

## Wind Renewable Energy\*

The following facts are pieces of information that can be used in testimony, oral or written. Address written public testimony to  
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Office of Administrative Hearings  
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**Wind Power Develops Rural Economies.** Wind energy can diversify the economies of rural communities, adding to the tax base and providing new types of income. Wind turbines can add a new source of property value in rural areas that have a hard time attracting new industry.

**Example:** Each 100 MW of wind development in southwest Minnesota has generated about \$1 million per year in property tax revenue and about \$250,000 per year in direct lease payments to landowners. Ranchers in west Texas are welcoming the revenue from wind projects to replace declining royalty payments from soon-to-be- depleted oil wells. In addition, building wind power projects can help contribute to a stronger infrastructure of roads and power lines.

**Wind Power Creates Jobs.** Wind energy provides more jobs per dollar invested than any other energy technology. Every time a wind energy project is installed, it creates new jobs for people who set up and maintain the turbines. Employment opportunities range from meteorologists and surveyors to structural engineers, assembly workers, and mechanics and operators. The U.S. wind industry currently directly employs more than 2,000 people, and every megawatt of new wind capacity creates 15-19 jobs and about 60 person-years of employment.

**Wind Power Reduces Air Pollution.** In the Southeast, the air pollution that results from fossil fuel powered electricity generation threatens human health, the environment, and the long-term economic viability of this region. Electricity generation is responsible for 76% of the SO<sub>2</sub> emissions in the Southeast, almost a third of the oxides of nitrogen and mercury, and half of the carbon dioxide. Investing in wind energy can reduce the harmful effects of air pollution from fossil fuel fired power plants. Wind energy can provide us with cleaner air and a healthier, safer environment.

**Wind Power is Cost Effective.** In the last century, coal, oil, and natural gas were promoted as cheap sources of energy, but their hidden costs have been enormous. Wind power has no hidden costs, and it has become more cost-

effective with each new round of technological advancements. The cost of wind-generated electricity has fallen from nearly 40¢ per kWh in the early 1980s to 3-10¢ per kWh today depending on wind speed and project size. Since wind is free, the price of wind power is stable, unlike electricity from fossil fuel powered sources which depends on fuels whose prices are costly and may vary considerably.

**Wind Power Is Sustainable.** Wind energy is a technology we can sustain over the long term. It won't pollute our air and water, and it won't produce wastes that will pile up year after year. It's also renewable. We can continue to use wind power effectively and efficiently for centuries, without worrying about how it will affect future generations.

**Wind Power Reduces Global Warming.** Global climate change is an increasing concern of the scientific community and governments around the world, and it is a reality we must begin to address. Carbon dioxide released from fossil fuel combustion is one of the primary heat trapping gases that contribute to global warming. Wind energy produces no byproducts that contribute to global warming, and the power from single utility-scale wind turbine can prevent the emission of 5,000 tons of carbon dioxide (CO<sub>2</sub>) into the atmosphere each year. Wind energy is one of the most useful tools we have to decrease the global warming gases we release into the atmosphere every day.

Example: A study conducted by energy experts from Stanford's Department of Civil and Environmental Engineering have concluded that, by building approximately 250,000 new turbines, America could eliminate almost two-thirds of its coal-generated electricity. This would reduce US 1999 greenhouse gas emissions to 7 percent below 1990 levels -- a goal originally proposed by the Clinton administration under the controversial 1997 U.N. Kyoto Protocol on climate change.

\* This information is taken from a fact sheet prepared by the North Carolina Wind Energy Working Group, February 2003.

[http://www.edf.org/documents/2882\\_WindFactsheetNC.pdf](http://www.edf.org/documents/2882_WindFactsheetNC.pdf)

PER GEORGE CROCKER, NAWO:

Each megawatt of wind produces about \$230,000 worth of electricity

per year. That revenue pays the debt that purchased the project equipment, pays taxes and maintenance and all other expenses, including a very nice management fee to the local C-BED owners while the large Equity Partner is earning a return on its investment.

If a large outside corporation owns the wind generation, the local people get a few thousand dollars per MW in easements and maybe \$20K or so in taxes - whatever the rate is. But the rest leaves the region to serve distant corporate interests. With C-BED, more of that \$230K per year per MW stays & is circulated locally. The C-BED statute requires that over the life of the project, 51% of the revenue must go to the qualifying owners and other local entities, such as they are. That's where more local jobs and local economic development comes from. The corporations tend to just run their own crews to get work done.