preclude future participation. Many repowering projects will not reach final engineering or procurement decisions until well after construction starts, preserving flexibility within an already-defined investment framework.

This reality places increased importance on supplier readiness: ensuring FEOC compliance, preparing supporting documentation, understanding how a product might enable beginning of construction strategies, and clearly articulating how replacement components improve performance, efficiency, or output relative to legacy equipment.

Owner Insights

Why Valuation and Documentation Now Drive Outcomes

Fair Market Value Is No Longer About Forecasting

Under the IRS 80/20 rule, fair market value (FMV) of retained components is not established through a simple discounted cash flow projection. Instead, the three approaches to value (Cost, Income, and Market) must be considered in determining the FMV of the retained components. The cost approach is the most applicable in calculating the FMV of the retained components. The cost approach, utilizes the reproduction or replacement cost new of the turbines and then adjusted for physical deterioration, functional, and economic obsolescence. The income approach is typically applied in determining if there is an economic obsolescence penalty that should be applied to the retained components. The applied steps in the cost approach determined the FMV of the retained components.

The implication: FMV has become a compliance determination rather than a financial forecast. What matters most is defensibility of the valuation at the placed-in-service date, supported by a qualified analysis and report.

Importantly, the webinar clarified that FMV does not need to be fully established or documented at the time of investment approval. Final valuation occurs at the placed-in-service stage, allowing component selection and supplier engagement to continue evolving after the July 4, 2026 construction-start deadline.

Another note is that original suppliers and designers of turbine components have access to legacy design and can contribute to further refinement and evaluation of actual cost and future cost structures of renewed component in question.

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Retained Assets Can Quietly Undermine the 80/20 Test

Repowering strategies often assume that retaining certain components preserves value. In practice, retaining high-FMV legacy components can make the 80/20 threshold harder to satisfy, especially when newer components are kept while lower-cost elements are replaced.

Partial retirements, such as replacing only portions of a gearbox, further complicate the valuation and 80/20 analysis.

The implication: Decisions about what to retain or replace are no longer neutral engineering choices. They are tax-sensitive decisions that can determine whether a project qualifies as “new.”

As discussed during the webinar, the investment budget and associated 80/20 calculation are typically forecasted early in the development process and later validated by an independent valuation firm. While early-stage budgets may rely on simplified or rounded assumptions, the final analysis must ultimately be supported by detailed cost analysis and appraisal work at placed-in-service.

Component Classification Is Determined by Function, Not Preference

The distinction between property included in the “unit of qualified facility” and property treated as “integral” is critical to the 80/20 analysis. Each turbine is generally treated as its own unit, components housed within the tower or nacelle may be treated as a part of that unit, and other components that condition or transmit electricity are generally considered integral to operation.

Once functional interdependence and physical location are established, there is limited room for reinterpretation.

The implication: Classification outcomes are driven by how assets function, not how stakeholders wish them to be characterized.

Documentation Is the First Line of Defense

Legacy projects rarely come with perfect data. Assumptions are often unavoidable. What separates defensible positions from vulnerable ones is the quality of documentation. This means clearly stated assumptions, consistent methodologies, and appraisals that meet IRS qualified appraisal standards.

The implication: The greatest long-term risk is not uncertainty; it is inadequate documentation when a project is examined years later.

The Bigger Picture

Wind repowering remains a powerful tool to extend asset life, capture the benefit of tax credits, and increase output. Now, more than ever, it is a tax-critical investment strategy, where early coordination between valuation, legal, and development teams determines success or failure.

Projects that treat repowering as a narrow technical upgrade risk discovering, too late, that the incentives underpinning their economics are no longer available. Those that approach it as an integrated regulatory, valuation, and execution challenge stand the best chance of unlocking its full value.

Looking beyond July 4, 2026, the webinar noted that many projects will only enter detailed engineering and component sourcing after construction has begun. At the same time, sustained U.S. power demand may extend opportunities beyond the current PTC cycle, shifting focus toward owner-driven investments that enhance asset performance through targeted upgrades rather than tax incentives alone.



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The Trade Council is a part of the Ministry of Foreign Affairs of Denmark, and it assists Danish and international companies with export and investment promotion services.

The Wind Energy Advisory (WEA) provides tailored support to help Danish companies unlock the full potential of the North American wind energy sector.



Marshall & Stevens

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Holland & Knight is a global law firm with more than 2,200 lawyers and other professionals in 35 offices throughout the world. Holland & Knight provides representation in energy, litigation, business, real estate and governmental law.

Jan Harrestrup

Trade Council of Denmark
Senior Commercial Advisor, Wind Energy Team
jaharr@um.dk

Fernando Sosa, ASA, MRICS

Marshall & Stevens
Managing Director, Energy & Infrastructure
fsosa@marshall-stevens.com

Ryan Phelps

Holland & Knight
Partner
Ryan.Phelps@hklaw.com

Raghav Agnihotri

Holland & Knight
Associate
Raghav.Agnihotri@hklaw.com