

UTILI-FACTS

Renewable Energy

Major Benefits:

There are two advantages to using renewable



energy:

It's clean, as opposed to using power plants that burn fossil fuels or using nuclear energy, which leaves radioactive waste. It's unlimited, so it can reduce demand for non-renewable sources of energy such as coal, oil, and natural gas. Unlike fossil fuels, non-biomass renewable sources of energy (hydropower, geothermal, wind, and solar) do not directly emit greenhouse gases.



Environmental Benefits of

Wind Power:

Generating wind power creates no emissions and uses virtually no water.

The water consumption savings from wind projects in Texas total more than 8.1 billion gallons of water per year

The wind power installed in Texas will avoid 22 million metric tons of carbon dioxide emissions annually, the equivalent of taking over 390,000 cars off the road.

The use of renewable sources is also limited by the fact that they are not always available; cloudy days reduce solar power; calm days reduce wind power; and droughts reduce the water available for hydropower

Growing Potential:

Texas produces and consumes more electricity than any other state. Due to its size and diverse climate,

Texas has tremendous potential to use renewable energy resources. Texas established a renewable portfolio standard (RPS) in 1999 and it was amended in 2005. The current RPS provisions require 5,880 MW of renewable energy by 2015. The state also has a target of reaching 10,000 MW of renewable capacity by 2025, a target that the wind energy industry met in 2010. The future goal also included 500 megawatts of non-wind capacity such as solar, biomass, or geothermal.

The AWEA Annual Wind Industry Report illustrates that through 2009, the wind power industry continued to experience growth of 93% of Texas' electricity generated from fossil and nuclear power plants. The remaining 7% was generated from renewable sources with the majority coming from wind power.

In state rankings, Texas leads in wind capacity with more than 9,000 megawatts (MW) installed. If Texas were a country, it would rank sixth in the world in wind capacity. EPA released data showing those power plant carbon dioxide emissions' declined 10% in 2010-2012 and wind energy production increased by 48%. Currently, there are over 6,300 wind turbines in Texas, and the numbers continue to increase as the wind industry grows. The Roscoe Texas Wind Farm is one of the world's largest capacity wind farms with 627 wind turbines and a total installed capacity of 781.5 MW which spans in four counties in West Texas.

Due to Texas' population growth and demand for electricity, the 2005 legislation streamlined the Public Utility Commission's ability to create Competitive Renewable Energy Zones for the construction of new transmission lines.

The state's renewable goals, the cost should decrease as more lines are built to carry renewably produced power to
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the populated areas of the state. Several Texas utilities now offer their customers power produced from renewable sources. It generally costs more than power generated from fossil fuel power plants, but a growing number of consumers are electing to pay a premium for environmentally-friendly power. An alternative is to buy "green" power, which can include electricity generated from relatively clean natural gas-power plants that burn gas produced in Texas. Generating power from renewable sources is typically more expensive than burning fossil fuels, but increased demand and tax incentives have brought down the cost of using renewable energy to generate electricity.

Electricity from renewable sources should become a more affordable alternative as the cost of fossil fuels rises and technological innovations increase the efficiency of wind farms, landfill gas operations, and solar installations. This is the first quiet, structure or

pole-mountable wind turbine that generates electricity by harnessing the power of the wind - providing you a cost effective energy source for residential, community, and industrial use.

By installing a wind turbine at your location you can reduce the amount of electricity used from conventional means, reduce your carbon emissions, lower your electricity bills, and generally make the world a more beautiful place.

When you choose to buy renewable energy from your electric provider, you want a certain percentage of your power to come from renewable resources. That percentage of renewable power is produced or purchased from another power generator and placed in the provider's power supply.

The actual electricity that finds its way to your home or business represents the mix of all generators connected to the grid, by choosing renewable power from your provider you help increase the amount of renewable energy used statewide.

QUESTIONS:

Call: 1-888-782-8477, in Austin 512-936-7120
(TTY 512-936-7136) (FAX 512-936-7003)

Write: PUC - Customer Protection Division
P.O. Box 13326, Austin, TX 78711-3326

Online: <http://www.puc.texas.gov/consumer/complaint/Complaint.aspx>

