NATIONAL OCEAN INDUSTRIES ASSOCIATION

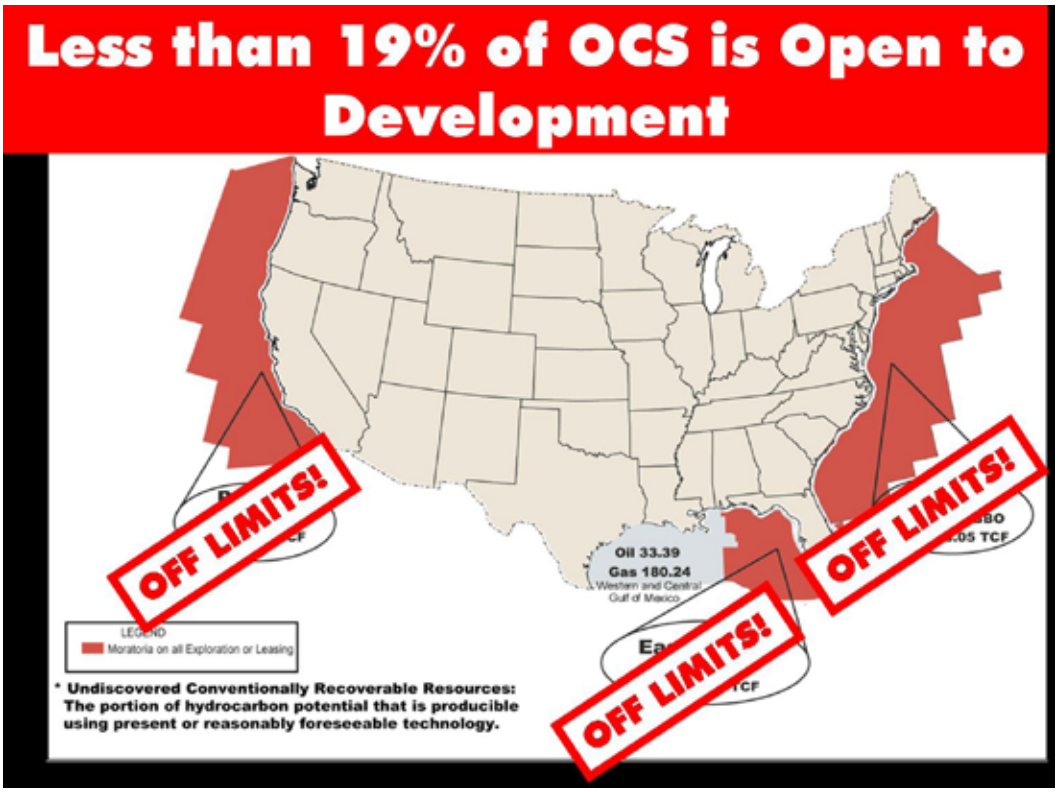
ENERGY CHALLENGES FOR KANSAS AND THE NATION

NOIA'S MISSION IS TO SECURE RELIABLE ACCESS TO THE NATION'S VALUABLE OFFSHORE ENERGY RESOURCES IN ORDER THAT THEY MAY BE DEVELOPED, PRODUCED AND SUPPLIED IN AN ENVIRONMENTALLY RESPONSIBLE MANNER.

Today, energy prices are on the rise across the nation. This affects individual citizens, industrial consumers, and the agricultural industry. But why is this so?

It all comes back to supply and demand. As the economy has grown, the demand for energy has grown every year. At the same time, however, policymakers have refused to make any changes to increase available supplies of energy. For example, over 80% of the nation's oil and natural gas resources on the Outer Continental Shelf is completely off-limits to exploration and production, despite a decades-long record of safe offshore production in the Central and Western Gulf of Mexico.

What can be done? Energy consuming states must make themselves heard and push for changes to policies like this that limit energy supply. This is key to long-term strategies to control prices and maintain economic growth and employment at home.



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ENERGY PRICES: A NATIONAL PERSPECTIVE

- In the last 25 years, our energy consumption has grown by 30 percent, while supply only increased at half that rate. In just the past decade, as our economy grew, energy consumption increased by more than 12 percent. But our domestic production increased by less than one-half of 1 percent.

