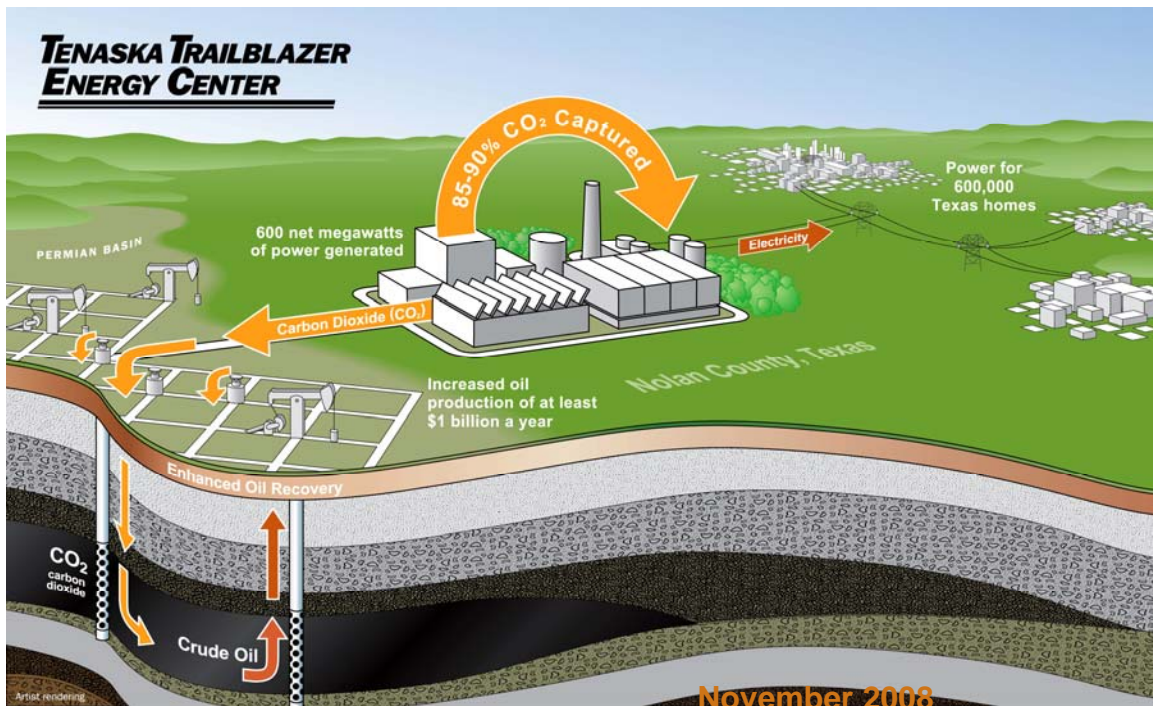


# The Potential Economic and Tax Revenue Impact of the Tenaska Trailblazer Energy Center

Tenaska, Inc.



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## Summary

TXP was retained to help Tenaska, Inc. evaluate the economic and tax impact of its proposed Tenaska Trailblazer Energy Center (TTEC) in Nolan County, Texas. The project as planned will generate approximately 765 megawatts (MW) gross and 600 MW net of electricity, using best available supercritical steam, pulverized coal technology. The plant will be designed to capture 85 to 90 percent of the carbon dioxide (CO<sub>2</sub>) produced by combustion and deliver it via pipeline to Permian Basin oil fields for use in enhanced oil recovery (EOR) and ultimately, geologic storage. TTEC will be the first conventional coal-fueled power plant in the United States to use carbon management technology on a commercial scale.

### TTEC Economic Impact

The construction phase of the TTEC will have a positive impact on the local economy, injecting over \$742 million in economic activity and supporting approximately 1,500 jobs during its peak. Once the plant is up and running, the ongoing economic benefits of TTEC to Nolan County consist of the day-to-day operation of project, normal operating expenditures, purchases from local vendors, and spending of people employed by these businesses. For example, TTEC anticipates paying an average annual base salary of \$75,000, well above the reported Nolan County average wage of roughly \$27,200, while \$1.4 billion in additional property value will increase Nolan County's property values by more than 50% and will be the largest single property value created in the entire state in recent years.

Once fully operational, the total impact will yield an annual increase of over \$12.7 million in employee compensation, while supporting a total of 176 local full-time jobs (105 directly at the facility and 71 due to impact of increased local spending). Just as important, there could be significant local taxes collected, along with enhanced capacity for oil extraction in the Permian Basin. TTEC will generate significant tax revenue for Nolan County and strengthen the West Texas economy by adding more than \$1 billion of oil production annually through enhanced oil recovery in the Permian Basin.

### TTEC Range of Benefits

<b>Construction Jobs</b>	1,500 at peak
<b>Economic Benefit of Construction</b>	\$742 million over a 5-year period
<b>Average Salary During Operations</b>	\$75,000 (base salary)
<b>Direct Full time Jobs Created</b>	105
<b>Indirect Full time Jobs created</b>	71
<b>Additional Oil Production in Permian Basin</b>	\$1 billion annually

## Strategic Implications of the TTEC

Does the TTEC match the long-term economic growth plan of Texas as set forth in the Texas ED Plan? The answer is clearly yes. The overarching theme of the Texas ED Plan centers on emerging technologies – “In the broadest sense, Texas must build a knowledge-based economy.” Firms that fit this profile will require highly skilled workers, pay above-average wages and invest millions of dollars in facilities. While the Texas ED Plan does not explicitly cite clean coal or renewable energy, an emphasis was placed on using technology to preserve the viability of the state’s utility and energy sectors. Clearly, TTEC’s proposed investment in state-of-the-art energy technologies coupled with the need for highly skilled workers meets these criteria.

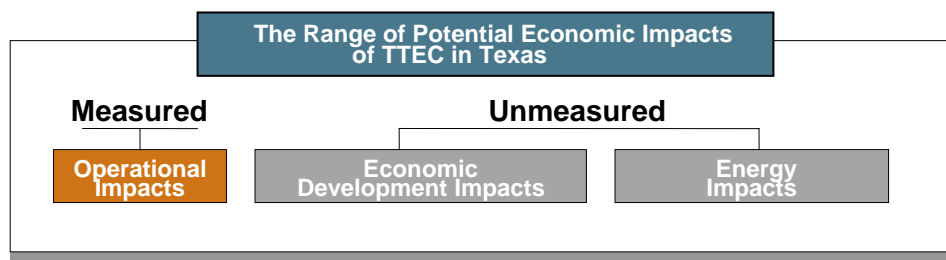
At the same time, the energy sector of West Texas has been significantly diversified in recent years, as surging retail prices have combined with evolving social values and enabling technology to create strong demand for energy from renewable sources, including wind. TXP estimates that just over \$10 billion has been or will be invested in creating just under 8,000 MW of regional wind-generation capacity in the coming years, along with approximately 400 direct jobs. The TTEC extends this diversification effort, and will have a substantial impact on the local economy as well. The following table compares the direct economic “footprint” of TTEC vs. the average wind farm in the region.

