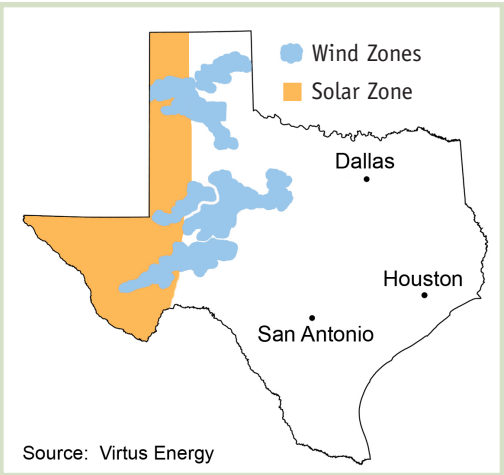


## Transmission has been Approved

A shortage of transmission lines limited clean energy production from West Texas. After 6 years of preliminary efforts, Texas is taking action on a transmission plan that:

- Will connect cities to the best renewable energy areas in Texas
- Support wind development of up to 25,000 MW
- Enable new solar, biomass and geothermal plants to use the same lines
- The state's grid operator ERCOT says "...will maintain system reliability..."

### WIND AND SOLAR ZONES



2400 miles of new transmission lines, planned for construction in the Competitive Renewable Energy Zones (CREZ) process, will allow for considerable additional wind and solar installations to be constructed. Where the Texas wind meets the dry, sunny solar rich area in west Texas they can share the transmission capacity that is being installed. Wind output peaks late in the evening and into the night while solar production peaks in the middle of the day. This produces complimentary power production profiles and allows the maximum amount of renewable energy to be delivered into the metropolitan areas of Dallas, Houston and San Antonio.

### Renewable Energy is Affordable

For the typical residential user the impact of the renewable energy goal was 9 cents per month in 2008.

Source: Scope of competition in electric markets report 2009 ERCOT

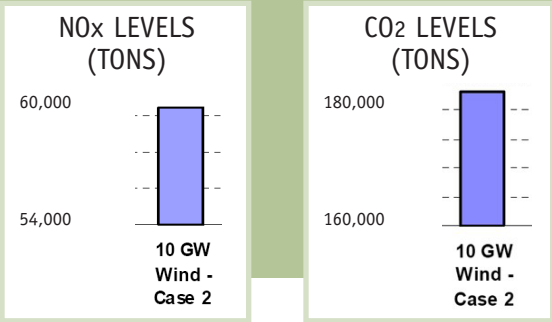
## REDUCE POLLUTION

When wind turbines supply power to the grid, other power plants reduce their output, resulting in less fuel burned and less pollution. Every major Texas city has smog and air pollution problems. Nitrogen Oxides (NOx) from power plants are a major contribution to air pollution and smog formation. A recent study by GE for ERCOT indicated substantial reductions in pollution emissions when large amounts of wind power are added to the grid. Thus, more wind energy will result in significant improvements in air quality in all metropolitan areas.

Congress will soon begin debating climate legislation. The House has promised a bill by Memorial Day 2009 and the Senate will follow soon after. Key congressional players have indicated that legislation will require cuts of CO2 emissions of 25%-40% by 2020 and 80% by 2050. If Congress does not act, President Obama has said he will instruct the EPA to regulate emissions on a similar scale.

As the largest emitter of greenhouse gases in the country Texas is facing decisions about how to lower the carbon intensity of our power sector by 65-80% by 2050. The Department of Energy has recently said that electric costs could increase as much as 62% in Texas due to potential carbon dioxide emissions limits assuming a business as usual strategy. Bold action to strengthen wind will cut our Carbon intensity and save consumers in a carbon constrained energy market.

### EFFECT OF WIND ENERGY ON CO2 AND NOx LEVELS



### WIND DEVELOPMENT BENEFIT SUMMARY

Benefit	Wind Development Levels (MW)	
	18,500	
Power Cost Savings (\$Billion/yr)	3.4	
Transmission Cost (\$Billion/yr)**	1	
Net Savings (\$Billion/yr)	2.4	
ERCOT NOx Reduction*	9%	
ERCOT CO2 Reduction*	10%	
Direct Jobs in Rural Areas*	8,318	
Local Taxes (\$million/yr)	107	
Landowner Royalties (\$million/yr)	9	

\* Extrapolated from ERCOT filings or Nolan County case study

\*\* Transmission costs annualized assuming 20% of total transmission capital cost per year

SOURCES: Cost: ERCOT (PUCT Project 33672, Item 1114, page 7 - May 15, 2008) Emissions: GE Ancillary Services Study (PUCT Project 33672, Item 1014, pg 111 - April 2, 2008) Jobs/Revenues: Nolan County Case Study of Wind Energy Economic Impacts in Texas, July 10, 2008

# Wind Energy Delivers Jobs Throughout Texas

Inside find out how...

