

Community Wind: Important Terms and Frequently Asked Questions

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What is Community Wind?

“Community wind projects are locally owned by farmers, investors, businesses, schools, utilities, or other public or private entities and they optimize local benefits. The key feature is that local community members have a significant, direct financial stake in the project beyond land lease payments and tax revenue.” – Windustry¹

A community wind project is generally a locally owned, commercial-scale wind project too large to qualify for net metering.

Benefits of Community Wind²

- **Stimulates the local economy** by creating new jobs, new business opportunities, and bringing new investment to the community.
- **Strengthens rural communities** by broadening the tax base and generating new income for farmers.
- **Keeps energy investment dollars local.**
- **Ushers in more renewable energy** and support for wind by getting local people involved.

What are Megawatts (MW) and Kilowatts (KW)?

The power capacity of a large utility-scale wind turbine is generally measured in megawatts or MW. One MW of wind power capacity will provide enough energy for 250-300 homes on average each day.

The power capacity of a small wind turbine is measured in kilowatts or kW. A typical home will need a wind turbine with a capacity of 2-10 kW to meet its energy demands.

Energy from both large utility-scale and small wind turbines are measured in kilowatt hours or kWh.

Steps in the Wind Project Development Process³

1. Site Selection
2. Land Agreements
3. Wind Assessment
4. Environmental Review
5. Economic Modeling
6. Interconnection Studies
7. Permitting
8. Sales Agreements [Power Purchase Agreements]
9. Financing
10. Turbine Procurement
11. Construction Contracting
12. Operations and Maintenance

Wind Resource Assessment

Wind resource maps are available for no cost at the U.S. Department of Energy website, www.windpoweringamerica.gov. Maps at this site will provide a rough estimate of the wind class or average annual wind speed for your site. The higher your wind class the higher your annual wind speed. If your site is wind class 3 or higher then you should look further into your wind project. Additional steps will include site-specific meteorological studies to determine the economic feasibility of the project.

Production Tax Credit (PTC)

The Renewable Electricity Production Credit (PTC) is a per kilowatt-hour tax credit for electricity generated by qualified energy resources which includes wind energy. The production tax credit (PTC) provides a 2.0-cent per kilowatt-hour (kWh) benefit for the first ten years of a wind energy facility's operation.

Power Purchase Agreement (PPA)

A Power Purchase Agreement (“PPA”) is a long-term agreement between the seller of wind energy and the purchaser. The length of a wind energy PPA is normally 20 years and the purchaser is a utility. The terms will express the amount the utility will purchase energy from the seller (e.g. 6 cents per kilowatt hour).

C-BED – Community-Based Energy Development

C-BED stands for Community-Based Energy Development. C-BED represents an initiative designed to optimize local, regional, and state economic development benefits from renewable energy, and to facilitate widespread development of community-based renewable energy projects. Key elements that define C-BED include:

- Local owners must benefit.
- No single owner may be allowed to own more than a specified percent of a project.
- Each C-BED project must have a local resolution of support.
- Partnerships and aggregation of projects are encouraged.
- Utilities are encouraged to look to C-BED sources of energy first.

Colorado’s Renewable Energy Standard (RES), HB07-1281

In 2007 Colorado Governor Ritter signed HB07-1281 requiring investor owned utilities (e.g. Xcel Energy) to purchase 20% of their energy from renewable sources by 2020 and requiring rural electric associations to purchase 10% of their energy from renewable sources by 2020. Energy from locally owned, community-based renewable projects can be multiplied by 1.5 toward meeting the RES.

¹ Windustry, “Frequently Asked Questions About Wind Energy,” <http://www.windustry.org/FAQs>, 2008.

² Windustry, <http://www.windustry.org>

³ DISGEN – Distributed Generation Systems, Inc., “The Wind Project Development Process,” revised August 2008.