The Federal Energy Leviathan Highlights of the Last Year

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A Grim Pattern Emerges from D.C.

- Wagering U.S. Economic Vigor and National Security on Federal Control of the Energy Sector
- Through Punitive Taxes and Prescriptive Control
- Mandates and Subsidy for Unproven, More Expensive Energy Sources and Technology with Inherent Limitations

H.R. 2454: The American Clean Energy and Security Act

- AKA The Waxman/Markey Bill WM
- "The most complex piece of legislation in human history." Senior Attorney for the Sierra Club
- Radical, Comprehensive Transformation of the Energy Sector
- Passed U.S. House of Representatives by 7 votes in June 2009
- More Severe Impacts for Texas than Other States
- At least 14% of Texas GSP from Energy Sector

Waxman/Markey A Gift from CA and MA to Texas

- W/M 1500 pages; 1000 new federal mandates; implemented by 21 federal agencies
- CBO Score of W/M: \$822 billion new federal spending; \$846 billion in new revenues: CARBON TAX
- Federal control of energy production and use through carbon caps, aggressive renewable mandates, and mandatory energy savings across all sectors
- W/M Recently Called Dead in the Senate but remains a menu for federal energy policy
- Select Provisions already implemented in federal agencies: EPA, DOI, DOE and others including SEC, DOE

TPPF Federal Climate Change Policy Initiative

- After House passage of W/M, what could TPPF do to strategically contribute to Senate consideration?
- Six Key States: AR, LA, MT, ND, MI, TX
- TPPF Designed a Project to Assist and Cooperate with five Counterpart Free Market Foundations
- Project Based on Development of Research and Outreach: Impacts on Economic Growth and Employment in Each State
- Six Research Studies Conducted by American Council of Capital Formation – Lead Economist, Dr. Margo Thorning
- ACCF Economic Studies of W/M and Similar Policies Highly Regarded for Quality, Substance and Objectivity

Research Study Methodology

- Studies Draw Upon ACCF's Previous Analysis of W/M
- An Economic Analysis of national economic impacts done in conjunction with National Association of Manufacturers
- ACCF/NAM Study Based on National Energy Systems Model (NEMS) Used by DOE for Energy Forecasting
- Combined with IHS Macroeconomic Global Insight Model
- Model Measure Dynamic Interactive Effects of Energy Prices Across All Energy Sectors
- In Battle of the Models, ACCF/NAM is a leading contender. Testimony at all Congressional Hearings and Throughout Major Media.
- Key Assumptions about the Unknown

Assumptions Used in Modeling: Technology Build Constraints (2030 Build Limits)

	High Cost Scenario	Low Cost Scenario
Nuclear	10 GW	25 GW
IGCC w Sequestration	15 GW	30 GW
Biomass	Max 3 GW/Year	Max 5 GW/Year
Wind	Max 5 GW/Year	Max 10 GW/Year
NGCC w Sequestration	15 GW	30 GW

Assumptions Used in Modeling: Other Specifications

	High Cost Scenario	Low Cost Scenario
Offsets (annual)	1,000 MMT (split 95% Domestic, 5% International)	1,000 MMT (split 95% Domestic, 5% International)
Oil Price Profile	AEO2009	AEO2009
Natural Gas Prices	Not Constrained	Not Constrained
Cellulosic Ethanol	With HR.6 – Not Constrained	With HR.6 – Not Constrained
Banking	5,000 MMT	5,000 MMT
HR.6	Yes	Yes
Allowance Prices (annual growth)	Constrained to 10%	Constrained to 10%
Strategic Reserve	Not modeled	Not modeled

Economic Impacts of Waxman Markey Bill: Change in Texas Economy Compared to Baseline Forecast

	Low Cost Case		High Cost Case	
	2020	2030	2020	2030
Impact on GSP (billion 2007\$)	-\$2.8	-\$29.9	-\$4.9	-\$40.8
Impact on Jobs	850	-144,600	-5,930	-196,930
Impact on Household Income (2007\$)	-\$86	-\$612	-\$216	-\$1,103
Impact on State Budget Receipts (2007\$)	-\$200 Mil	-\$2.1 Bil	-\$343 Mil	-\$2.9 Bil

Impact of Waxman Markey Bill on Energy Prices In Texas Compared to Baseline Forecast