- Between now and 2030 – just less then 25 years from now – we will need 55 percent more electricity than we generate today and consumption of all sources of energy are expected to increase:
  - *Petroleum by 41 percent*
  - *Natural gas by 33 percent*
  - *Coal by 41 percent*
  - *Renewable energy by 39 percent*

- The Energy Information Administration predicted on Jan. 11 that the average U.S. home heating bill tin 2006 will increase by $257, or 35 percent, for natural-gas heat; $275, or 23 percent, for oil heat; and $184, or 17 percent, for propane heat.

- The price of U.S. natural gas has hit peaks recently of about $15/million btu's, the rough equivalent of paying $7 a gallon for gasoline.
  - *This is more than double what they pay in China, and 50 percent higher than prices in the United Kingdom. The U.S. price is 20 times what Saudi Arabians pay.*

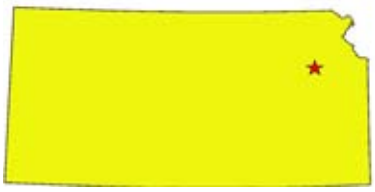
- High energy prices, particularly for natural gas, have cost the economy 2.8 million jobs since 2000.

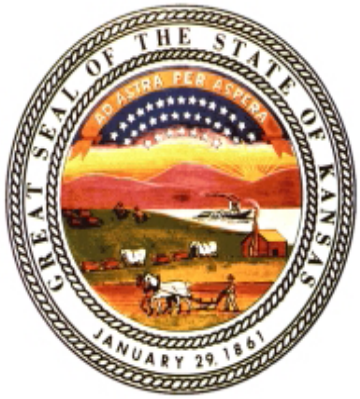
- More than 100,000 lost jobs in the chemical industry, and the closure of 70 chemical facilities in 2004 alone, have resulted from high prices of natural gas.

- During the 2003 and 2004 growing seasons, farmers paid more than $6 billion in added energy-related expenses, a 41% increase over 2004, according to USDA's Economic Research Service.

KANSAS ENERGY CONSUMPTION, PRODUCTION, AND OUTLOOK:

- Kansas is a net energy importer consuming 432 trillion British Thermal Units (Btus) more than it produces. In the years 2006, 2008, and 2010, the state's net imports of energy are forecast to be 451, 475, and 527 trillion Btus, respectively.
- Kansas consumed 1,159 trillion Btus of primary energy in 2002, the last year of data from the U.S. Department of Energy. This was a 2.5 percent increase from 2001 energy consumption (1,129 trillion Btus). Primary energy consumption in 2006, 2008, and 2010 is forecasted to be 1,119, 1,116, and 1,135 trillion Btus, respectively.
- The total petroleum consumption is expected to increase annually by 1.2 percent to 1.4 percent between 2005 and 2010, particularly for aviation jet fuel (5.6 percent annually), liquid petroleum gas (5.0 percent), asphalt (2.3 percent), and kerosene (.1 percent).
- Electricity is becoming more expensive as generation fuel prices (including natural gas) become more expensive. Kansas electricity consumption is projected to be 40,564 in 2006; 41,581 in 2007, and; 44,791 in 2010.
- Coal consumption is expected to remain steady through 2010. Predicted consumption is to be 22,044 in 2006; 21,955 in 2007; and 21,906 thousand short tons in 2010.
- To meet the growing energy demand Sunflower Electric is adding two 600 MW coal units to its Holcomb power plant along with three new 345-kilovolt (kV) transmission lines which will be built from Colorado into Kansas.
- Westar plans to build two new natural-gas units that would add a total capacity of 150 to 200 MW by 2008 and a 600 MW coal plant by 2012 or 2013.
- Recent coal supply shortages are forcing utilities to use more natural gas, reducing the amounts going into storage for winter and pushing up prices further.
- Coal is burned to produce 51 percent of U.S. electricity, but 71 percent of Kansas electricity.
- Most of the coal burned in Kansas comes from outside the state, principally Wyoming.
- Kansas coals are higher in sulfur and thus must be blended with cleaner-burning coals to meet clean air standards.
- Kansas primary energy production is expected to decrease slightly over the next five years, largely due to continuing declines of 5 to 6 percent in the state's natural gas production. In 2003, Kansas produced 730 trillion Btus of energy.
- For much of the last century, Kansas supplied the nation with oil and gas and is still among the top-ten producing states.
- The value of the state's oil and natural gas production is projected to be over $4.6 billion in 2005, significantly more than its previous high of $3.5 billion in 2004.





