RISKY BUSINESS Linkesh Diwan, Engineer Sr., HSB Contact Linkesh Diwan@hsb.com for an Explanatory Whitepaper

A framework quick-reference for new or aspiring Wind Farm Projects to manage risks from development to decommissioning, using the Project Co's perspective.

Three Broad Approaches to Risk Management

- Risk Retention ("No way around it")
- Risk Reduction (Poka-yoke, Culture, Quality, Budget, Maintenance)
 - Risk Relocation (Transfer via Insurance or Contract Clauses)

Development

- Delays
- Permit Issues
 Supplier Solvency:
- Multiple Suppliers
- Parent Co.Guarantees
- * Change Requests
- Regulatory Stability
- Design ErrorsModeling Errors

Construction

Personal Injury:

- Safety Culture
 - Workman's Comp Quality Issues:
- Contract Provisions
- Inspections & Audits
 Transportation Issues:
 - Damage
- Logistics
- * Covid-19

Operation

- Personal Injury 🔷
- Weather Variability
 - **Grid Availability**
- ✓ Serial Defects
- Wear and Tear
- Equipment Failure
- Equipment Breakdown
- * Price Variability
- Local Hostility
- Security, incl. Cyber

Decommissioning

- ★ Residual Value ✓
- Political Changes
- Personal Injury
- Transportation Logistics
- Disposal Costs
- * Recycling Requirements
- Environmental Pollution

Repowering

- Building Code Changes
- Political Will Changes
- ★ Incentive Changes ✓
- Residual Life
- Development Risks
- + Construction Risks