	Low Cost Case		High Cost Case	
	2020	2030	2020	2030
Rise in Gasoline Prices	8.6%	20%	11.3%	26%
Rise in Residential Electricity Prices	1.8%	31%	10.2%	54%
Rise in Residential Natural Gas Prices	-3.2%	58%	0.6%	77%

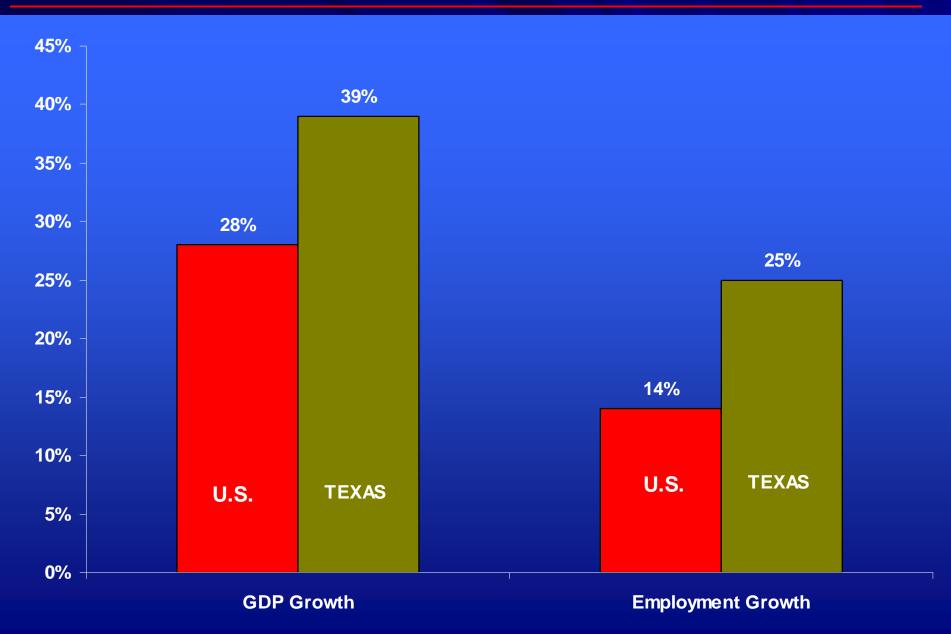
Change in Texas Output in Key Manufacturing Sectors Relative to Baseline Forecast

	Low Cost Case		High Cost Case	
	2020	2030	2020	2030
Manufacturing	-3.5%	-4.6%	-3.7%	-5.4%
Fabricated Metal Product Man.	-3.7%	-5.8%	-3.9%	-6.9%
Energy Intensive Manufacturing	-6.7%	-11%	-7%	-11.8%
Nonmetallic Mineral Product Manufacturing	-10.4%	-17.8%	-10.9%	-19.2%
Primary Metal Manufacturing	-13.4%	-22.8%	-14.2%	-25.5%

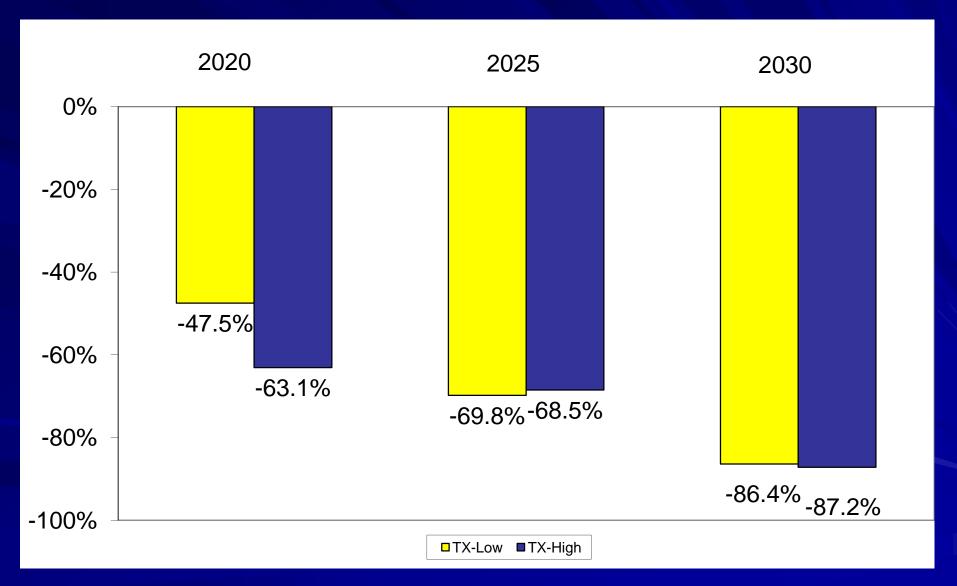
Distinctive Trends in the Texas Economy over Last Decade (1998-2008) – Vigorous Growth

