





# Project Development & Construction



Founded in 1996 currently > 1,000 employees



Headquarters in Wiesbaden, Germany 28 office locations worldwide



Core business is development & construction of wind & solar farms and battery systems



So far ~5 gigawatts realized
2 gigawatts of which also built by ABO Wind



~ 5 billion euros investment volume in projects



Project pipeline of 21 gigawatts under development worldwide, mostly in Europe (+ additional 20 GW hydrogen pipeline)



# International Orientation: Project Development in 16 Countries



### Value Chain





- Site identification
- Land lease agreements
- Checking grid access



#### **Development**

- Site appraisal
- Analysis of wind and irradiation
- Feasibility calculation
- Selection of plants and park layout
- Obtaining permit



#### **Financing**

- Structuring of financing
- Securing of remuneration
- Conclusion of loan agreements
- Approaching of investors



#### Construction

- Grid connection
- Infrastructure
- Construction Management (wind)
- Construction of solar farm
- Commissioning



#### Sales

- Sale to operator (e.g. institutional investor, utility)
- Citizen participation
- Increasing acceptance



#### **Services**

- Operational Management
- Maintenance
- Technical Assessments
- Products (e.g. ABO Lock)

# **In-House Expertise**



 Site Assessment prepares internal yield assessments at an early stage



 Electrical Department with dedicated specialists for grid connection and transformer stations



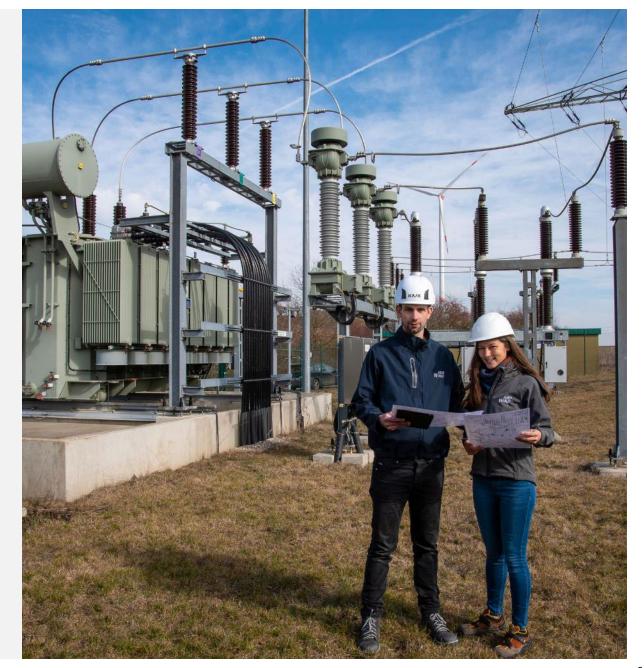
 Construction Department finds solutions for complex sites, stony or sandy subsoil, cold and hot climates, etc.



 Hybrid Energy and Hydrogen Projects combining different technologies (wind, solar, battery, H<sub>2</sub>)



Environmental Experts implement compensation measures



# **ABO Wind Oy**



Activities in Finland started 2013 Office in Helsinki, ~50 employees



Nine wind farms in operation 76 WTG - 300 MW

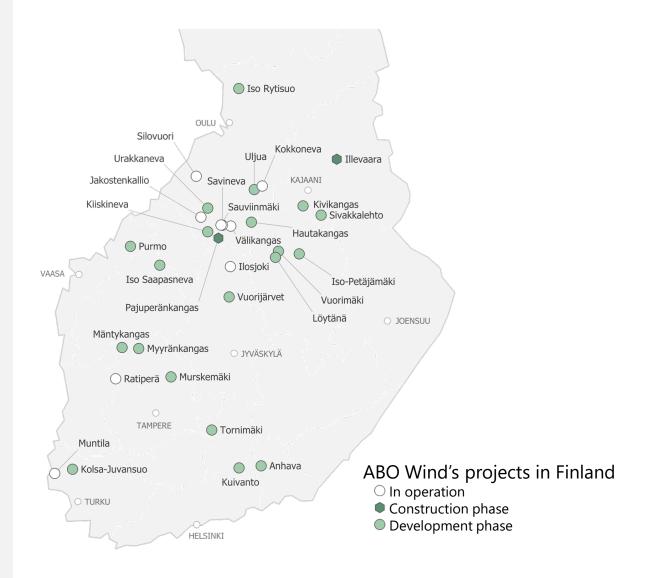


#### Two projects under construction

- Pajuperänkangas in Haapajärvi, 14 WTG; ~90 MW
- Illevaara in Hyrynsalmi, 5 WTG; 30 MW



20 projects in development phase ~5500 MW



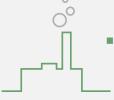




#### Green Hydrogen

# Different business approaches





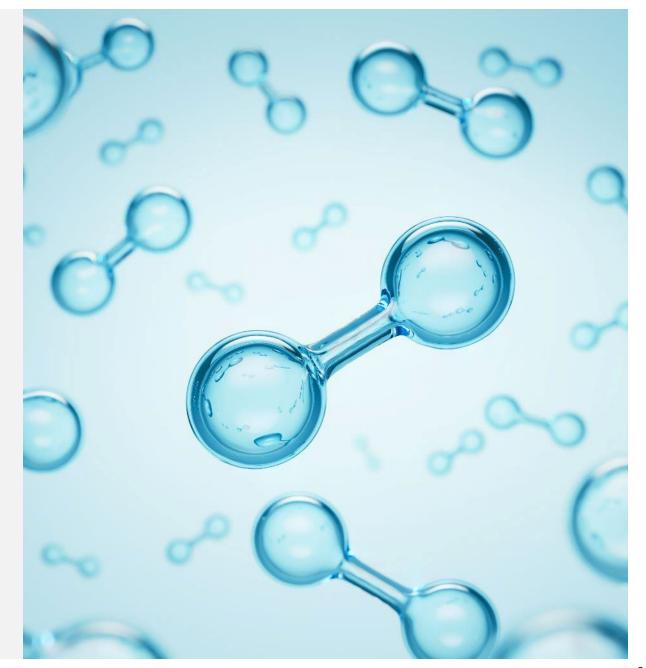
Hydrogen solutions for industry
 such as refineries, steelworks, chemical industry,
 or fertilizer production



 Turnkey integrated hydrogen solutions including development of renewable energies, electrolyzer, storage and filling stations



Green electricity for hydrogen producers
Provision of green electricity for third-party hydrogen
projects, e.g. via PPAs



#### Green Hydrogen

# ABO with vast experience in development

# Wind Experience

- > 26 years experience in developing over 5 GW of global renewable energy projects including the largest wind project in Canada
- Strong experience in meteorologically challenging environments (Canada / Finland / Tunisia)
- 5.5 GW Renewable pipeline in Finland



- >30 colleagues working in a dedicated hydrogen cluster
- Fully developed +5 MW pilot project funded by the German government and 8-200 MW project in Tunisia with 2 utilities
- Exclusive Letter of Support from Braya Renewable Fuels to provide hydrogen for their biofuel refinery in Newfoundland
- Global 20 GW hydrogen pipeline

#### Green Hydrogen

# **Our Potential** Hydrogen Projects



Locations



Wind Energy



Solar Energy



Electrolyzer



Hydrogen Fueling Station



Pipeline Injection



**Ammonia Shipping** 



\* Scale up to multi-GWs in the second phase

## Contact



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