

Beware of Herders, Herds

Federal Reserve Chairman Alan Greenspan
Declares Impending Natural Gas Crisis

...increased...
...leum sign agreement for LNG supply
Pipeline & Gas Journal, November 1, 2003

Exxon to Buy XTO for \$31 Billion in Bet
on U.S. Gas

Bloomberg, December 14, 2009

capacity in... States.

Lee Raymond, Exxon CEO, "Gas production has...
North America" *interview*

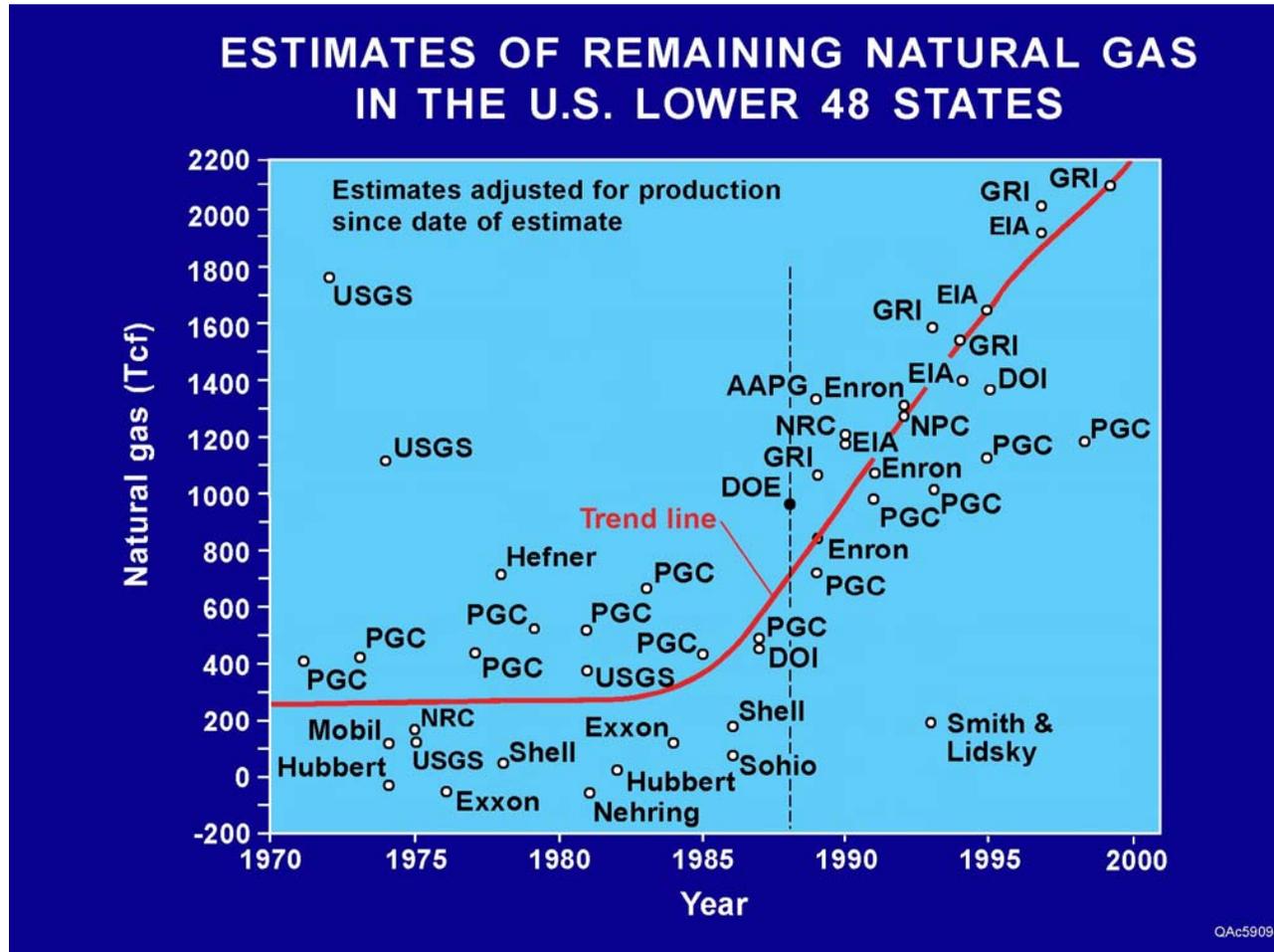
...raham, April 2004

U.S. Shale Gas Plays Affecting Global LNG Market

WSJ, November 3, 2009

...ers, June 21, 2005

US Gas Resource Estimates Continue to Increase



William Fisher
COGA 2006

Hydraulic Fracturing and State Regulatory Schemes

- Broad Based Support for State Regulation: NARUC, IOGCC, GWPC – *May 2009 Report*
- Oklahoma Corporation Commission Rulemaking (2010) Clarifying Existing Regulatory Structure:
 - Over **36 different** sections from Okla. Admin. Code addressing life-cycle: fracturing to environmental enforcement.
- Knowledge Transfer Mechanisms

Oklahoma

Jobs and Economic Impact

- Employs more than 76,000 workers
 - Average compensation: **\$116,000 per worker**
 - These workers earned \$9 billion in income in 2007 alone
- Each worker supported 3.2 additional jobs
 - Totaling 322,000 workers employed by the energy industry
- Energy industry contributed approximately \$50 billion to gross state product in 2008

\$2 billion annually in tax revenue

Table 7. Distribution of Oklahoma Gross Production Tax Receipts