- Texas Economic Growth Rate 38.8%
- U.S. Economic Growth Rate 28%
- Total Growth in Texas Employment 25%
- Total Growth in U.S. Employment 25%
- Driven by job growth in the oil & gas sector, employment in Texas "mining sector" grew up 52%
- Texas retains growth in some key manufacturing sectors.

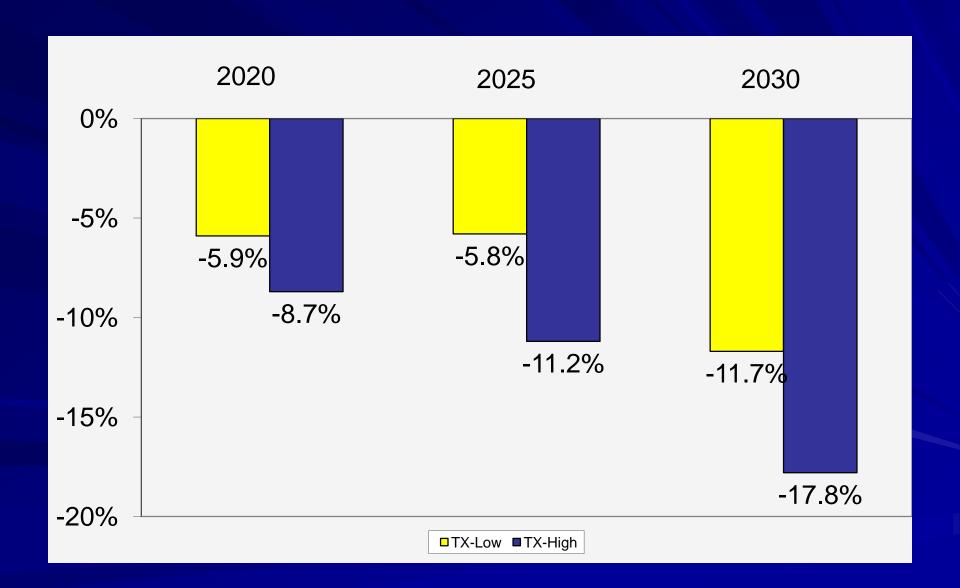
Texas Economic Performance Outstrips U.S. over Last Decade (1998 to 2008)



Change in Texas Production by Sector: Coal (Percent)



Change in Texas Electricity Production (Percent)



(Percent) Low Cost Case High Cost Case 2030 2020 2020

Manufacturing

Wood Product Manufacturing

Machinery Manufacturing

Miscellaneous Manufacturing

Food Product Manufacturing

Apparel Manufacturing

Textile and Textile Product Mills

Printing and related Support Activities

Fabricated Metal Product Manufacturing

Computer and Electronic Product Manufacturing

Furniture and related Product Manufacturing

Electrical Equipment and Appliance Manufacturing

Motor Vehicle, Body, Trailer, and Parts Manufacturing

Change in Texas Output by Major Manufacturing Sector Relative to Baseline

-3.5%

-4.3%

-3.7%

-6.6%

-3.6%

-4.7%

-4.8%

-2.7%

0.0%

-1.8%

-3.5%

-6.2%

_N 2%

-4.6%

-6.9%

-5.8%

-7.1%

-4.9%

-5.7%

-7.5%

-5.6%

-0.5%

-1.9%

-4.9%

-7.5%

_1 Nº/₂

2030

-5.4%

-7.6%

-6.9%

-8.7%

-5.9%

-7.0%

-8.0%

-6.2%

-0.3%

-2.2%

-5.5%

-8.7%

-3.7%

-4.5%

-3.9%

-7.0%

-3.8%

-5.0%

-5.0%

-2.8%

0.0%

-1.9%

-3.7%

-6.7%

_N 3%

Change in Texas Output by Major Manufacturing Sector Relative to Baseline
(Percent)

