



DWEA Briefing Paper: **Benefits of Small Wind**

Economic Benefits

- Small wind systems provide economic benefits for the turbine owner, the community and the utility
- Turbine owners benefit through reduced utility bills, tax incentives and renewable energy credits
- Once the initial investment is paid off, electricity produced by the turbine is "free" except for the cost of inspections and maintenance. The community benefits when project materials, equipment and services are purchased through local suppliers.
- Local jobs are created not only in manufacturing and distribution, but also in design, installation and maintenance of these systems.
- Communities with renewable energy installations also benefit from reduced air and water pollution from fossil fuel electricity generating facilities
- The utility benefits include increased distribution system reliability decreased distribution and maintenance costs, decreased fuel required to run plants, grid reliability, pollution emission mitigation and increased ability to meet Renewable Portfolio Standard requirements.

Decentralized

Small wind systems can capture energy and supply power close to the point at which it is to be consumed. This reduces burden on the electric grid since the electricity is both produced and consumed on-site.

Environmental Stewardship

Small wind systems generate energy from wind and, unlike most conventional power plants, they do not pollute. More small wind means fewer pollutants in our streams, rivers and atmosphere, and fewer negative impacts on our health.

Owning and operating a small wind system encourages awareness of electricity consumption. Net metered (and off-grid) turbine owners quickly learn the value of each kilowatt hour as they store excess electricity on the utility grid in the form of a credit; they also learn how to use that electricity more wisely since they can monitor their daily production and usage history.

Energy Independence

Although the term 'energy independence' sometimes refers to off-grid stand-alone systems that can allow individuals to live in remote locations, it also refers to the role that distributed, grid-connected, small wind systems play in decreasing the use of both domestic and imported fossil fuel resources.