



Steelcase®

Pulling energy out of thin air.

When it starts operation this spring, the Wege Wind Energy Farm, provided by Steelcase, outside the town of Panhandle, Texas (pop. 2,589) will produce clean, emission-free electricity. As sole sponsor of this farm, Steelcase will be the largest buyer of wind power in the furniture industry.

It's the first time any corporation has made an upfront commitment like this one, but it seems a natural outcome for a story that starts a half-century ago.

"This is the farm where I grew up," says Glen Hodges, owner of the property where the Wege Wind Energy Farm stands. "My dad also grew up in this area, and my mom and dad owned this property for over 50 years."

Glen's dad, Floyd Mark Hodges, joined the Army Air Corps during World War II and became a navigator. He served in the South Pacific and stayed in the service after the war. In 1952 he and his bride, Ella Nora, bought a half-section (320 acres) of property near his parents' farm. Floyd Mark retired as a lieutenant colonel from the Air Force, settled into the life of a farmer, raising wheat and grain sorghum, along with Glen and his five siblings.

"I remember when we were kids we used to sit outside with my dad. As a navigator he knew his way around the stars. He would point out the constellations to us."

A new kind of farming continues a legacy of environmental commitment spanning almost a century.

About the same time Floyd Mark was navigating planes, another air corpsman, Peter Wege, a pilot from Grand Rapids, MI, was ferrying planes around the U.S. before being deployed to North Africa. One of his routes changed his life. He was delivering a training plane to West Point on a clear, sunny day as he approached Pittsburgh, PA. But he couldn't see the city: it was obscured by smog.





“Steelcase is making a tangible contribution to a wind farm before it’s operational and will support it after it’s up and running. They have a much closer relationship with this project than a typical renewable energy investor,” says Ted Rose.

“I couldn’t see the ground at three o’clock in the afternoon, even though I knew I had to be flying right over it.” He got a new heading from the airport tower, they turned on the landing field lights, and he finally found the airport.

Wege’s first experience with environmental pollution affected him deeply. It was the start of a lifetime commitment to protect and improve the environment. Now 88, he remains dedicated to the cause. “My passion to do something about it has only intensified since that long ago afternoon.”

In time Wege formed and funded a foundation to support environmental work, and wrote a book about how economics and ecology are not mutually exclusive pursuits but rather complimentary pursuits, among other efforts. Throughout his career he has invested a large

share of his time, effort, and fortune in pursuit of a sustainable future for the planet.

Today, the story comes full circle as Steelcase funds a new kind of farm, one that produces renewable energy year around. The land where Floyd Mark Hodges farmed is now the site of the Wege Wind Energy Farm, named for an environmental pioneer who has long supported Steelcase’s environmental efforts.

On this wind farm, turbines standing 243 feet high will produce enough power for nearly 3,000 homes in the Panhandle area without using any fuel and without producing any emissions or pollution. And there’s still plenty of room for wheat and grain sorghum to grow underneath the quietly turning blades. The stars will remain easy to see over Panhandle, Texas.

A New Precedent in Renewable Energy Investment

The Wege Wind Energy Farm also sets a new precedent for renewable energy investment, says Ted Rose, vice president of business development for Renewable Choice Energy of Boulder, CO. “Steelcase is making a tangible contribution to a wind



The winter wheat has yet to sprout on the Wege Wind Energy Farm in this photo from late winter. **“When the blades are spinning the wind is blowing and it covers any noise the turbine makes,” says Hodges. “You have to get right underneath them to hear the whoosh of the blades.”**

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Ted Rose’s company links renewable energy projects with investors and says most companies buy wind power for one or three years from existing wind farms and that’s the extent of the relationship. Up-front involvement is a new approach. “If other companies went out and started sponsoring wind farms like this, renewable energy developers would have an incredible assist getting more projects developed.”

The idea for the wind farm came from Glen’s brother, Ken, who works for the Texas Farm Bureau. “He suggested our property might be well suited for wind energy and I looked into it and realized he was right.”

Anyone who’s been to the Great Plains knows the wind is strong and steady, and as Hodges notes, has few windbreaks. “As Ken likes to say, ‘You see that table over there? Well, the Panhandle is a lot flatter than that.’”

While he continues to plant grain and sorghum on the property, Hodges says generating wind power is an important new crop.



