



NATIONAL
OCEAN
INDUSTRIES
ASSOCIATION

ENERGY CHALLENGES FOR VERMONT 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.



VERMONT ENERGY CONSUMPTION AND OUTLOOK:

- In 2004, the Vermont State Government consumed 1.3 trillion British thermal units (BTUs) of energy for transportation and building heating fuels, building electricity and travel reimbursements, at a total cost of \$20 million.
- Powering and heating state buildings accounts for about 50% of energy expenditures by the State of Vermont. Of that \$10 million, nearly 62% of expenditures are for the purchase of electrical energy and 38% for the purchase of fuels (#2 oil, #6 diesel, natural gas, propane and wood chips) for heat.
- Vermont electric rates are over 50% above the national average. Within the region, Vermont remains above the regional average by roughly 9% for residential customers, 5% for commercial customers, and, on a statewide average, less than 1% for industrial customers.
- Summer electricity peak in Vermont has grown rapidly. In 1999, Vermont's summer peak was only 805 MW. By the summer of 2002, the summer peak temporarily exceeded the winter peak reaching a high of 1,023 MW.
- Green Mountain Power based in Colchester has asked the Vermont Public Service Board to authorize an 11.95% rate increase to go into effect on January 1, 2007. The Company said 88% of the increase is due to rising power costs in a post-Katrina wholesale market, while the remaining 12% is due to increasing state and regional transmission costs.
- Higher energy costs in New England are attributable to the run-up in global oil and natural gas prices and concern about the impact on the wholesale market of a predicted abnormally active hurricane season.
- Electric energy demand is projected to continue at a pace of roughly 1% for the coming 20 years, according to the 2005 Vermont Electric Plan.



INCREASING ENERGY PRICES HURT MANUFACTURING INDUSTRIES, IMPERILING VERMONT JOBS:

- In March 2006, Vermont was home to more than 36,800 manufacturing jobs, paying employees an average of \$45,350/year, 38% higher than the state's overall average. Unfortunately, rising energy costs have contributed to the loss of more than 9,500 of these high-wage manufacturing jobs since 2000.
- Chemical, plastic and rubber manufacturing – which depend on natural gas as a critical input – accounted for more than \$72 million in Vermont exports in 2005. These manufacturing jobs are also in jeopardy due to the high price of natural gas.
- Vermont's forest products industry is one of the state's top manufacturing industries, employing nearly 8,000 workers with an annual payroll over \$216 million. Vermont's paper and wood manufacturing workforce represents more than 11.2% of the state's total manufacturing workforce, but these jobs are also in jeopardy due to the high price of natural gas.
- 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:

- Business reliance on electricity has increased throughout Vermont. Vermont's ski industry, the state's largest tourism-related industry, increasingly relies on electricity for additional snowmaking, new lifts, and hotels and condominiums at slope side.
- The Vermont Ski Areas Association estimates the state's resorts spend about \$20 million on energy a year, the second-largest operating expense behind employee compensation. In 2006, heating oil and gas prices are up more than 14% at Mad River Glen Ski Resort, thus causing them to end the season with a deficit, in part, because of higher than expected fuel costs.
- The price of gasoline has increased 100% in the last five years, and Vermont families, businesses, and farmers are being hit hard. According to the Vermont Fuel Price Report, on May 1, 2006 the average retail price for unleaded regular gasoline was \$2.93 a gallon in Vermont – up 33% from 2005. Diesel fuel averaged \$3 a gallon, up 24% from a year ago.
- Burlington's Parks and Recreation Department fuel costs to mow the city's 550 acres of parks are almost 50% more this year than in 2005. By May 2006, the city had spent \$34,000 on fuel for maintaining parks with two months of busy mowing left in the city's fiscal year.
- The Kwiniaska Golf Club in Shelburne has raised green fees and golf cart rentals in response to higher fuel costs as well as increased fertilizer costs.
- At Cabot Creamery, the company has absorbed the escalating gas costs rather than charging higher prices for cheese at the supermarket. The company is paying more for diesel fuel to deliver the product and additional costs for its plastic yogurt containers, a petroleum byproduct.
- More than half of Vermont residents' energy bills go to home heating, bills that are only getting bigger. The average energy bill for Vermont homes heated with natural gas will increase by about \$350 in 2006. Average energy bills for homes heated with oil will go up about \$330. Propane-heated home owners will see their bills rise by about \$180, while electric heating costs will rise by about \$30.
- In 2005, Vermont distributed over \$13.7 million in Low Income Home Energy Assistance (LIHEAP) funding to more than 19,000 eligible households to help pay their heating and cooling bills.
- Vermont's gasoline prices are currently about 33% higher than one year ago. At today's prices, Vermont households pay about \$2,750 annually for gasoline.





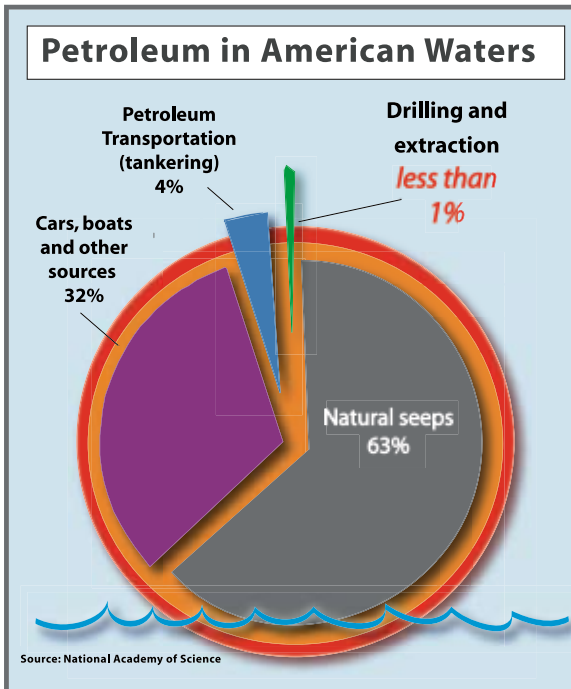
INCREASING ENERGY PRICES SQUEEZE FARMERS AND AGRICULTURAL INDUSTRIES:

- Vermont is home to more than 6,400 farms, including 1,200 dairy farms which are a critical part of the Vermont economy.
- Vermont produces more than 2.6 billion pounds of milk annually which is used for both milk and cheese. In 2004, sales from milk comprised 75% of the Vermont's total cash receipts. Throughout the Northeast and the nation, many dairy farmers have been impacted by high energy costs with increases in feed stock, motors, lighting, and transportation costs.
- Vermont Greenhouses and nurseries generated more than \$26.8 million in cash receipts in 2004. Many greenhouse operators are paying more for natural gas, heating oil and electricity than in past years, which has decreased many greenhouse operators' profit margins.
- 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.

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