Low Cost Case High Cost Case

Energy Intensive Manufacturing

Primary Metal Manufacturing

Paper Manufacturing

Chemical Manufacturing

Nonmetallic Mineral Product Manufacturing

Petroleum and Coal Products Manufacturing

Plastics and Rubber Products Manufacturing

2020

-6.7%

-10.4%

-13.4%

-3.9%

-4.7%

-7.8%

-5.9%

2030

-11.0%

-17.8%

-22.8%

-6.6%

-7.5%

-12.9%

-10.8%

2020

-7.0%

-10.9%

-14.2%

-4.1%

-4.8%

-8.2%

-6.2%

2030

-11.8%

-19.2%

-25.5%

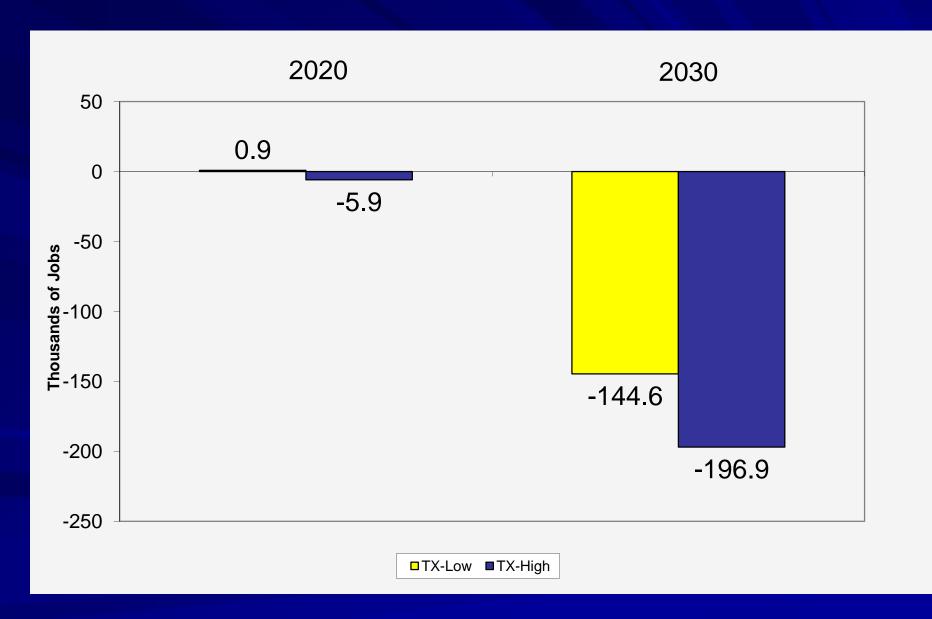
-7.2%

-7.8%

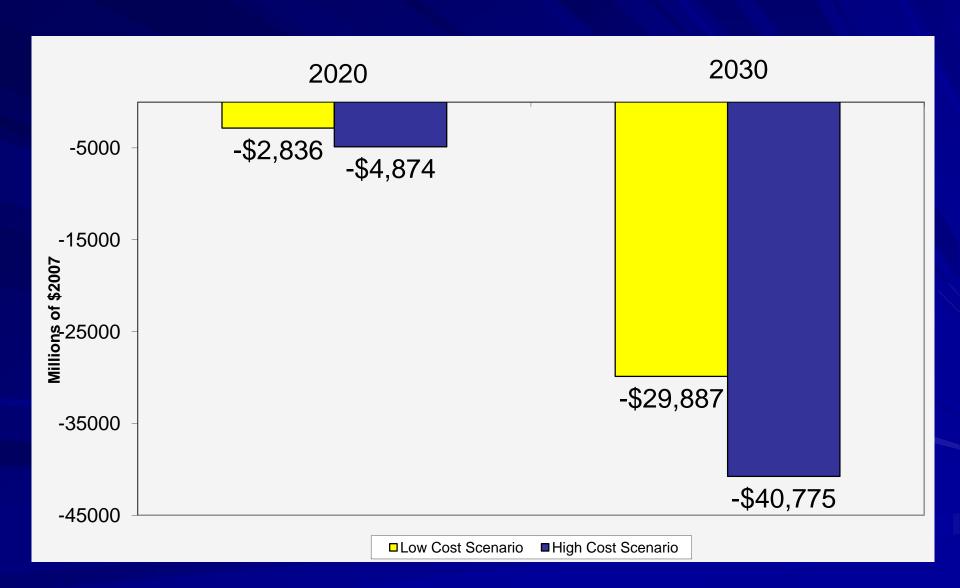
-13.9%

-11.7%

Loss in Employment in Texas



Loss in Gross State Product in Texas



ACCF Study: Economic Impacts of the Oil and Natural Gas Industry

"Texas oil and gas industry paid \$9.9 billion in taxes and royalties to state and local government in 2008."

