GREEN POWER PARTNERSHIP - WHAT IS IT?

The Green Power Partnership is a voluntary program that encourages organizations to buy green power as a way to reduce the environmental impacts associated with purchased electricity use. The Partnership currently has hundreds of Partner organizations voluntarily purchasing billions of kilowatt-hours of green power annually. Partners include a wide variety of leading organizations such as Fortune 500® companies, small and medium sized businesses, local, state, and federal governments, and colleges and universities.

Wind Power Benefits & Fun Facts

Wind energy has many environmental benefits. Wind energy is **clean** energy that produces no emissions, which means it doesn't contribute to acid rain and snow, global climate change, smog, regional haze, mercury contamination, water withdrawal, and particulate-related health effects.



Wind energy is a valuable crop of the future for farmers and ranchers. Wind farms located in rural areas generate energy that can be transmitted to load centers in urban areas via the regional utility grid.



Wind energy is economically competitive. With today's rising coal and gas prices, new wind plants compete favorably against any new electricity generation source.



Unlike most other electricity generation sources, wind turbines don't consume water. Irrigation and thermal electric generation account for approximately 77% of U.S. fresh water use.



Wind energy is inexhaustible and infinitely renewable. Unlike conventional fossil fuels, wind energy is renewable, abundant energy that will be available for future generations.

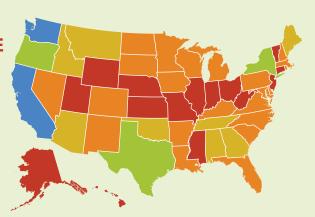
RENEWABLE **ENERGY USAGE** BY STATE

50,000 MWH+

10,000 - 49,999 MWH+

5,000 - 9,999 MWH+ 1,500 - 4,999 MWH+

Less than 1,500 MWH+



Over 70% of Washington's electricity comes from hydroelectric power.

West Virginia could replace all of its electrical capacity with 2% of its geothermal power potential.

The world's largest wind farm is in Texas.

California produces more geothermal, solar and wind power than all other states combined.



CLEAN ENERGY Obtaining energy from the wind emits zero emissions into the atmosphere, providing a clean alternative to fossil fuels, which contribute significantly to dangerously high levels of atmospheric CO2.

LESS SPACE IS NEEDED Wind turbines take up much less space than what is required for a single power station, and the surrounding land can continue to be used for other purposes including agriculture.

RENEWABLE ENERGY Unlike fossil fuels, the wind will not run out and can provide the planet with a limitless supply of "free" power.

GENERATE ENERGY IN REMOTE

LOCATIONS In remote mountainous or countryside regions, utilizing wind power can provide a much cheaper and convenient source of energy.

OF WIND POWER



HOW LOUD IS A WIND TURBINE* WHEN COMPARED TO COMMON HOUSEHOLD ITEMS?



LAWNMOWER 105 DB(A)



WIND TURBINE 100 DB(A)



BLENDER 90 DB(A)



VACUUM 80 DB(A)



WINDOW AC 50 DB(A)



REFRIGERATOR 40 DB(A)



Wind turbines, in residential areas, are placed **no closer than 300 meters** from the nearest house.

ONE WIND TURBINE CAN PRODUCE ENOUGH **ELECTRICITY TO POWER UP TO 300 HOMES.**



WIND POWER: A RENEWABLE ENERGY

The U.S. currently relies heavily on coal, oil, and natural gas for its energy. Fossil fuels are nonrenewable, that is, they draw on finite resources that will eventually dwindle, becoming too expensive or too environmentally damaging to retrieve. In contrast, renewable energy resources are constantly replenished and will never run out.

WIND ENERGY BY THE NUMBERS

Wind energy produced worldwide: 65,000,000,000 kWh per year (enough power for 6 million U.S. homes)

Wind energy produced in the U.S.: 16,000,000,000 kWh per year (enough power for 1.6 million homes)

Potential U.S. wind energy production by 2020: enough power for 25 million homes yearly

YEARLY EMISSIONS ELIMINATED BY GENERATING ENERGY FROM A 1 MW WIND TURBINE INSTEAD OF 1 MW OF CONVENTIONAL SOURCES: over 1,500 TONS of carbon dioxide + 6.5 TONS of sulfur dioxide + 3.2 TONS of nitrogen oxides + 60 POUNDS of mercury



ENOUGH SUNLIGHT FALLS ON THE EARTH IN JUST

DEMANDS FOR A WHOLE YEAR.

Wind power provides of total electricity

consumed.

Wind power has made up of all new generating capacity added to the U.S. grid since 2007.



MODERNLITHO

Sources: American Wind Energy Association, Carrington College of California, Clean Energy Ideas and AWEA, GE Global Research, $\,$ National Institute of Deafness and Other Communication Disorders, U.S. Department of Energy, National Renewable Energy Laboratory, U.S. Environmental Protection Agency