### TTEC vs. Average Wind Farm

	Total Appraised Value	Total Earnings	Total Employment
TTEC	\$1.4 billion	\$12.7 million	176
Wind Farm	\$0.2 billion	\$0.6 million	26

Source: TXP

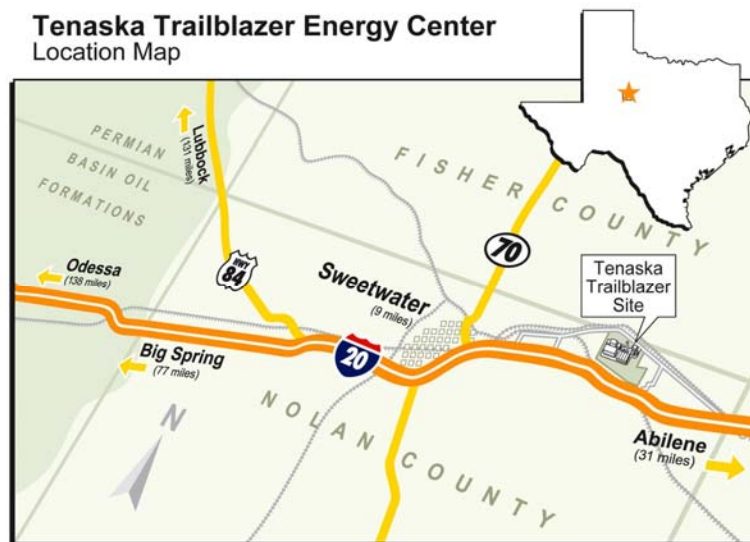
As the data indicates, TTEC’s impact on the region is at least seven times that of the typical wind farm. When the other unmeasured benefits outlined below are factored into the equation, the gain to the state and region seems clear.



## Overview

In 2001, the 77<sup>th</sup> Texas Legislature addressed the disproportionate burden placed on capital-intensive industries. Of concern was the disadvantage that Texas faced when competing for economic development projects. Specifically, more aggressive incentive programs and investment tax credits offered by other states were feared to make location in Texas too costly. The *Texas Strategic Economic Development Plan 1998-2008* (Texas ED Plan) found that the lack of R&D and investment tax credits and relatively high property tax rates “place Texas at a significant disadvantage when competing with other states for high capital-intensive projects.” Little has changed in the ensuing years, as the move toward higher added-value industries and increased global competition heightens the stakes for economic recruitment and development.

**Figure 1**



TXP was retained to assist Tenaska, Inc. for evaluation of the economic and tax impact of its proposed Tenaska Trailblazer Energy Center (TTEC) in Nolan County. The project as planned will generate approximately 765 megawatts (MW) gross and 600 MW net, using best available supercritical steam, pulverized coal technology. The plant will be designed to capture 85-90 percent of the CO<sub>2</sub> produced by combustion and deliver it via pipeline to Permian Basin oil fields for use in enhanced oil recovery (EOR) and ultimately, geologic storage. Several different cost numbers related to the TTEC are used in this and other published reports regarding the project.

TXP has reviewed the Nolan County region's economic base and demographic data, researched the utilities and energy industries, and built econometric

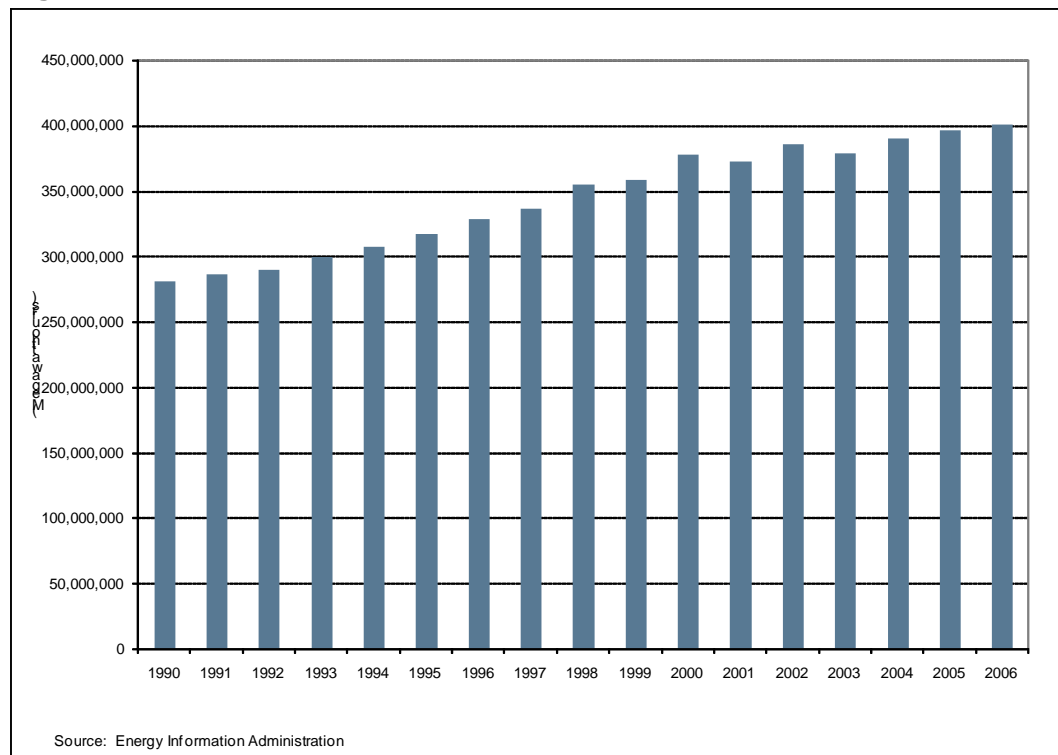
models to simulate the project's impact on the regional economy. The result is a detailed report that will assist area leaders in determining the economic benefits generated by TTEC.

## Texas Energy Sector

### Texas Energy and Natural Resource Sectors

For much of the 20th century, an abundance of oil and natural gas reserves “fueled” the growth of the Texas economy. The exploration of oil fields throughout East Texas, for example, drove the expansion of Houston, Beaumont, and Port Arthur. Close proximity to the oil fields promoted the growth of related industries such as chemical manufacturing and petroleum refineries along Texas' coastline. Royalties generated from these sectors subsidized public higher education and social programs throughout the state. Texas utility companies were also able to leverage the abundance of natural resource inputs. According to the Energy Information Administration (EIA), Texas firms in 2006 generated over 400,000,000 MWh of electric power.

