



In the wind energy sector, **maintenance and repair costs** are of substantial importance, in particular in later stages of a turbine's life-cycle. Additionally, loss of energy production shall be kept at an economic minimum. **admoVa's** approach to **optimize spare parts management systems** is to take an integrated **value-chain perspective**:

Successful management of the supply chain for spare parts and maintenance services requires consideration of various internal and external factors.

**Turbine and spare parts suppliers**



**Wind farm operator**



Maximum electricity production at lowest possible cost  
 ↓  
 Maximum yield per MWh

**Challenges:**

- Effective global spare parts supply and maintenance services (MRO) for various types of technologies, life-cycles, and contracts
- Cost-efficient design of the underlying logistics infrastructure in a complex, international network of warehouses and repair stations and windfarms
- Optimum transport capacity and systems design
- Efficient inbound and outbound processes as well as smart control and monitoring procedures

Impact on equipment and production volume; complex spare parts demand patterns

Impact on production income

Impact on income (but only partly / in the future; qualified wind farms)

- Weather-induced operating breakdowns

- Fixed prices (guaranteed feed-in tariffs)

- High and low variable prices

- Very high variable prices (balancing energy/ operating reserve)

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How can we help adding more value to your business?

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admoVa's core competency is the design of cost-efficient and effective logistics systems. Based on solid experience from various industries, we help clients to cope with tactical and operational spare parts management challenges. Using proven methods and sophisticated simulation tools, we optimize warehouse structures, configure international logistics networks, and define the appropriate stock levels. We design lean procurement, transport and storage processes to ensure that service levels can be guaranteed and loss of electricity production is kept at an economic minimum. Developing supply chain control through integration of intelligent information systems is another important part of our consulting services.