- Kansas has produced almost 6.2 billion barrels of oil since its first reported production in 1891. Production in 2005 is estimated at 33.7 million barrels.
- Kansas has produced almost 39 trillion cubic feet (tcf) since its first reported production in 1889. Production in 2005 is estimated at 376 billion cubic feet.
- While production declines in natural gas have taken place in southwest Kansas, natural gas in southeast Kansas (primarily coalbed methane) has continued to increase.

• In fall 2005, the National Cooperative Refinery Association at its McPherson refinery completed a $300 million clean fuels project to meet the new national standards for low-sulfur diesel fuel. This project brings 85,000 barrels-per-day into compliance with federal environmental requirements.

• The 35-million gallon per year (mmgy) East Kansas Agri-Energy (EKAE) ethanol plant in Garnett began producing ethanol in the summer of 2005, bringing Kansas ethanol capacity to nearly 170 mmgy through seven facilities. Currently there are seven ethanol plants in Kansas accounting for approximately 4.3 percent of U.S. ethanol production during 2005.

• The Elk River wind farm in southeast Butler County came online in December 2005, supplying 150 Megawatts (MW) of electricity to Empire District Electric Company. This is the second and largest-capacity wind project in the state, brining the state's total commercial wind capacity to 263 MW.

(Data is drawn from the "2006 Kansas Energy Report")

INCREASING ENERGY PRICES HURT MANUFACTURING INDUSTRIES, IMPERILING KANSAS JOBS:

• As of April 2006, Kansas was home to more than 178,800 manufacturing jobs, paying employees an average of $43,030/year, 30% higher than the average wage and salary for the state. Unfortunately, rising energy costs have contributed to the loss of more than 21,800 of these high-wage manufacturing jobs since 2000.

• Chemical, plastics and rubber manufacturing – which depend on natural gas as a critical input – accounted for more than $630 million in Kansas exports in 2005 and supported more than 6,900 jobs directly. These jobs are also in jeopardy due to the high price of natural gas.

• Approximately 3 percent of Kansas is forested, accounting for 2.2 million acres of state's land area. Kansas' forest products industry ranks as one of the state's top manufacturing industries, employing more than 10,000 workers with an annual payroll of over $307 million. Kansas' paper and wood manufacturing workforce represents 3.2 percent of the state's total manufacturing workforce, but these jobs are also in jeopardy due to the high

price of natural gas. Nationally, more than 232 mills have closed and 182,000 jobs have been lost (12 percent of the industry's national employment) since 2000 when energy prices started to rise.

- Today, energy is the third largest manufacturing cost for the forest products industry (18 percent for pulp and paper mills), growing quickly enough to eclipse employee compensation.

INCREASING ENERGY PRICES SQUEEZE BUSINESSES, UNIVERSITIES, AND INDIVIDUAL CONSUMERS:

- In the first half of 2006, The Kansas City area's Consumer Prices increased 2.9 percent in the first half of 2006 compared with the same period in 2005, according to the U.S. Department of Labor's Bureau of Labor Statistics. Higher energy prices accounted for more than half the index's overall increase, rising more than 17.4 percent, including motor fuel prices. In the Kansas City Area: Transportation prices rose 6.5 percent, housing prices rose 1.8 percent, and food and beverage prices rose 2.5 percent.
- According to a July 2006 Creighton University report, one Kansas durable-goods manufacturer reported that fuel prices are going to begin affecting prices of other commodities, which will be a drag on the economy. Contrary to the rest of the region, Kansas truck-transportation companies have been reporting weak economic activities over the past several months.
- In 2006, Wichita State University is expecting its annual energy costs to rise by 25 percent, or about $1 million. At the University of Kansas Medical Center, they are also anticipating significant increases this fiscal year. They anticipate a cost increase for gas well above $600,000 and are also facing higher electricity bills due to increasing rates and consumption from additional square footage being added to the campus.
- Almost half of Kansas' energy bills go to home heating, bills that are only getting bigger. The average energy bill for Kansas homes heated using natural gas will increase by around $310 in 2006. Homes heated with heating oil will go up by about $210 and propane-heated homes will see their bills rise by $120. Electric heating costs will also rise by about $50.
- In 2005, an estimated 54,000 households throughout Kansas received more than $17.6 million in Low Income Home Energy Assistance (LIHEAP) funding to help pay their heating and cooling bills.
- According to the National Energy Assistance Directors' Association, the number of Kansas households needing energy assistance increased 32.2 percent in 2005-2006.
- Kansas gasoline prices are currently about 35 percent higher than one year ago. At today's prices, Kansas households pay approximately $2,950 annually for gasoline.