- Wind Energy Reduces Costs
- Wind Energy Will Create 83,000 Jobs
- Wind Energy Reduces Pollution
- Wind Energy Pays For Schools

Texas is the Number One Wind Market in America



# Global Warming:

Federal Legislation is coming! Getting ahead of it means more jobs, cleaner air, and cheaper electricity—on our terms!

## REDUCE COST

Wind power offers great potential to help control rapidly rising energy costs. Wind has zero fuel cost, and many sources show that wind power can lower wholesale electricity and natural gas prices.

### Reduced Natural Gas Prices

Electric bills have doubled in the last ten years, due in large part to the skyrocketing price of natural gas. Luckily, Texas has an easy solution. By adding renewable energy such as wind, Texas can reduce its demand for natural gas, thereby reducing its price and Texans' electric bills.

### Savings are More than Costs

One of the common complaints about transmission lines for wind energy is that they are too expensive. In reality, wind power saves more than it costs—for every \$1.00 invested in transmission lines to windy areas, more than \$3.00 are saved through reduced payments to power plants.

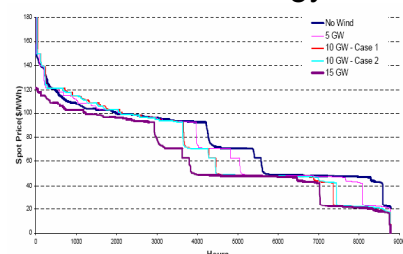
In fact, the Electric Reliability Council of Texas (ERCOT) has determined that wind would lower the market cost for power by \$3.4 billion per year, assuming new transmission allows 11,500 MW of wind capacity to be added.

### Texas Could Save Even More

By adding more wind to the grid, Texas could increase its savings on electric bills, more transmission is being constructed to realize this potential. The savings from wind will continue for decades after the transmission lines are built.

As the graph below shows, as more wind is added to the fuel mix the price of energy goes down.

### Wind Generation Reduces Spot Price of Energy



Source: GE Energy, Analysis of Wind Generation Impact on ERCOT Ancillary Services Requirements, Prepared for ERCOT, March 21, 2008.

## CREATE JOBS

In 1995, Texas had virtually zero wind industry. Through committed action and effective policies, Texas has surged ahead to become the #1 wind market in America, spawning economic activity across the state.

### WIND INSTALLATIONS

Texas has more than 8000MW in Service and ERCOT is tracking requests for an additional 52,000 MW. Texas expects more than 10,000 wind project construction jobs during 2009, T Boone Pickens Mesa project alone projects 1400 jobs.

### MANUFACTURING

#### TURBINES

1 TECO Westinghouse (Round Rock, 100 jobs) – manufactures wind turbines for DeWind and potentially other companies

#### TOWERS

- 2 Barr Fabrication (Brownwood, 90 jobs) - structural metal components
- 3 Bergen Southwest Steel (El Paso, 120 jobs) – wind tower fabricator
- 4 CAB, Inc. (Nacogdoches, 20 jobs) – steel components for wind projects
- 5 RTLC Windtowers (McGregor, 60 jobs) - fabrication and coating operations for structural wind towers
- 6 Tower Tech (Abilene, 150 jobs by 2009) - fabricator of wind towers for on-shore and off-shore applications
- 7 Trinity Structural Towers (Dallas/Fort Worth, 225 jobs) – nation's leading manufacturer of structural wind towers
- 8 Windclean (Coleman, 140 jobs) - blasts, paints and rigs internal systems for hundreds of towers each year