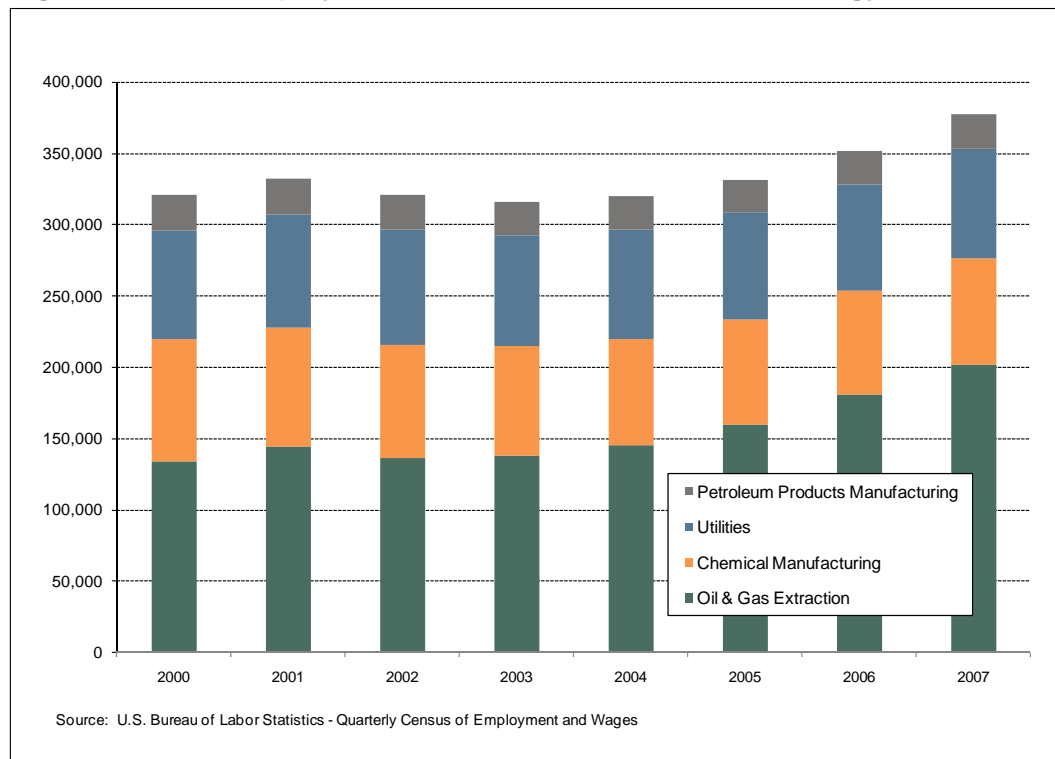
**Figure 2: Total Texas Electric Power Generation**



Over the past two decades, the highly cyclical nature of oil prices, international competition, and the shifting role of technology resulted in significant layoffs in the state's natural resource and energy industries. Regional headquarters

operations were closed in Midland and Odessa in favor of consolidation in the Houston area. While demand and prices have surged in recent months, the fact remains that Texas natural resource and energy industries have experienced tremendous consolidation and change over the past 25 years. Despite this fact, Texas continues to maintain its position among the nation's leading energy and natural resource producers. Currently, Texas' natural resource and energy sector employs approximately 375,000 workers.

**Figure 3: Texas Employment in the Natural Resource & Energy Industries**



**Table 1: Employment in the Natural Resource & Energy Industries (2006)**

Sector	United States	Texas	Texas as % of U.S.
Petroleum Manufacturing	113,063	23,480	20.8%
Chemical Manufacturing	860,835	73,148	8.5%
Oil & Gas Extraction	273,619	180,762	66.1%
Utilities	803,929	74,045	9.2%
<b>Total</b>	<b>2,051,446</b>	<b>351,435</b>	<b>17.1%</b>

Petroleum Mfg. = NAICS 324; Chem. Mfg. = NAICS 325; Oil & Gas Extraction = NAICS 211, 21311, & 54136

Even though Texas is one of the nation's leading producers of energy and petroleum related products, ever-growing local demand for energy has outpaced local supply, as the state has shifted from net exporter of energy in the 1970s to major importer of fuels just thirty years later. A 2006 quote from Secretary of

Energy Samuel W. Bodman posted on the U.S. Department of Energy website highlights this national trend:

With America now importing 60% of the oil we use and a national bill for this habit that came to \$250 billion last year, there is simply no time to waste. With worldwide demand growing rapidly, and with concern about the environmental impact of greenhouse gases rising, the deployment of clean, reliable sources of energy is clearly in our national interest.

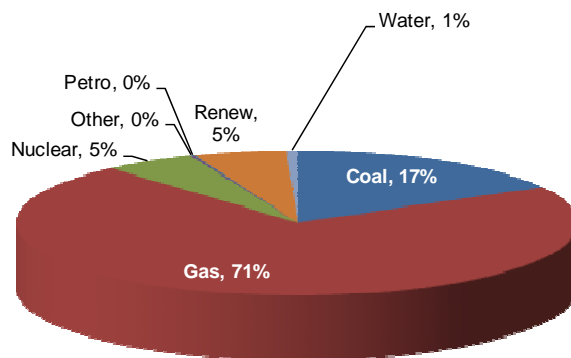
To partially address this shortage and rising costs, many federal and state agencies as well as the private sector are focusing on renewable energy as the alternative energy source of the future. As reported in *Business Week* several years ago;

An array of alternative-energy, energy-efficiency, and other green technologies -- together known as "cleantech" -- are beginning to boom. A host of forces is responsible for the trend: high prices for oil, gas, and coal; expanded government incentives and mandates; advances in technology that are reducing costs; concern over global warming; and investors looking for the Next Big Thing.

### **Coal as an Energy Source**

The U.S. Department of Energy conservatively forecasts that the United States will need 40 percent more electricity by 2030. Coal is an abundant natural resource that currently supplies more than half of the nation's electricity and will continue to do so for the foreseeable future. Today, coal is the most widely used fuel for generating electricity in the world and accounts for about 37 percent of total worldwide electricity production. Although coal reserves are widely distributed throughout the globe, over half the recoverable reserves are located in China, the United States, and the former Soviet Union. The United States has nearly 275 billion tons of recoverable coal, which represents more than 250 years of supply at today's usage rates and accounts for approximately 95 percent of the nation's fossil energy reserves.

**Figure 4: Texas ERCOT Fuel Percentage by Nameplate Capacity (2008)**



Source: Global Energy Decisions, Inc.

Coal is also the cheapest source of power fuel per million Btu, averaging less than a quarter of the price of oil and natural gas.