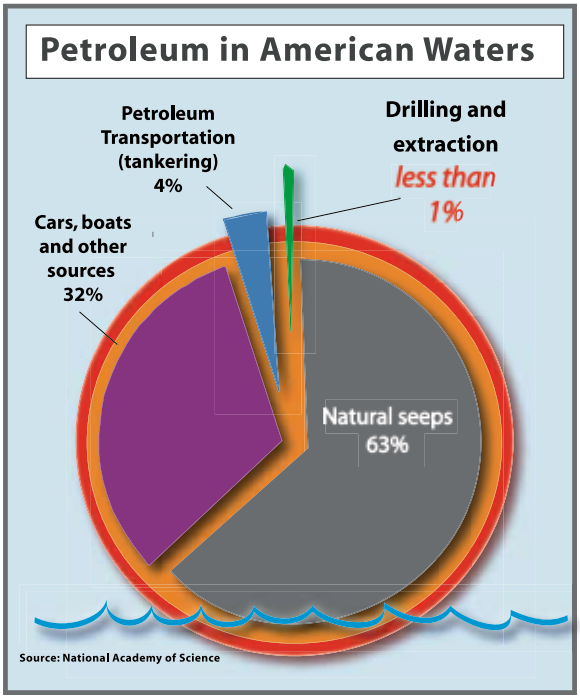
INCREASING ENERGY PRICES SQUEEZE FARMERS AND AGRICULTURAL INDUSTRIES:

- Kansas is home to more than 64,500 farms, covering over 47.2 million acres of farmland. Nearly 20 percent of Kansans, rural and urban, are employed in jobs related to agriculture.
- Kansas' agricultural exports were more than $2.9 billion in 2004, with the state producing more wheat or sorghum grain than anyone else in the nation. The state also ranked second in the nation in acres of cropland and prime farmland, as well as cattle and calves on the farm.
- Increased energy costs – particularly natural gas, gasoline, and diesel – affected all consumers, but the farming sector has been particularly devastated.
- Rising energy prices have hit the Kansas irrigated crop producers especially hard. The higher energy prices being faced by producers are not a one year phenomenon, they have been escalating for several years. The Energy Expense Complex per acre for Irrigated Crop Farms in the Kansas Farm Management Association summary has increased $23.91 from 2002 to 2005, a 44.9 percent increase.
- A 2003 Kansas State University irrigation researchers revealed that 41 percent of Kansas irrigators used natural gas, 28 percent used electricity, 26 percent used diesel and 5 percent used liquid propane.
- In terms of energy's share of costs within each major production activity, 23 percent of crop production expenses were attributable to energy costs, compared with only 6 percent for livestock production outlays.
- In 2004, wheat production was 314.5 million bushels and generated a value of production of $1.02 billion. Unfortunately, because of the high price of energy, fertilizer costs have gone up by double digits, and – for the first time since the Great Depression – a gallon of diesel fuel is more expensive than a bushel of wheat. For wheat farmers, this dramatic rise in prices is especially acute because more than half the variable cost associated with growing it comes from fuel and fertilizer. In 2006, it will cost 24 to 27 percent more to grow wheat than in 2005.
- From 2001 to 2006, the price of diesel fuel increased 113 percent, thus impacting farm machinery costs.
- According to the Food and Agriculture Policy Research Institute, fertilizer costs are up 70 percent and fuel costs are up 113 percent since 2002. From 2005 to 2006, these prices are expected to rise another 10 to 15 percent.

A PLAN OF ACTION:

What can be done to increase energy supplies?

- Call on Congress and the Administration to cultivate a plentiful, diverse and affordable energy supply for America.
- Pursue renewable technologies such as offshore wind and tidal power and the development of offshore methane hydrates.
- Promote energy conservation and greater efficiency.
- Increase refining capacity and import facilities.
- Provide access to the Outer Continental Shelf (OCS) for exploration and development of the nation's valuable offshore energy resources in an environmentally responsible manner. Over 80 percent of all federally controlled coastal waters are currently off-limits to energy exploration and production, yet the OCS is conservatively estimated to hold over 419 trillion cubic feet of technically recoverable natural gas resources and 86 billion barrels of oil. This is enough:
  - natural gas to heat 100 million homes for 60 years.
  - oil to drive 85 million cars for 35 years.
  - oil to replace current Persian Gulf imports for 59 years.



Offshore drilling is safe: Less than 1% of oil found in the ocean comes from offshore production, significantly less than results from natural geologic seeps and run-off from land-based sources