



## WIND SUPPLY CHAIN SHIFT TO ASIA

Opportunities to leverage wind supply chain shifts to China and India



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Wind energy is one of the **fastest-growing technologies** for renewable energy, reaching over 700 GW of installed capacity in 2020. As the technology reaches a state of maturity, **supply chains continue to shift** to countries such as China and India, driven by 2 key factors:



**Asia is the key driver of growth**, accounting for ~60% of new installations in 2020, incl. China with more than 70 GW installed and 35% yearly growth. With increasingly unstable global trade relations, companies choose to **diversify supply chains** and source closer to installation sites in Asia.

At the same time, **costs keep falling**. Onshore installed cost per kW dropped from 2,000 USD a decade ago to ~1,400 USD (2018). As subsidies run out, cost pressure will further increase. **Outsourcing manufacturing** to China or India offers the opportunity to take advantage of cost-competitive, established wind energy supply chains for global customers.

To remain competitive, firms along the wind supply chain must **adapt their strategy to a changing market**, key factors include:

- ▶ Identifying **localization needs** of products to improve costs and enable market participation in local biddings
- ▶ Optimizing **global footprint** with a balance of manufacturing costs, access to customers and trade considerations (e.g. duties)
- ▶ Leveraging the strong **local supplier base** for overseas customers

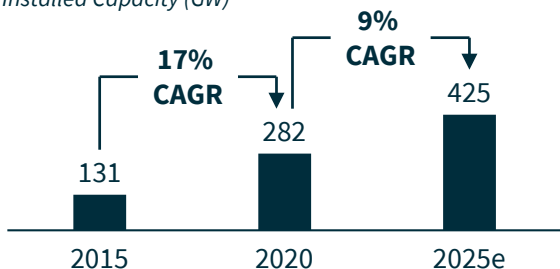
With a strong track record in the wind industry, EAC helps clients to **navigate increasingly complex supply chains**. Contact us for more details or a first exchange on how we might be able to support you.



## SNAPSHOT CHINA

### Local Market Development

Installed Capacity (GW)



China has been driving global market growth and is expected to remain **largest market for wind energy** in foreseeable future, however, **phase-out of subsidies** will lead to a slowdown of growth.

### Local Supply Chain Development

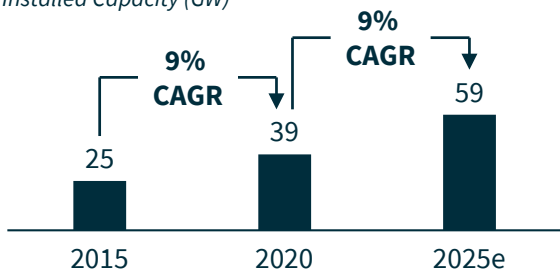
- ▶ Supply chain in China is driven by a **strong local market**, the presence of domestic turbine manufacturers (e.g. Goldwind, Envision) and favorable government policies
- ▶ Wind energy supply chain in China is **largely localized** and offers an opportunity to outsource manufacturing of components to cost-competitive, mature players
- ▶ International players along the value chain need to carefully **assess their market positioning** and capabilities compared to local suppliers to stay competitive

Category	Localization Supply Chain	Selected Manufacturers
Tower		
Blades		
Casting		
Gearboxes		
Bearings		
Generators		

# SNAPSHOT INDIA

## Local Market Development

Installed Capacity (GW)



India’s market was significantly impacted by COVID-19, with only 1.1 GW installed in 2020 (original target 3.3), but the market is **set to bounce back** to reach 59 GW by 2025 with **ambitious government targets**.

## Local Supply Chain Development

- ▶ Supply chain remains largely **dominated by foreign players** but continues to grow
- ▶ The growing local market, beneficial trade relationships, low tax rate (~15% CIT for new mfg. companies) and attractive business environment (e.g. manpower availability, loose environmental regulations) make India a **strong destination for investment**
- ▶ Foreign OEMs (e.g. Nordex, Siemens Gamesa & Vestas) are increasingly exploring India as an Asian **export hub for wind components**

Category	Localization Supply Chain	Selected Manufacturers
Tower		
Blades		
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Gearboxes		
Bearings		
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## How EAC Can Support – Previous Project Examples



### CHINA SOURCING OFFICE

- Best-fit **location** for sourcing office based on supplier access & cost
- Optimization based on **taxes & duties** and cost planning
- On-the-ground project support for **roll-out** of local sourcing organization



### COMPETITOR BENCHMARKING

- Transparency on **cost structure** and technological capability of local Chinese competitors
- Roadmap to optimize cost positioning to ensure sustainable **competitive advantage**



### GO TO MARKET STRATEGY

- Transparency on **market potential**, OEM & competition landscape to assess India **investment attractiveness**
- **Location assessment** of region, zone, plot on multiple parameters for setting up manufacturing unit



### LOCALIZATION SUPPORT

- Best-fit supplier search for **local procurement**
- Capability mapping, techno-commercial assessment and prioritization of suppliers to identify **best-fit supplier** for local and global demands

## EAC – Your Partner in Asia

- > 25 YEARS CONSULTING EXPERIENCE
- > 50 COUNTRIES
- > 2,000 PROJECTS

**= OUR EXPERTISE**

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