Gross Production Tax on Crude Oil					
Fund (Crude Oil Distribution)	Allocation	FY-2004	FY-2005	FY-2006	FY-2007
County Highways	7.14%	\$9,999,074	\$14,166,392	\$18,630,566	\$18,521,124
Local School Districts	7.14%	9,999,074	14,166,392	18,630,566	18,521,124
County Bridge & Road Improvement	4.28%	5,993,843	8,491,899	11,167,902	11,102,298
Rural Economic Access Plan (REAP)	4.28%	5,993,843	8,491,899	11,167,902	11,102,298
OK Student Aid Revolving Fund	25.72%	36,019,075	51,030,758	67,111,786	66,717,550
Higher Education Capital Fund	25.72%	36,019,075	51,030,758	67,111,786	66,717,550
Common Education Technology Fund	25.72%	36,019,075	51,030,758	67,111,786	66,717,550
Total - Crude Oil	100.00%	\$140,043,060	\$198,408,856	\$260,932,294	\$259,399,495

Gross Production Tax on Natural Gas					
Fund (Natural Gas Distribution)	Allocation	FY-2004	FY-2005	FY-2006	FY-2007
General Revenue Fund	85.72%	\$468,767,115	\$560,701,835	\$736,542,759	\$612,338,353
County Highways	7.14%	39,045,698	46,703,349	61,349,922	51,004,385
Local School Districts	7.14%	39,045,698	46,703,349	61,349,922	51,004,385
Total - Natural Gas	100.00%	\$546,858,510	\$654,108,534	\$859,242,603	\$714,347,122

Source: Oklahoma Tax Commission, Oklahoma Office of State Finance, OSU Center for Applied Economic Research

Natural Gas is the Scalable Answer To Clean Energy Usage

Natural gas produces clean baseload support for
intermittent renewables

“The Clean Energy Triumvirate”