Texas, like most of the world, has relied largely on fossil fuels such as oil, gas and coal to meet its energy needs. According to the EIA, coal is the second largest source of electricity generation in Texas. In 2008 coal represents about one-sixth of the Electric Reliability Council of Texas (ERCOT's) generating capacity, while it represents about one-third of the U.S. total.

According to an energy report produced by the Texas State Comptroller's office:

Demand for coal is increasing across the globe and some governments, including the U.S., are considering limitations on greenhouse gas emissions. Such factors could impact the development of new coal plants, at least until technology to capture carbon emissions becomes cost-effective.

Because of coal's abundance, it is likely to continue to be an important part of the state's fuel mix. And, as new technologies such as carbon sequestration prove effective, coal could have increased prominence.

### **Carbon Sequestration**

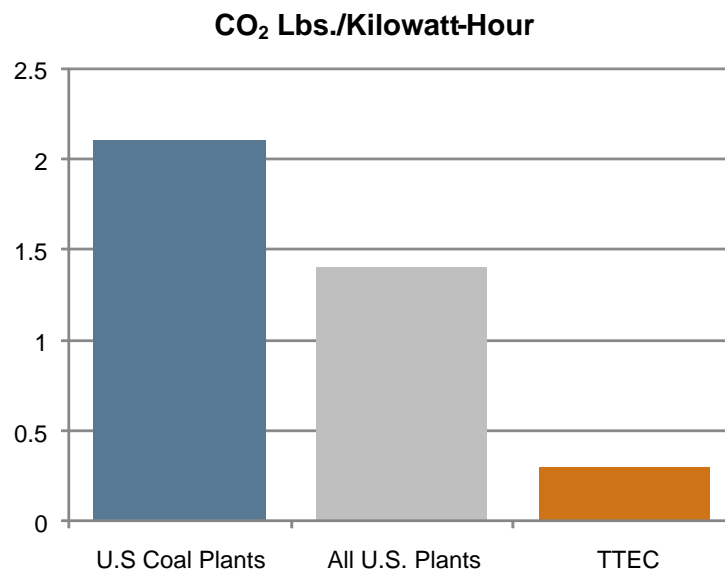
Carbon sequestration is the placement of CO<sub>2</sub> into a repository in such a way that it will remain permanently sequestered. EOR, which will be used to sequester the CO<sub>2</sub>, involves injecting carbon dioxide into underground reservoirs that have the ability to securely contain it.

CO<sub>2</sub> is routinely separated and captured in other industrial processes, such as ammonia and hydrogen production, natural gas processing and limestone calcinations. However, CO<sub>2</sub> separation and capture technology have yet to be applied to new conventional coal-fueled power plants on a commercial scale, except in very small research and demonstration projects. The illustration on the front cover graphically depicts the process by which the carbon dioxide will be captured and sequestered at TTEC.

The design of TTEC will be a conventional generating station utilizing supercritical steam technology to produce electricity using low-sulfur Powder River Basin coal. The term “supercritical” refers to the use of steam at a higher temperature and pressures to drive the turbine, which generates the power. The use of these higher temperatures and pressures results in cleaner, more fuel-efficient power generation.

The TTEC will capture, dehydrate and compress for use in ERO 85 to 90 percent of the CO<sub>2</sub> produced by combustion of the plant’s fuel – sub-bituminous, low-sulfur coal. TTEC will be the first conventional coal-fueled power plant operating on a commercial scale today to capture and sequester most of the CO<sub>2</sub> it produces. The figure below shows average U.S. industry emission rates for CO<sub>2</sub> in 2004 versus anticipated TTEC emission rates.

**Figure 5: U.S. Industry Average Emissions (2004) vs. Anticipated TTEC Emission Rates**



Source: Environmental Protection Agency, eGRID2006 Version 2.1, April 2007 and Tenaska, Inc.

In addition, sulfur dioxide, nitrogen oxides, mercury, particulate matter and other emissions will be controlled utilizing a combination of low-sulfur coal, combustion controls, catalytic reduction, fabric filters, activated carbon injection, and flue gas scrubbers. The plant will be designed to meet the environmental standards for sulfur dioxide, nitrogen oxide and mercury removal outlined in House Bill 3732, Texas' "Advanced Clean Energy Project" legislation, passed in 2007.

## Nolan County Economic Climate

Nolan County's employment base expanded slightly over the past year, adding 6 jobs or a 0.1 percent increase in total employment. In Q4 2007, the most recent data published by the Texas Workforce Commission, there were approximately 6,026 Nolan County-based business employees. Much of the gains that did occur over the past year were in the natural resources and mining, manufacturing, and education and health services sectors. Despite overall stability in the local job base, Nolan County residents continue to seek employment in surrounding counties. In 2007, 7,312 Nolan County residents were employed – indicating that almost 1,300 Nolan County residents were working for businesses located in surrounding counties.

The Manufacturing, Trade, Transportation & Utilities (T.T.U.), and Local Government sectors play a large role in the local economy. These sectors account for more than 57.1 percent of Nolan County's current total employment, compared to 41.4 percent for Texas. During the 1990s, the County's employment base fluctuated between 5,500 and 6,000 jobs. This trend has continued over the past few years as overall with total employment approaching a 20-year high. Agriculture and oil production, which are not counted in the Quarterly Census of Employment and Wages (QCEW) data, are also important to the local economy. In 2006, the total value of oil and gas production based on the taxable production value and net value determined by the Comptroller was \$89.8 million. According to the 2002 Census of Agriculture, 516 farms generated \$13.4 million in agricultural products.

Consistent with a relatively small economic job base and high percentage of workers who seek employment outside of the County, Nolan County's unemployment rate has remained under 6.0 percent over the past few years. In 2003, local unemployment was 5.9 percent. By 2007, the unemployment rate had fallen to 3.8 percent, below the state's unemployment rate of approximately 4.3 percent.

Local population has been slowly declining this decade. Since 2000, the County has lost about 1,100 residents, a decrease of 7.2 percent. Nolan County's