Fueling the Economy, TXOGA

Texas	U.S.

2,123,291

1,661,138

4,034,007

915,370

456,971

158,934

299,464

477,249

199,344

97,947

179,958

The Economic Impact of the Oil and Natural Gas Industry, 2007

	Texas	0.5.
Employment	1,772,335	7,818,437

432,147

421,747

918,441

293,760

185,760

42,108

65,893

140,941

77,924

24,742

38,276

Source: The Economic Impacts of the Oil and Natural Gas Industry on the U.S.

Economy: Employment, Labor Income and Value Added, PricewaterhouseCoopers,

Direct

Indirect

Induced

Direct

Indirect

Induced

Direct

Indirect

Induced

Value Added (\$ Millions)

Labor Income (\$ Millions)

Oddly, Villainizing Oil

- Campaign Rhetoric: Ending the Tyranny of Oil in Our Times Like Our Parents Ended the Tyranny of Hitler
- Evidently, He Means It! Grossly Misleading Conflation of "energy independence" and "getting off oil"
- Al la W/M: "The Congress of the U.S. finds that oil is a Clear and Present Danger to the Security of the United States.' Sections 127-130.
- "Therefore, there is an urgent national security interest to develop alcohol fuels technology, production and distribution systems as soon as possible." (Section 127)
- Read: More federal subsidy and mandates for ethanol!

Drill Where? Drill When?

- W/M would impose all carbon emissions from the transportation sector (40-44%) on the refining sector (4%)
- EnSys study for API estimates that refining throughput could decline by as much as 25% by 2030; 20% increase in imports
- DOI ignores repeal of the 30 year ban on offshore production ban repealed in September 2008.
- DOI: Shelved lease applications; stalled process for two years; cancelled leases; stonewalls court-order on Alaska; Memo leaked proposing National Monument designation on 14 million acres of energy rich western land.
- Beware of EPA on Shale Plays, esp. Barnett
- Taxes @\$39 billion new revenue from oil & gas sectors in 2010 White House budget.

EPA Goes Rogue

- Endangerment Finding: A Legal Determination that Greenhouse Gases, i.e. CO2, is a pollutant harming human health
- The Finding triggers full authority of the Federal Clean Air Act to Regulate CO2 and other GHG
- Pollutant Level for Direct EPA Regulation in CAA 250 tons per year from a stationary source
- Pollutant Level in W/M for Direct Carbon Caps, i.e. Regulation – 25,000 tons per year
- Big Churches and Homes Would Emit more than 250 tons per year of CO2

Most Decry EPA Endangerment Finding

- TEXAS Legal Challenge of EPA Endangerment Finding
- Petition for EPA Reconsideration and Petition for Review in DC Circuit Court
- Bi-Partisan Bills to Deny EPA Authority under CAA to Regulate CO2
- Still Leverage to Force a Senate Bill
- Beware of the Senate Mongrel A light carbon tax, some offshore, a touch of Nuks, more money & federal mandates for renewable

EPA Ozone Wildness

- Proposed New Ozone Standard (70 ppb -60ppb) - So Strict Brewster County Would Exceed Standard
- The Texas Ozone Achievement
- As of 2009 data: Houston Attains the Current Legal Standard

The Path Forward A Key Time

- The eyes and ears of the sleeping giant are open!
- Weakness in science of man-made global warming revealed.
- Polls show doubt/disbelief about global warming and opposition to carbon taxes.
 - Still strong support for increasing domestic production of energy
- Urgently Needed: "Energy 101" for Policy Makers and Public. Why petroleum based fuels have more energy density than plant based fuels.
- Strategic Initiatives like TTPF's multi-state project
- Voices from the states are more compelling.
- Texas is the natural leader for this effort.
- TPPF exploring ways to make a TPPF a national leader in energy policy debates.