#### BLADES

9 Molded Fiber Glass (Gainesville, 200 jobs) – producer of blades and other composite components for wind machines

#### MAJOR MATERIAL SUPPLIERS

- 10 Aztec Bolting (League City) - field technicians and/or hydraulic tooling for wind turbine bolting applications
- 11 DIAB, Inc. (DeSoto, 250 jobs) - one of the world's leading suppliers of core materials for wind turbine blades
- 12 Dow (Freeport) - provider of epoxy resins and material solutions for use in various wind power applications
- 13 Hempel (Conroe) - world leader for high performance coating systems for wind turbine towers
- 14 Huntsman (Port Neches) - supplier of structural bonding adhesives
- 15 Owens-Corning (Amarillo) - supplier of fabric for blades
- 16 Zoltek (Abilene, 150 jobs) - supplier of carbon fiber for blades

### OPERATIONS & SERVICE

#### OPERATIONS & MAINTENANCE

- 1 GE O&M (Sweetwater) - regional turbine service and optimization center
- 2 Siemens (Houston) - new machine engineering, packaging and testing
- 3 Energy Maintenance Service (Abilene, 80 jobs by 2009) - wind energy O&M, construction, training and component refurbishing
- 4 Wind Energy Services Co (Sweetwater) - wind composite component service and repair