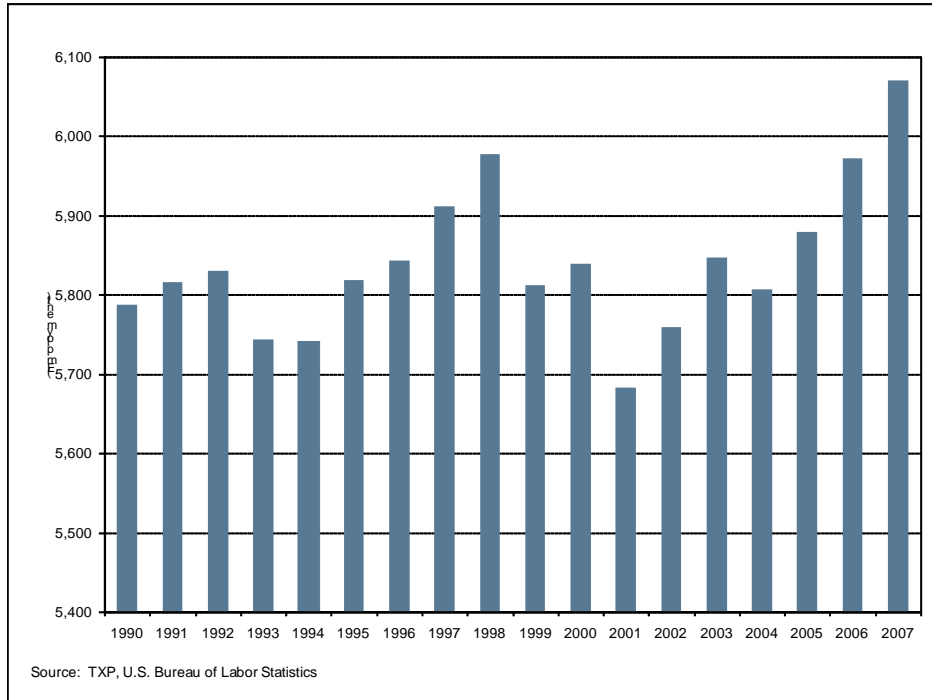
declining growth is noticeable when compared to Texas' significant population growth rate of 14.1 percent. This declining population growth rate is higher than the West Central Texas rate of 0.4 percent. Per capita income levels have been increasing each year, but at a slower rate than the State of Texas. Nolan County's per capita personal income (\$25,828) is now 73.4 percent of the Texas average (\$35,166), falling from a high of 79.3 percent of the state average in 1990. Wages paid to area workers are also lagging state levels. Over the past ten years, Nolan County's workers earned about 20 percent less than the state average. In 2006, an employee earned \$27,166, compared to the Texas average of \$41,918.

**Table 2: Nolan County Employment Trends (NAICS) Trends**

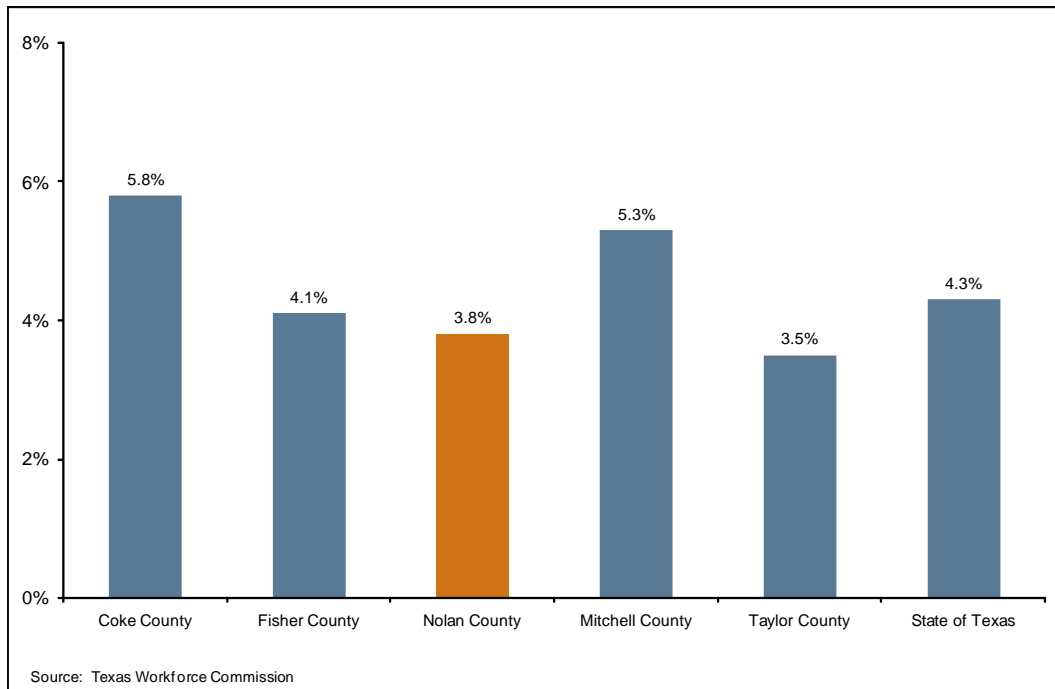
Description	Employment 2002 Q4	Employment 2006 Q4	Employment 2007 Q4	Change 06-07	% Change 06-07
Natural Resources & Mining	252	320	385	65	20.3%
Construction	120	206	219	13	6.3%
Manufacturing	856	816	886	70	8.6%
Trade, Transport & Utilities	1,321	1,291	1,197	-94	-7.3%
Information	53	53	51	-2	-3.8%
Financial Activities	177	166	174	8	4.8%
Professional & Bus. Services	130	247	237	-10	-4.0%
Education & Health Services	472	331	380	49	14.8%
Leisure & Hospitality	472	569	561	-8	-1.4%
Other Services	181	133	130	-3	-2.3%
Nonclassifiable	1	486	401	-85	-17.5%
Federal Government	51	45	47	2	4.4%
State Government	466	0	0	0	0.0%
Local Government	1,315	1,357	1,358	1	0.1%
<b>Total Employment</b>	<b>5,867</b>	<b>6,020</b>	<b>6,026</b>	<b>6</b>	<b>0.1%</b>

Source: Texas Workforce Commission

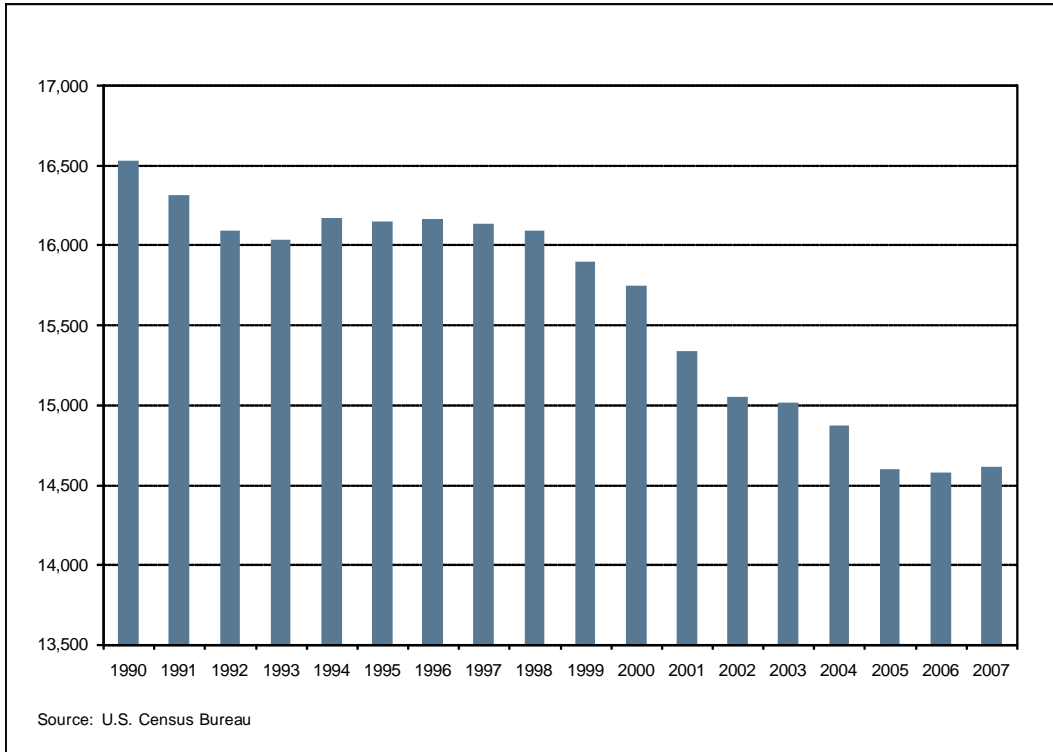
**Figure 6: Nolan County-Based Employment Trends**



