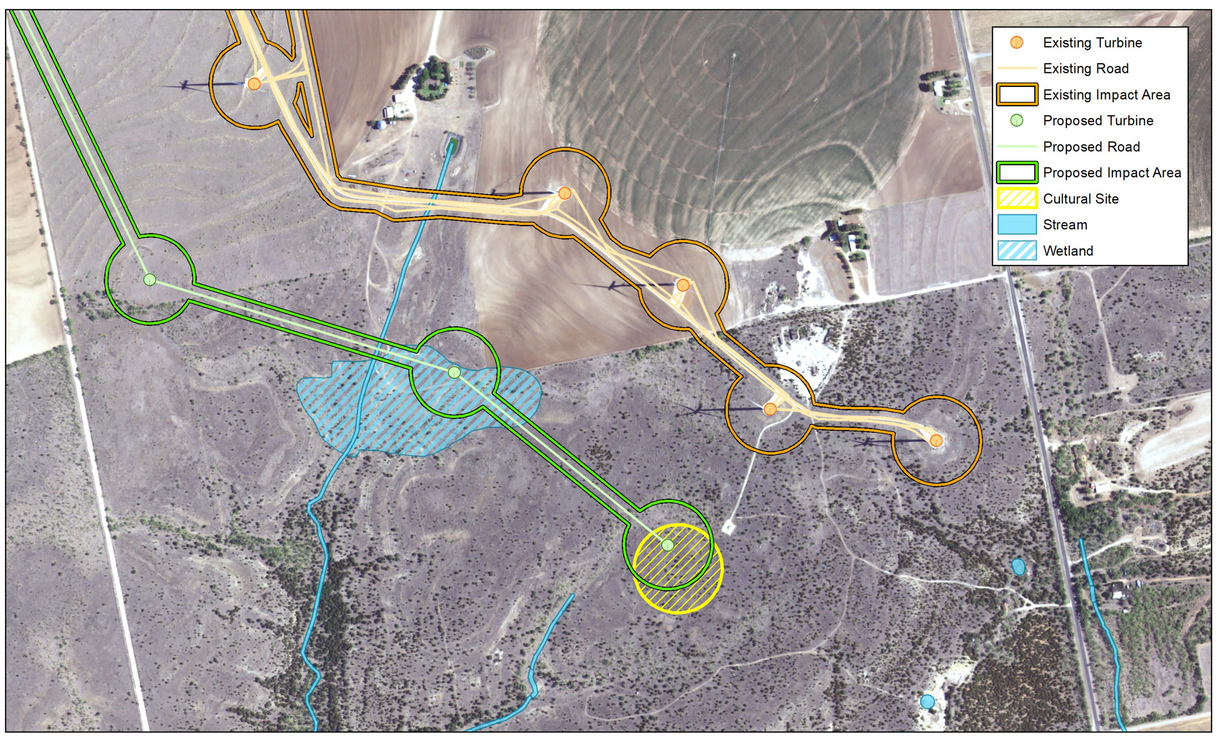
Repowering wind projects faces a storm of challenges — **shifting regulations**, **tighter operations**, **redesign hurdles**, **costly mitigation**, and **increased monitoring**.

Reviving the Wind: Navigating Environmental Challenges in Repowering Projects



What is Repowering?

Upgrading or replacing aging wind turbines to enhance energy output, improve efficiency, and extend project lifespan.

Benefits of Repowering

- Increased Energy Production
- Extended Project Lifespan
- Reduced Maintenance Costs
- Environmental Benefits
- Grid Integration

Types of Repowering

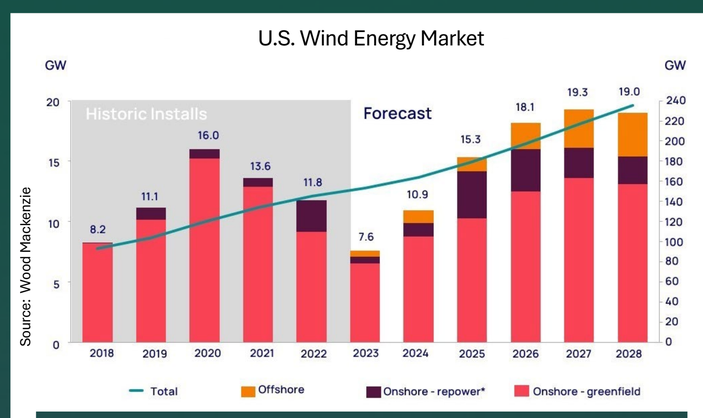
- Partial Repowering (or top-off)
- Full Repowering
- Hybrid Repowering

Challenges

- Regulatory Changes
- Permitting and Compliance
- Operational Restrictions
- Project Redesign
- Mitigation Costs
- Monitoring Requirements

Strategies

- Thorough Regulatory Review
- Mitigation and Minimization
- Creative Solutions
- Appropriate Documentation



Over 30 gigawatts, or approximately 20% of the current U.S. onshore wind energy capacity projected to be repowered by the end of 2028.

Raptor nest on an electric pole needing replacement for repowering

Grave site discovered at repower site

Anjali Karve
Senior Environmental Project Manager
Anjali.Karve@icf.com | +1.469.740.0300

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