“Wind energy and farming and ranching are very compatible. In fact, the supplemental income from wind energy can be the difference that allows you to keep the property in the family.”

The power generated at the Wege Wind Energy Farm will be used locally. It’s more efficient to use power locally than send it long distances over the national power grid. In the process, green power avoids emissions from fossil fuel generation: there’s no air or water pollution. Plus the wind farm was brought online in a matter of months compared to the five years or more it takes to build a traditional power plant.

Part of the Plan

For Steelcase, the wind farm is a natural evolution of its commitment made nearly a century ago to be stewards of the environment. “We are constantly seeking more effective ways to



Steelcase's commitment to the Wege Wind Energy Farm complements its on-going energy reduction efforts. In North America alone, the company has cut electricity usage by over 30% in the past 5 years.

consumption, with the goal of reducing our carbon footprint by 25% by 2012. Steelcase is proud to make the project a reality in what we hope will inspire more companies to invest in green power both nationally and internationally.”

Around the world energy use is rising, which makes renewable energy sources even more important. Wind energy capacity in the U.S. grew by nearly 20 gigawatts last year, the highest volume achieved in a single year, and 32% more than in 2006.

However, the staying power of these facilities and the future growth of wind power depends on both private investment and tax benefits. Several states have renewable energy plans in place and more are considering them.

The plans pay off. Texas has had legislation in place for nearly a decade and has attracted more than \$5 billion in wind power investment. The state expects to have over 4,000 jobs attributable to wind power investment in 2010.

One of those jobs belongs to Glen Hodges. After practicing as an attorney for 14 years he's become a wind power developer with Babcock & Brown. He meets with land owners and helps them develop wind projects not unlike the Wege Wind Energy Farm on his own property. Since those land owners are located around the country, Hodges often finds himself in an appropriate place for this work: flying in an airplane.

conserve resources, prevent pollution and nurture environmental consciousness in our people every day,” says Nancy Hickey, senior vice president and chief administrative officer, Steelcase Inc.

“Our commitment to the Wege Wind Energy Farm is a complement to our on-going efforts to reduce our own energy consumption,

Wege Wind Energy Farm Q & A

Where is the Wege Wind Energy Farm located?

Panhandle, Texas, about 350 miles northwest of Dallas.

What is a wind farm?

It's a cluster of wind turbines. Unlike conventional power plants, most wind farms are not owned by public utilities but by business people who sell the electricity produced by the wind farm to utilities.

How does a wind turbine work?

Like old fashioned windmills, the blades collect the wind's kinetic energy. Wind flows over the airfoil shaped blades causing lift, like the effect on airplane wings, causing them to turn. The blades are connected to a drive shaft that turns an electric generator to produce electricity.

How many wind turbines are there in a wind farm?

Wege Wind Energy Farm has 8. The largest wind farm in Texas has over 400.

How long does it take to build a wind farm?

It depends on several factors: the location of the farm, topography, wind speed, the number and type of turbines required, etc. Once environmental and meteorological studies and other developmental work is complete, actual construction time for a wind farm is much less than a conventional power plant. The Wege Wind Energy Farm took less than six months to build.

How much power will the Wege Wind Energy Farm generate?

35 million kilowatt hours a year. Translated into everyday use, that's enough to power 2,925 homes.

Since the Wege Wind Energy Farm is emission-free, how much carbon dioxide is avoided, compared to a conventional power plant?

61,639,900 pounds, every year.

Can the land at a wind farm still be used for farming?

Yes. Farming and cattle grazing can go on right up to the turbine footprint.

Any drawbacks to a wind farm?

There used to be concern about wind turbines causing a lot of bird deaths, but studies show that's not the case. The largest drawback seems to be their effect on the natural view of the landscape. To some, wind turbines are an eyesore; to others they're majestic, a pleasant alternative to a conventional power plant.

How many states have wind turbines in operation?

25. Most are in California, Texas, Iowa, Minnesota, and Oklahoma, where state policies encourage wind power development and wind speeds are high and consistent.

Is wind power production growing?

As concern grows about emissions from fossil fuel generation, renewable energy sources like solar, geothermal, wind and others draw more interest. Engineers have cut the price of wind generated electricity by about 80% in the last 20 years, and 2007 was the biggest year ever for wind power capacity installation in the U.S. Wind power investment and construction is expected to continue its dramatic growth.