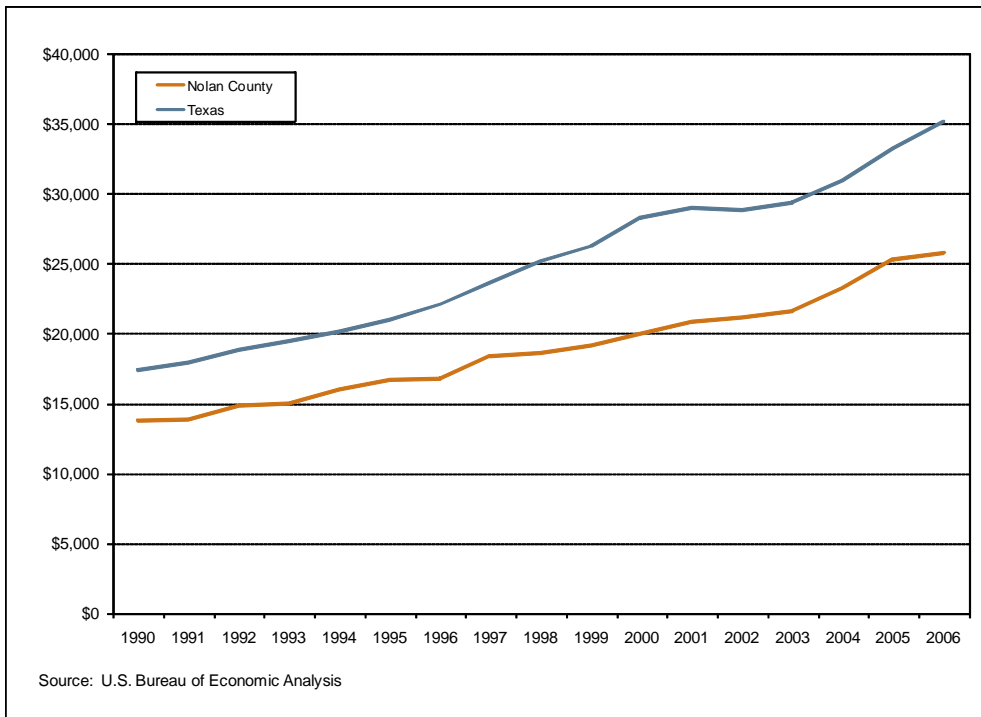
**Figure 7: Regional Unemployment Trends (2007)**



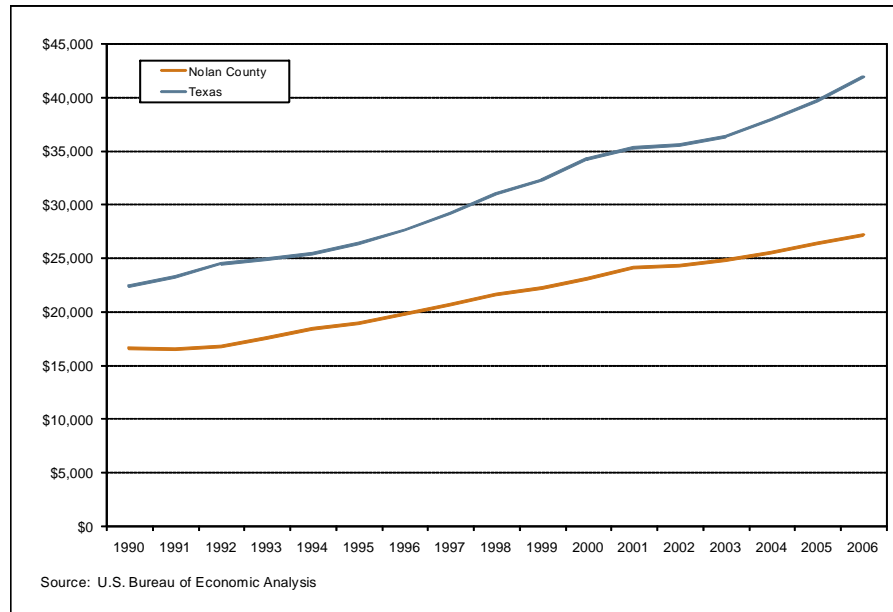
**Figure 8: Nolan County Population Trends**



**Figure 9: Nolan County Per Capita Income Trends (1990-2006)**



**Figure 10: Nolan County Wage Trends (1990-2006)**



## TTEC Economic & Tax Revenue Impact

The construction phase of the TTEC will have a positive impact on the local economy, injecting over \$742 million in economic activity and supporting approximately 1,500 jobs during its peak. Once the plant is up and running, the ongoing economic benefits of TTEC to Nolan County consist of the day-to-day operation of project, normal operating expenditures, purchases from local vendors, and spending of people employed by these businesses. The economic benefits of this economic activity materialize primarily in the form of increased regional employment and income. The assumptions on the plant's local direct economic "footprint" are summarized in the table below.

