



iea wind

TASK 41

Distributed Wind

The International Energy Agency (IEA) Wind Technology Collaboration Programme shares information and research activities to advance wind energy research, development, and deployment in member countries.

IEA Wind Task 41: Enabling Wind as a Distributed Energy Resource

IEA Wind Task 41 is an international group of researchers from numerous member countries and associations dedicated to advancing wind technology as a cost-effective and reliable distributed energy resource.

Our objectives are to:

- Coordinate international distributed wind energy research
- Facilitate collaboration on priority research topics
- Increase the visibility of wind technology as a distributed energy resource

What is distributed wind?

Wind technology, of any size, can be a distributed energy resource. Distributed wind systems are often used to generate electricity for remote communities or offset a portion of energy costs for grid-connected customers. As a result, distributed wind systems can be part of an isolated grid or a grid-connected micro-grid, or can be connected at the distribution voltage level of a grid system as either behind-the-meter for self-consumption or on the distribution grid to serve local loads.

Examples of Distributed Wind Projects



Four 100-kW wind turbines are part of the isolated grid on Gasado island, South Korea. *Photo credit: Korea Electric Power Corporation*



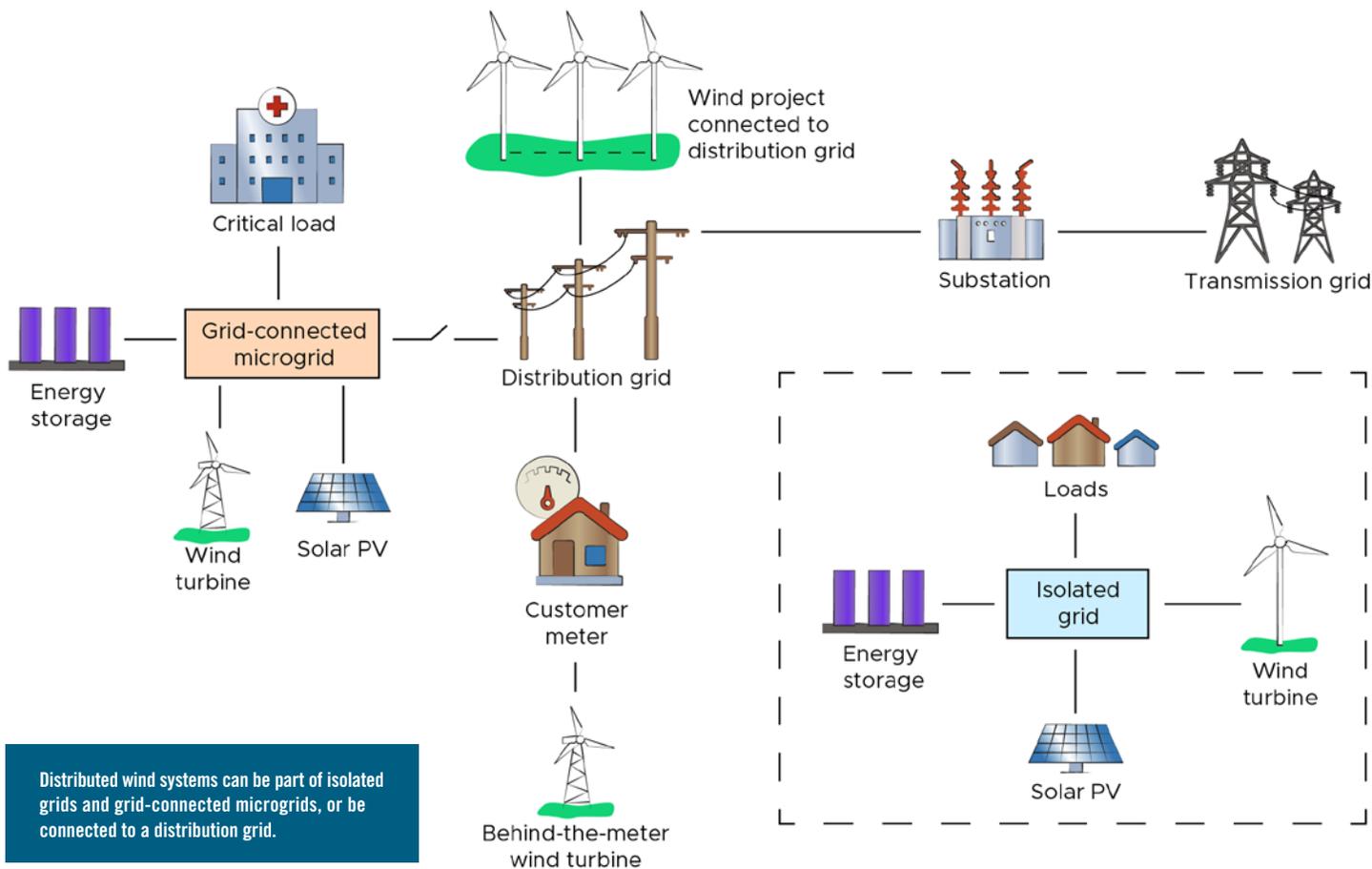
A 25-kW wind turbine provides behind-the-meter energy for a farm in Spain. *Photo credit: Eocycle Technologies Inc.*



Two 2.2-MW wind turbines provide distributed generation for local loads in Jiangsu Province, China. *Photo credit: China General Certification*



Three 10-kW wind turbines provide behind-the-meter energy for a school in Alaska. *Photo credit: Bergey WindPower*



IEA Wind Task 41's Work Packages

- **Standards:** Research to support development of design and testing guidelines for small and mid-sized wind turbines
- **Data Catalog:** Create an information sharing platform for distributed wind research and data
- **Integration:** Enable efficient and reliable integration of wind technology into evolving electricity systems
- **Outreach and Collaboration:** Facilitate and coordinate distributed wind research with other IEA tasks and international organizations
- **Innovation and Downscaling of Large-Scale Wind Technology:** Apply advances of large-scale wind technology to smaller-scale wind technology

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<https://community.ieawind.org/task41/home>

The International Energy Agency

The IEA has an international collaborative mission of providing reliable, cost-effective, and clean energy worldwide. The IEA devotes research and development to energy security, economic development, environmental awareness, and worldwide engagement. The IEA Wind Technology Collaboration Programme shares information and research activities to advance wind energy research, development, and deployment in member countries.