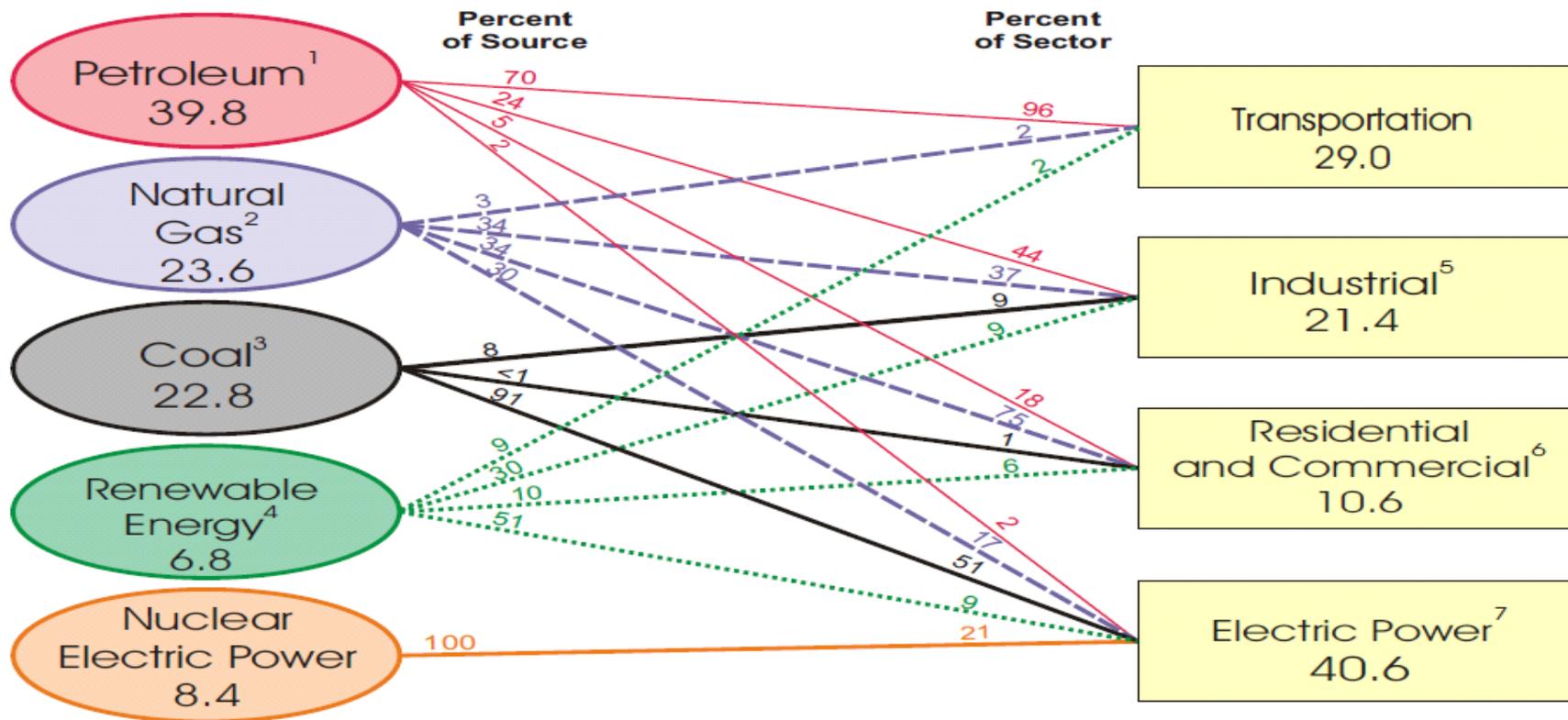


Economic Development

- Economic benefit of 1,000 MW = \$1.25 billion
 - 5,530 construction jobs, 215 permanent jobs
- Average wages in component manufacturing industry = \$40,709 - 15% higher than average state wage
- Strong correlation between Western OK counties that have lost population in recent decades with counties that have significant wind resources
- In many cases, land suited for wind development has lower per-acre returns for agricultural use
- Sooner Survey of 600 registered voters:
 - 72% of Oklahomans willing to pay more for wind-generated electricity
 - 91% approve of further development of wind farms

Transportation Fuel Diversity

U.S. Primary Energy Consumption by Source and Sector, 2007
(Quadrillion Btu)



¹Does not include 0.6 quadrillion Btu of fuel ethanol, which is included in "Renewable Energy."

²Excludes supplemental gaseous fuels.

³Includes less than 0.1 quadrillion Btu of coal coke net imports.

⁴Conventional hydroelectric power, geothermal, solar/PV, wind, and biomass.

⁵Includes industrial combined-heat-and-power (CHP) and industrial electricity-only plants.