**Table 3: TTEC Nolan County Total Taxable Investment**

Year	Jobs	Payroll	Average Salary Per Job	Total Appraised Value	Investment per Job
2014	105	\$10,500,000	\$100,000	1,454,837,000	\$13,855,590
2015	105	\$10,815,000	\$103,000	1,460,548,000	\$13,909,981
2016	105	\$11,139,450	\$106,090	1,465,637,000	\$13,958,448
2017	105	\$11,473,634	\$109,273	1,470,067,000	\$14,000,638
2018	105	\$11,817,843	\$112,551	1,473,806,000	\$14,036,248
2019	105	\$12,172,378	\$115,927	1,476,812,000	\$14,064,876
2020	105	\$12,537,549	\$119,405	1,479,049,000	\$14,086,181
2021	105	\$12,913,676	\$122,987	1,480,476,000	\$14,099,771
2022	105	\$13,301,086	\$126,677	1,481,052,000	\$14,105,257
2023	105	\$13,700,118	\$130,477	1,480,732,000	\$14,102,210
<b>Average</b>	<b>105</b>	<b>\$12,381,967</b>	<b>\$134,392</b>	<b>\$1,472,301,600</b>	<b>\$14,021,920</b>

Source: TXP, Tenaska, Inc. TEC. \* TXP has applied an inflation factor to the payroll data based on growth in the county's average annual wage over the past ten years.

## Economic Impact Methodology

As stated above, TXP has calculated the total economic impact of TTEC's business activity based on annual investment and employment levels. The economic assumptions underlying the analysis are summarized in Section 3. Specifically, this analysis measures the anticipated economic impacts of the TTEC using the IMPLAN input-output economic system and RIMS II (a similar system produced by the Census Bureau). TXP has customized the models by modifying the underlining industry data and by altering regional purchasing coefficient assumptions.

An economy can be measured in a number of ways. Three of the most common are "**Output**," which describes total economic activity and is equivalent to a firm's gross sales, "**Employee Earnings**," which corresponds to wages and benefits, and "**Employment**," which refers to permanent jobs that have been created in the local economy.

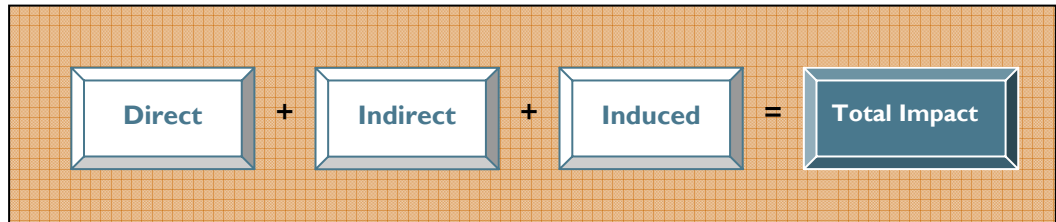
In an input-output analysis of new economic activity, it is useful to distinguish three types of expenditure effects: direct, indirect, and induced.

**Direct effects** are production changes associated with the immediate effects or final demand changes. The payment made by an out-of-town visitor to a hotel operator is an example of a direct effect, as the money that out-of-town visitor spends at restaurants.

**Indirect effects** are production changes in backward-linked industries caused by the changing input needs of directly affected industries – typically, additional purchases to produce additional output. Satisfying the demand for an overnight stay will require the hotel operator to purchase additional cleaning supplies and services, for example, and while restaurant owners have to buy food and other supplies. These downstream purchases affect the economic status of other local merchants and workers.

**Induced effects** are the changes in regional household spending patterns caused by changes in household income generated from the direct and indirect effects. Both the hotel operator and restaurant experience increased income from the visitor's stay, for example, as do the cleaning supplies outlet and the food service vendor. Induced effects capture the way in which this increased income is in turn spent by them in the local economy.

**Figure 11: The Flow of Economic Impacts**



The interdependence between different sectors of the economy is reflected in the concept of a “multiplier.” An output multiplier, for example, divides the total (direct, indirect and induced) effects of an initial spending injection by the value of that injection – i.e., the direct effect. The higher the multiplier, the greater the interdependence among different sectors of the economy. An output multiplier of 1.4, for example, means that for every \$1,000 injected into the economy, another \$400 in output is produced in all other sectors.

### **Economic Impact Results**

The total cost of the TTEC is estimated to be about \$3 billion. About \$600 million of that amount is comprised of development, legal and financing costs, leaving the “hard” costs of the project at approximately \$2.4 billion. About \$1 billion of those hard costs are associated with pollution control equipment for the project, and those costs automatically are removed from the taxable value of the facility. Absent these costs, the actual taxable property value of the project will be about \$1.4 billion.

Given a project of this magnitude, the construction phase will generate thousands of jobs for the region. However, a large portion of this investment will be in equipment imported to the region and will not have a Nolan County economic impact (no local jobs or firms built the equipment). TXP used a conservative approach to calculate the economic impact of the construction phase. Based on direct employment and existing construction wages, it was possible to estimate the construction impact of the project.

### **Definitions**

Output: describes total economic activity and is closely linked to a firm’s gross sales

Employee Earnings: corresponds to wages and benefits

Employment: refers to the jobs that have been created in the local economy

**Table 4: Aggregate Impact of TTEC’s Construction Phase (2009 – 2013)**

Year	Output	Earnings	Employment
2009	\$98,996,000	\$53,374,667	671
2010	\$222,741,000	\$120,093,000	1,509
2011	\$222,741,000	\$120,093,000	1,509
2012	\$160,868,500	\$86,733,833	1,090
2013	\$37,123,500	\$20,015,500	251
<b>Total</b>	<b>\$742,470,000</b>	<b>\$400,310,000</b>	<b>5,029</b>

Source: TXP, Tenaska, Inc. Note: Values may not sum to total due to rounding.

**Table 5: Aggregate Impact of TTEC’s Operations (2014 – 2023)**

Year	Output	Earnings	Employment
2014	\$308,589,500	\$12,658,350	176
2015	\$317,847,185	\$13,038,101	176
2016	\$327,382,601	\$13,429,244	176
2017	\$337,204,079	\$13,832,121	176
2018	\$347,320,201	\$14,247,084	176
2019	\$357,739,807	\$14,674,497	176
2020	\$368,472,001	\$15,114,732	176
2021	\$379,526,161	\$15,568,174	176
2022	\$390,911,946	\$16,035,219	176
2023	\$402,639,304	\$16,516,276	176
	<b>\$3,537,632,785</b>	<b>\$145,113,798</b>	<b>N.A.</b>

Source: TXP, Tenaska, Inc. Note: Values may not sum to total due to rounding.

### Regional Tax Revenue Impact

Beyond the economic impacts detailed above, the TTEC could generate a significant amount of tax revenue for local taxing jurisdictions. All levels of government – school districts, city, county, and special taxing authorities – would be very positively impacted by the development of the facility, although the level of ultimate benefit will be influenced by any tax incentives that are approved. Tax rates were obtained directly from the Nolan County Appraisal District.

Note: Since this economic and tax impact analysis is conducted before negotiations of value limitations, it should be noted that the tax revenue figures shown for the school district and other taxing jurisdictions reflect the projected tax collections based on the anticipated value of the project, in the absence of any approved limitations on value, state school financing legislation, or any other type of favorable tax treatment from any public sector jurisdiction.