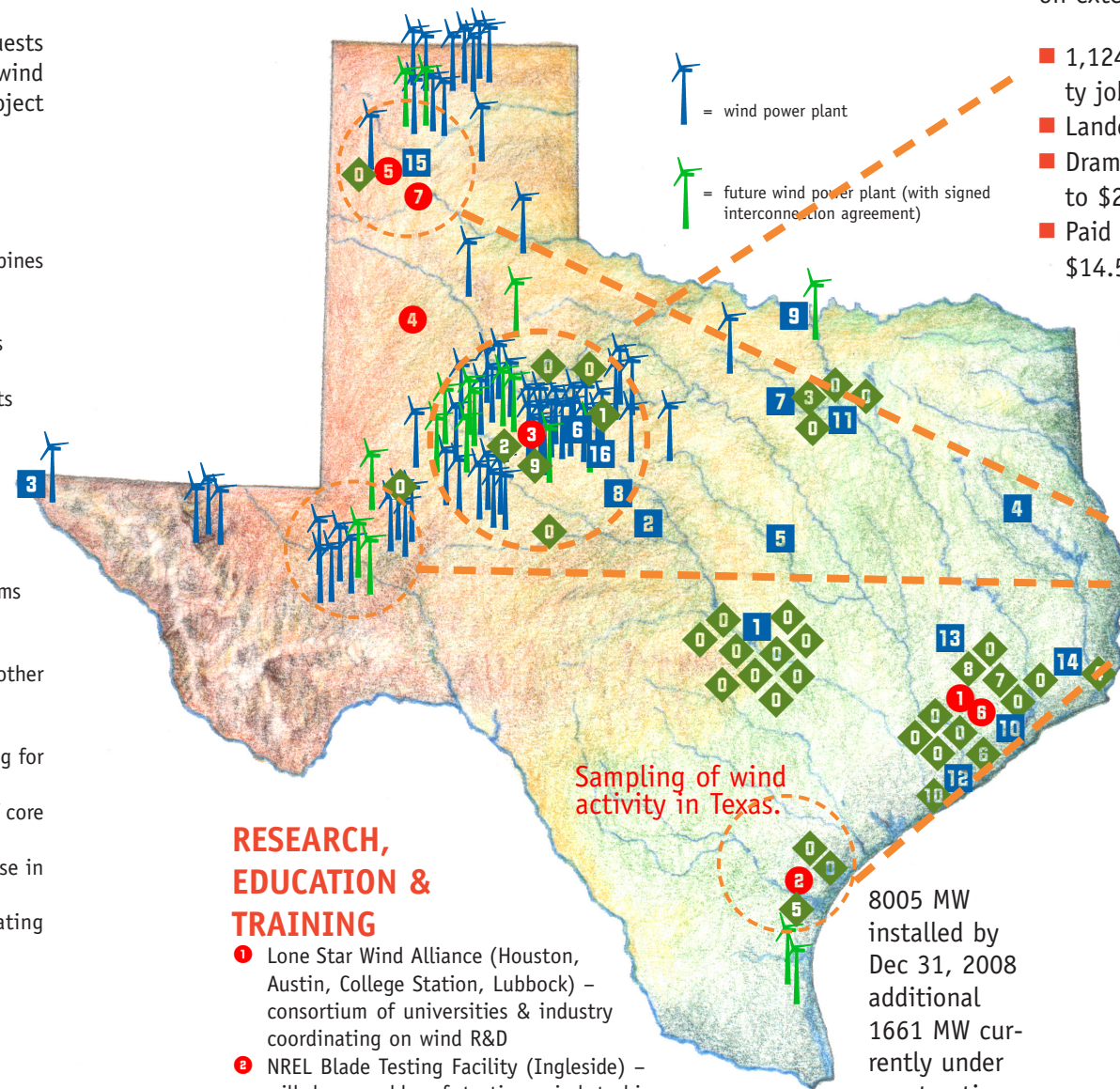
#### TRANSPORTATION

- 5 Lone Star Transportation (Ft. Worth, 75 jobs) – largest freight hauler of wind power components in the U.S.
- 6 Port of Beaumont – 2007 total project cargo increased by 149% that includes about 25 wind turbine shipments

- 7 Port of Corpus Christi – handles an average of 4 vessel loads of wind power generators, blades, and other components each month
- 8 Port of Freeport – Imported approximately \$200 million worth of wind components in 2007
- 9 Port of Houston – Imports 2 or 3 wind vessels a month; the average vessel employs 20-25 workers for a week
- 10 Port of Galveston – Imports 6-8 vessels per month carrying wind towers or wind turbine generators

#### DEVELOPERS (Some with more than 100 jobs in Texas)

- 11 AEP, AES, American Shoreline, Babcock & Brown, BP, Cielo, Clipper, Duke, E.On, Edison Mission, Element Markets, FPLE, Fremantle, Gamesa, Hilliard/Skyward, Horizon, Iberdrola, Invenergy, Luminant, Mesa, Noble, NRG, RES, Shell, Third Planet, W.E.S.T., White-Wind, Wind Hunter, Wind Tex



### RESEARCH, EDUCATION & TRAINING

- 1 Lone Star Wind Alliance (Houston, Austin, College Station, Lubbock) – consortium of universities & industry coordinating on wind R&D
- 2 NREL Blade Testing Facility (Ingleside) – will be capable of testing wind turbine blades up to 230 feet long
- 3 Texas State Technical College (Sweetwater) – provides industrial training in wind turbine field technicians
- 4 Texas Tech University (Lubbock) – one of only PhD programs in the U.S. in wind energy engineering
- 5 USDA Conservation & Production Lab (Bushland) – pioneer in applied research of wind turbines since 1976
- 6 Vestas Research Center (Houston, 100 jobs) – North American research center for world's largest turbine supplier
- 7 WTAMU, Alternative Energy Institute (Canyon) – a major wind energy information resource since 1977

8005 MW installed by Dec 31, 2008 additional 1661 MW currently under construction.

## Nolan County Case Study

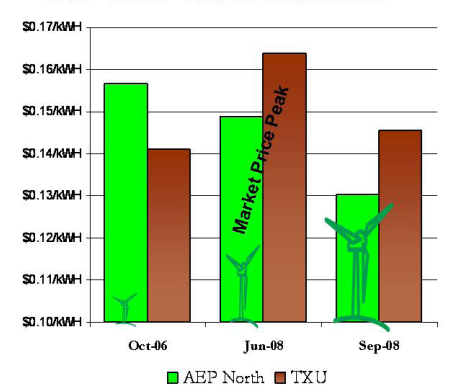
Nolan County, Texas has become a remarkable example of how quickly and effectively renewable energy development can revitalize rural America. Starting with a single wind project in 2001, this single county's 2,500 MW now outpaces the total wind capacity of any other state and all but 7 other countries. An assessment of benefits based on extensive field surveys reveals:

- 1,124 direct wind jobs (nearly 18% of the county jobs) with a payroll of \$45 million per year
- Landowner Royalties of \$12.3 million per year
- Dramatic increase in property tax base surging to \$2.4 billion in 2008
- Paid local school and local property taxes of \$14.5 million in 2007
- Supports \$24 million in new school construction (2004-2010)

There is an extraordinary opportunity for the Nolan success story to be replicated elsewhere among Texas' 254 counties.

### Amarillo-Pampa-Lubbock San Angelo- McCombs Laredo-Corpus Christi

#### More WIND=Lower Electric Prices



Renewable energy has been instrumental in moderating price increases during periods in which the cost of natural gas prices have been increasing.