



NATIONAL
OCEAN
INDUSTRIES
ASSOCIATION

ENERGY CHALLENGES FOR OREGON 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.

STATE OF OREGON



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OREGON ENERGY CONSUMPTION AND THE IMPACT OF ENERGY ON THE ECONOMY:

- According to the State of Oregon Energy Plan 2005-2007, Oregonians spend about \$7.6 billion a year for all forms of energy.
- Oregon's total energy use was 773 trillion British thermal Units (Btus) in 2000, up 15% from 1990.
- Today, nearly half of the energy consumed in Oregon is from petroleum products and is used primarily for transportation.
- Natural gas and oil price increases tend to disproportionately harm the Oregon economy because Oregon imports 100% of its natural gas and oil, while the United States as a whole imports 15% of its natural gas and 56% of its oil. (Oregon receives its natural gas from British Columbia, Alberta, Wyoming, Colorado, and New Mexico. More than 80% of the Oregon's crude oil originates in the Alaska North Slope oil fields.)
- From 1999 to 2003, petroleum prices for residential heating oil, on-highway diesel and regular gasoline increased 39%, 25%, and 30% respectively. Oregon wholesale natural gas prices rose 168% between January 1999 and July 2004. In the past, costs would rise for either one fuel or the other, allowing factories to switch to whichever was cheaper, but that was not possible in 2004 because both rose precipitously.
- Between 7% and 15% of Oregon's electricity is generated from natural gas, depending on snow and water conditions. The share of gas fired generation is increasing as loads grow and as most new plants are fired by natural gas. Between 2001 and 2003, Oregon added 1,675 MW of natural-gas-fired capacity to their utility resources.
- From 1999 to 2003, retail electricity prices rose 29%. The increase was 23% higher for residential customers and higher for larger customers.
- In 2002, Oregonians spent \$2.9 billion on electricity.

INCREASING ENERGY PRICES HURT MANUFACTURING INDUSTRIES, IMPERILING OREGON JOBS:

- As of November 2005, Oregon was home to more than 208,700 manufacturing jobs, paying employees an average of \$46,900/year, 33% higher than the average wage and salary for the state. Unfortunately, rising energy costs have contributed to the loss of more than 14,700 of these high-wage manufacturing jobs since 2000.
- Chemical manufacturing – which depends on natural gas as a critical input – accounted for more than \$519 million in Oregon exports in 2005 and support more than 3,750 jobs directly. These jobs are also in jeopardy due to the high price of natural gas.
- Approximately 48% of Oregon is forested, accounting for 28 million acres of state's land area. Oregon's forest products industry is the state's top manufacturing industry, employing 71,000 workers with an annual payroll over \$2.6 billion. Oregon's paper and wood manufacturing workforce represents more than 19.8% 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% 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% for pulp and paper mills), growing quickly enough to eclipse employee compensation.



INCREASING ENERGY PRICES SQUEEZE SMALL BUSINESSES AND INDIVIDUAL CONSUMERS:

- According to the Federal Deposit Insurance Corporation 2006 Spring State Profile, high energy costs will continue to burden household pocketbooks, and higher prices will persist in 2006.
- In 2000, Oregonians spent 2.6 percent of their total personal income on gasoline and 4.3% on all oil products combined.
- From 1999 to 2003, residential natural gas rates rose 94%, and in 2006, home heating costs are expected to increase by 40 percent in Oregon's region of the country.
- In 2005, an estimated 58,000 households throughout Oregon received more than \$25.4 million in Low Income Home Energy Assistance (LIHEAP) funding to help pay their heating and cooling bills.
- The Small Business Administration estimates there were more than 320,000 small businesses in Oregon in 2004. In a November 2005 survey by the Oregon chapter of the National Federation of Independent Business, when asked what small businesses did to offset spikes in energy costs, 23% said they reduced energy use, 20% absorbed costs with lower earnings while 14% raised prices.



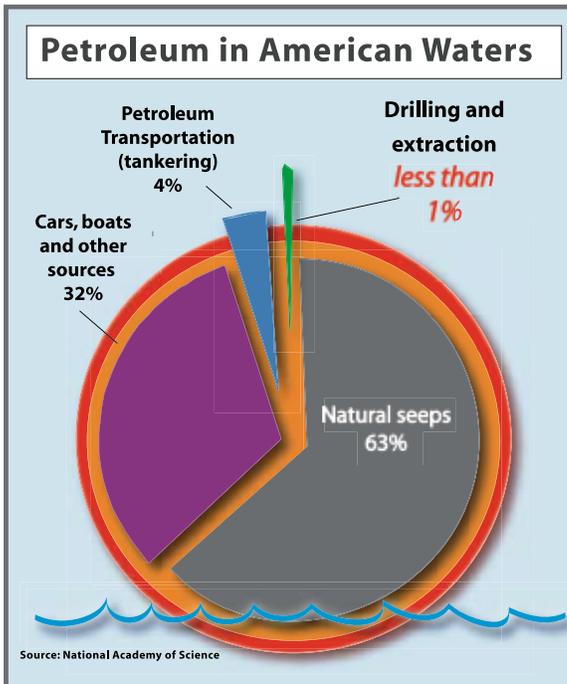
INCREASING ENERGY PRICES SQUEEZE FARMERS AND AGRICULTURAL INDUSTRIES:

- Oregon is home to more than 40,000 farms, covering more than 17.2 million acres of farmland.
- According to the Food and Agriculture Policy Research Institute, fertilizer costs are up 70% and fuel costs are up 113% since 2002. From 2005 to 2006, the prices are expected to rise another 10 to 15% and almost 10%, respectively.
- In 2004, the value of Oregon wheat and wheat products as an agricultural export was more than \$165 million. 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% more to grow wheat than in 2005.
- In 2004, Oregon's horticultural industries set a record high with a total sales value of \$844 million for nursery and greenhouse products. Today, many greenhouse operators are paying more for natural gas, heating oil and electricity than in past years. The high energy prices have decreased many greenhouse operators' profit margin.

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