**Table 6: Estimated Tax Impact of TTEC (2014 – 2023)**

	Total Taxable Prop. Value*	Sweetwater ISD	Nolan County	Nolan County FM	Hospital District	Other Taxes**	Total Tax Revenue
	<b>Tax Rate</b>	<b>\$1.1234</b>	<b>\$0.3723</b>	<b>\$0.0330</b>	<b>\$0.1414</b>	<b>N/A</b>	<b>N/A</b>
2014	\$1,454,837,000	\$16,343,639	\$5,416,358	\$480,096	\$2,057,140	\$306,880	\$24,713,226
2015	\$1,460,548,000	\$16,407,796	\$5,437,620	\$481,981	\$2,065,215	\$316,086	\$24,818,240
2016	\$1,465,637,000	\$16,464,966	\$5,456,567	\$483,660	\$2,072,411	\$325,569	\$24,913,095
2017	\$1,470,067,000	\$16,514,733	\$5,473,059	\$485,122	\$2,078,675	\$335,336	\$24,997,180
2018	\$1,473,806,000	\$16,556,737	\$5,486,980	\$486,356	\$2,083,962	\$345,396	\$25,069,966
2019	\$1,476,812,000	\$16,590,506	\$5,498,171	\$487,348	\$2,088,212	\$355,758	\$25,130,756
2020	\$1,479,049,000	\$16,615,636	\$5,506,499	\$488,086	\$2,091,375	\$366,431	\$25,178,957
2021	\$1,480,476,000	\$16,631,667	\$5,511,812	\$488,557	\$2,093,393	\$377,424	\$25,213,889
2022	\$1,481,052,000	\$16,638,138	\$5,513,957	\$488,747	\$2,094,208	\$388,746	\$25,234,875
2023	\$1,480,732,000	\$16,634,543	\$5,512,765	\$488,642	\$2,093,755	\$400,409	\$25,241,169
	<b>TOTALS</b>	<b>\$165,398,362</b>	<b>\$54,813,789</b>	<b>\$4,858,595</b>	<b>\$20,818,345</b>	<b>\$3,518,036</b>	<b>\$250,511,352</b>

Source: TXP, Tenaska Inc., TEC

\* Calculations assume Total Taxable Property Value (Real & Business Personal Property) = Assessed Value

\*\* This value is for indirect and induced Nolan County property taxes and general sales tax collections.

### Strategic Implications of the TTEC

Does the TTEC match the long-term economic growth plan of Texas as set forth in the Texas ED Plan? The answer is clearly yes. The overarching theme of the Texas ED Plan centers on attracting and developing industries using emerging technologies – “In the broadest sense, Texas must build a knowledge-based economy.” Firms that fit this profile will require highly skilled workers, pay above-average wages and invest millions of dollars in physical facilities. While the Texas ED Plan does not explicitly cite clean coal or other forms of renewable energy, an emphasis was placed on using technology to preserve the viability of the state’s utility and energy sectors. Clearly, TTEC’s proposed investment in state-of-the-art energy technologies coupled with the need for highly skilled workers meets these criteria. At the same time, the energy sector of West Texas has been significantly diversified in recent years, as surging retail prices have combined with evolving social values and enabling technology to create strong demand for energy from renewable sources, including wind. TXP estimates that just over \$10 billion has been or will be invested in creating just under 8,000 MW of regional wind-generation capacity in the coming years, along with approximately 400 direct jobs.

The TTEC extends this diversification effort, and will have a substantial impact on the local economy as well. For example, TTEC anticipates paying an average annual salary of \$100,000, above the Nolan County average wage of roughly \$27,000, while \$1.4 billion will be the largest single property value

created in recent years (and the equivalent of well over ten percent of the total wind-related investment in the region). Once fully operational, the total impact will yield an annual increase of over \$12.1 million in employee compensation, while supporting a total of 176 local full-time jobs (105 directly at the facility and 71 due to impact of increased local spending). Just as important, there could be significant local taxes collected.

The following table provides a comparison of the direct economic “footprint” of TTEC vs. the average wind farm in the region.

**Table 7: TTEC vs. Average Wind Farm**

Year	Total Appraised Value	Total Earnings	Total Employment
TTEC	\$1.4 billion	\$12.7 million	176
Wind Farm	\$0.2 billion	\$0.6 million	26

Source: TXP

Beyond the economic impact calculations, TTEC increases the breadth and depth of the energy sector in the Permian Basin – it represents the largest single energy-related investment ever in Nolan County, while further diversifying the regions clean energy industry. Meanwhile, the captured CO<sub>2</sub> could allow more than \$1 billion of additional Permian Basin oil to be extracted each year.

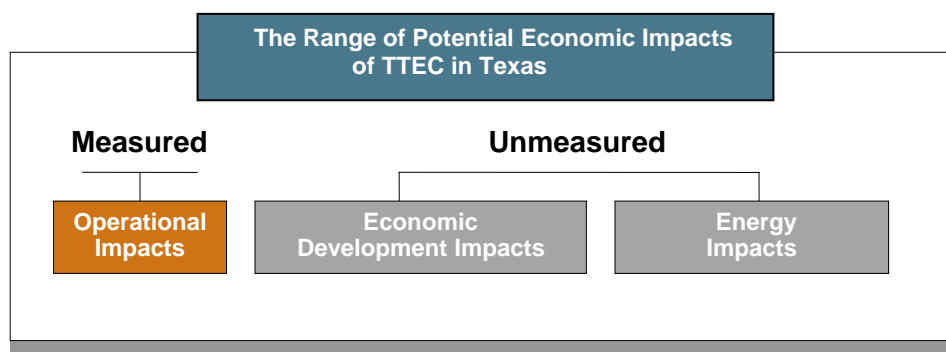
## Conclusions

Attracting high-paying, capital-intensive industries is becoming extremely competitive. Communities across the country, regardless of size, have committed hundreds of millions of dollars for economic development marketing and recruitment. In Texas alone, the ½ cent sales tax for economic development has generated over \$3.2 billion for economic development corporations since 1997. States and regions who want to remain competitive for large capital intensive investments, regardless of industry sector, typically must be willing to offer some form of public incentive.

As more and more states and regions consider long-term strategies for clean air regulation and compliance, it is likely that technologies that enable “greener” energy production will become highly prized. In particular, TTEC could have a significant impact on economic development in the state, as the technology and processes created and applied could help seed a new cluster that would stimulate the development and recruitment of additional economic activity. Similarly, the additional capacity of the plant and others like it could have a

positive impact on regional energy costs, especially if coal continues to be a financially attractive feedstock. Taken together, the combination of construction, operation, additional capacity, and research and economic development appears to be highly attractive potential addition to Texas' economic assets. The following figure provides a conceptual illustration of the range of impacts.

**Figure 13: Areas of Potential Impact**



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