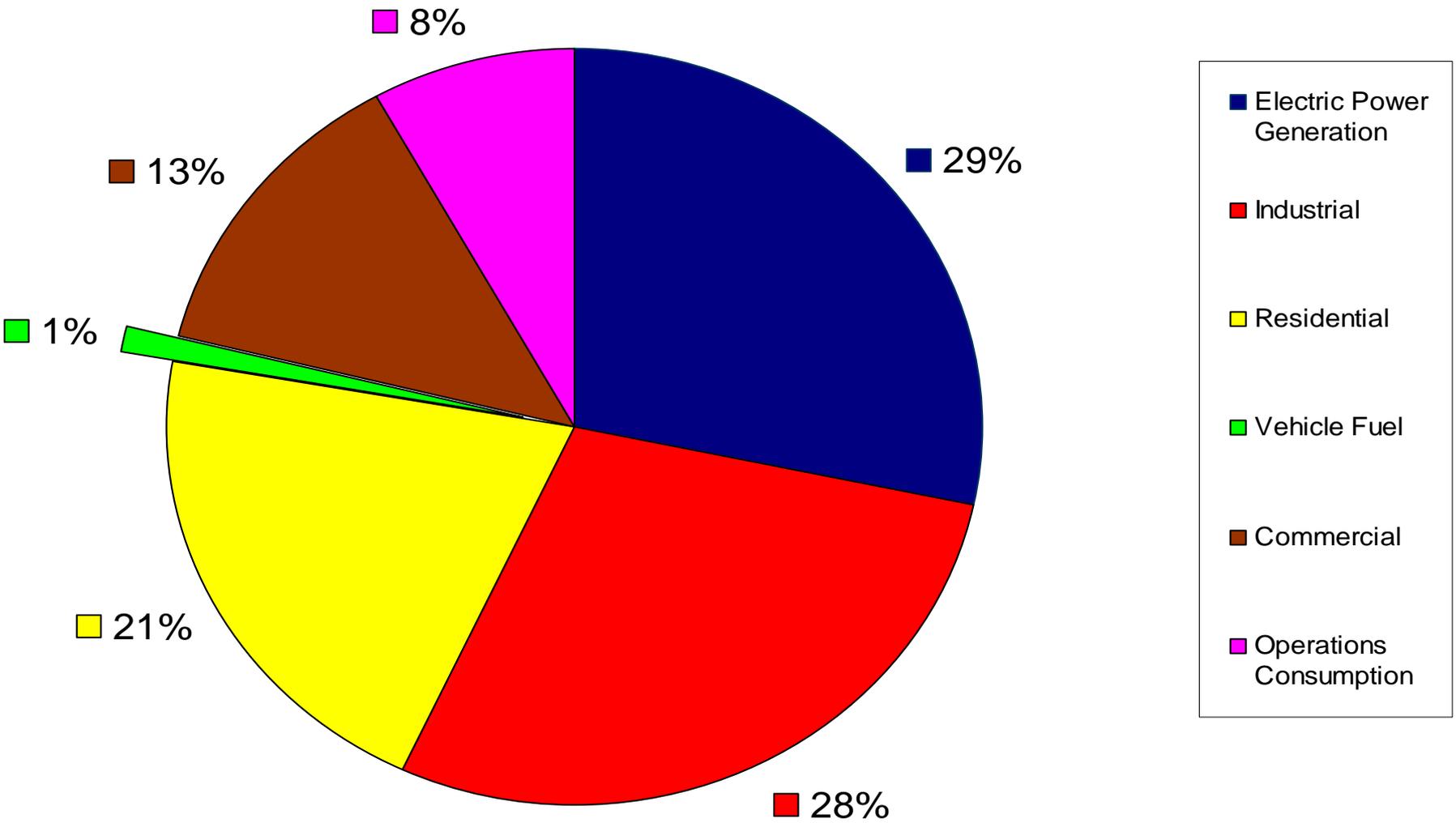
⁶Includes commercial combined-heat-and-power (CHP) and commercial electricity-only plants.

⁷Electricity-only and combined-heat-and-power (CHP) plants whose primary business is to sell electricity, or electricity and heat, to the public.

Note: Sum of components may not equal 100 percent due to independent rounding.

Sources: Energy Information Administration, *Annual Energy Review 2007*, Tables 1.3, 2.1b-2.1f and 10.3.

U.S. End Uses of Natural Gas



Source: EIA



WESTERN GOVERNORS' ASSOCIATION

Serving the Governors of 19 States and 3 US-Flag Pacific Islands

“Incentivizing the further build-out of NGV technologies will stop billions of dollars in overseas oil payments, create thousands of jobs, reduce harmful greenhouse gas and criteria air pollutant emissions, and improve the overall health of the United States’ economy.”

*WGA letter to Speaker Pelosi and Majority Leader Reid
February 11, 2010*