



NATIONAL
OCEAN
INDUSTRIES
ASSOCIATION

ENERGY CHALLENGES FOR ARKANSAS 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.

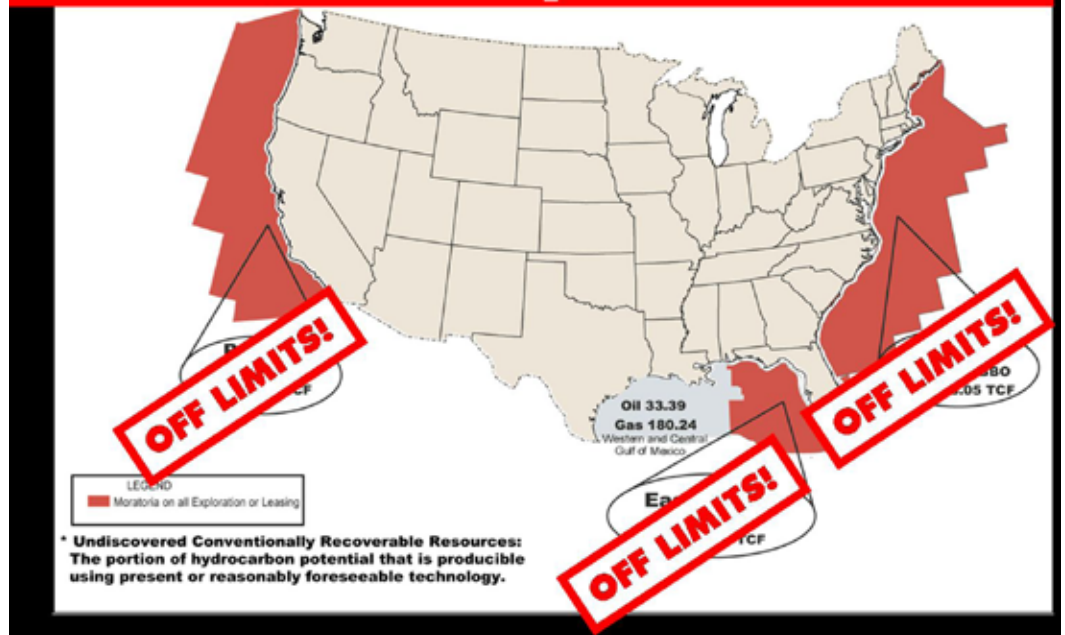
Today, energy prices are on the rise across the nation. This affects individual citizens, industrial consumers, and the agricultural industry. But why is this so?

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.



Less than 19% of OCS is Open to Development



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 than 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:
 - o *Petroleum by 41 percent*
 - o *Natural gas by 33 percent*
 - o *Coal by 41 percent*
 - o *Renewable energy by 39 percent*
- The Energy Information Administration predicted on Jan. 11 that the average U.S. home heating bill in 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.
 - o *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.



ARKANSAS ENERGY CONSUMPTION AND ITS ECONOMIC IMPACT:

- Arkansas ranks 30th nationally in total energy consumption, consuming 1.106 quadrillion British thermal units (Btu). In 2001, Arkansas ranked 32nd in the nation for residential consumption, 33rd for commercial, 24th for industrial, and 30th for transportation.
- Arkansas' primary consumption by fuel type was petroleum (34 percent), followed by coal (24 percent), natural gas (23 percent), nuclear (11 percent), biomass (6 percent) and hydro (2 percent).
- More than 53 percent of natural gas consumption in Arkansas is used by the industrial sector. The residential and commercial sectors use 17 percent and 13 percent, respectively.
- In 2000, Arkansas' electric generation was primarily coal (58 percent), followed by nuclear (28 percent), natural gas (8 percent), and hydroelectric (6 percent.)
- Arkansas has the 16th lowest retail electricity prices in the country. The state has an average retail rate of \$57.90/Megawatt, 14 percent below the national average.
- Motor gasoline accounts for 48 percent of Arkansas' total petroleum consumption, followed by distillate fuel (33 percent), liquid propane gas (7 percent), jet fuel (8 percent) and other-asphalt, road oil, aviation gasoline, kerosene, and lubricants (4 percent)
- According to the U.S. Department of Transportation, Arkansas ranks 19th in the nation for the miles driven per capita – 11,107 miles.
- In 2005, Arkansas ranked 15th in the nation in crude oil production, producing 6.3 million barrels.
- Arkansas has 1.8 trillion cubic feet of proven natural gas reserves – or about one percent of the nation's proven reserves. In 2004, Arkansas produced over 187 billion cubic feet of natural gas.
- In Arkansas, 66 percent of household energy expenditures went towards the purchase of gasoline while appliances use 17 percent, heating 7 percent, cooling 6 percent, and hot water 4 percent.

(Data is drawn from the "2003 Arkansas Energy Data Profile" and the Energy Information Administration)

INCREASING ENERGY PRICES HURT MANUFACTURING INDUSTRIES, IMPERILING ARKANSAS JOBS:

- In 2004, Arkansas's manufacturing sector accounted for 18 percent of the state's jobs, as well as 18 percent of the state's gross state product.
- As of April 2006, Arkansas was home to more than 196,500 manufacturing jobs, paying employees an average of \$33,250/year, 11% higher than the average wage and salary for the state. Unfortunately, rising energy costs have contributed to the loss of more than 43,800 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 \$626 million in Arkansas exports in 2005 and supported more than 5,100 jobs directly. These jobs are also in jeopardy due to the high price of natural gas.
- Approximately 56 percent of Arkansas is forested, accounting for 18.8 million acres of state's land area. Arkansas' forest products industry ranks as the state's number two manufacturing industry, employing more than 43,000 workers with an annual payroll over \$1.3 billion. Arkansas' paper and wood manufacturing workforce represents 11.7 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 STATE GOVERNMENTS, BUSINESSES AND INDIVIDUAL CONSUMERS:



- Wal-Mart Stores, Inc., the world's largest retailer and headquartered in Bentonville, Arkansas, reported in July 2006 its smallest same-store sales gain in more than a year as shoppers cut back because of higher fuel prices. The company said shoppers made fewer trips and restricted spending to items such as food.
- J.B. Hunt Trucking, based in Lowell, Arkansas, saw fuel expenses rise by \$100 million in 2005, thus passing on fuel surcharges to their customers. J.B. Hunt operates about 5,500 company tractors that average between five and six miles per gallon. The U.S. trucking industry estimates truckers spent \$88 billion on diesel fuel in 2005 and fuel costs are a top concern among trucking companies in 2006.
- In 2006, Tyson Foods, headquartered in Springdale, Arkansas provided more than \$28 million in supplemental fuel payments to 6,800 contract poultry producers to help with rising energy costs. Tyson currently operates poultry complexes in 13 states.
- Arkansas state government energy expenditures totaled more than \$60 million in 2002. Of that, more than \$40 million went towards electricity costs while \$20 million was spent on natural gas.
- The Arkansas Energy Office estimates the state's public school districts spend at least \$80 million annually on utility costs, with prices only projected to increase over the coming years.
- In August 2006, economist Dr. Jeff Collins declared that the Arkansas economy is "cooling off." While he noted that overall the national, state and local economies are in good shape, Collins said the psychological impact of higher gas and energy prices, rising interest rates and an overbuilt housing market are making consumers feel "less wealthy" than in previous years.





- Almost 40 percent of Arkansans' energy bills go to home heating, bills that are only getting bigger. The average energy bill for Arkansas homes heated with natural gas will increase by about \$230 in 2006. Homes heated with heating oil will go up by about \$145. Propane-heated home owners will see their bills rise by about \$145, while electric heating costs will rise by about \$65.
- In 2005, an estimated 57,600 households throughout Arkansas received more than \$13.5 million in Low Income Home Energy Assistance (LIHEAP) funding to help pay their heating and cooling bills.
- According to the National Energy Assistance Director's Association, Arkansas reported a 30 percent increase last year in the number of households receiving heating assistance.
- Arkansas gasoline prices are currently about 30 percent higher than one year ago. At today's prices, Arkansas households pay about \$3,100 annually for gasoline.

INCREASING ENERGY PRICES SQUEEZE FARMERS AND AGRICULTURAL INDUSTRIES:



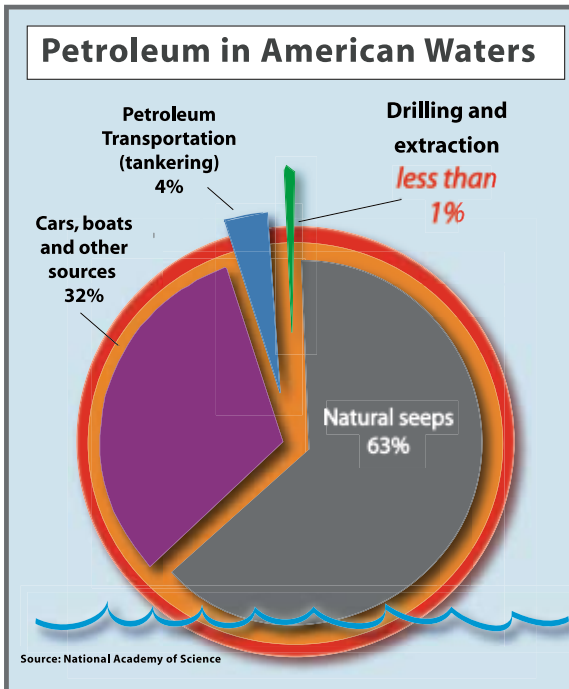
- Arkansas is home to more than 47,000 farms, covering more than 14.4 million acres of farmland.
- Agriculture and agriculture-related biotechnology play an integral part in Arkansas' economy. The state leads the nation in rice production with 107.4 million cwt harvested in 2004/2005, is the second largest poultry producer with 1.2 billion birds raised and processed in 2004, and is the third largest producer of catfish.
- Rising energy prices have had a dramatic impact on the economic health of the farm sector in 2005. A University of Arkansas study has found that higher energy prices, in addition to drought and Hurricane Rita, reduced net returns to Arkansas farms last year by more than \$922 million.
- Throughout Arkansas, crop production accounts for about 90, 000 jobs.
- According to the University of Arkansas's Division of Agriculture, about 1.6 million acres of rice were farmed in Arkansas, accounting for nearly half of the nation's rice crop. Unfortunately, because of rising energy prices, 2006 will see a decline in acres of rice statewide. The high diesel prices in 2005, which were more than twice the 2004 price, is one of the main reasons. Also, the cost of irrigating the rice fields were dramatically higher in 2004 and they continue to increase.
- In 2003, more than 4,600 Arkansas farms irrigated their crops and pasture land, costing farmers more than \$68 million.
- The Agricultural & Food Policy Center at Texas A&M reported last October that among their representative farms, rice producers' net cash farm income fell by 81 percent; feed grain farms' by 31 percent; cotton farmers by 29 percent; beef growers' by 10 percent; and dairymen's by 4 percent.
- In 2004, Arkansas farmers purchased more than 1.2 million tons of fertilizer.
- 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 percent 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