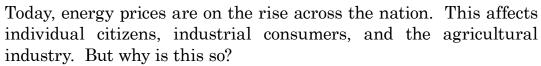


# ENERGY CHALLENGES FOR NEW HAMPSHIRE AND THE NATION

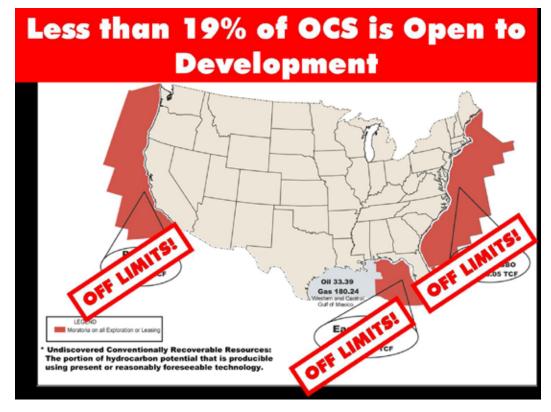
NOIA'S MISSION IS TO SECURE RELIABLE ACCESS TO THE NATION'S VALUABLE OFFSHORE ENERGY RESOURCES IN ORDER THAT THEY MAY BE DEVELOPED, PRODUCED AND SUPPLIED IN AN ENVIRONMENTALLY RESPONSIBLE MANNER.



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 decadeslong 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.







#### **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:
  - 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 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.
  - 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.





#### **NEW HAMPSHIRE ENERGY CONSUMPTION AND OUTLOOK:**

- · According to 2002 New Hampshire Energy Plan, New Hampshire imports the vast majority of fuels used to generate energy. In 1999, New Hampshire ranked sixth highest nationally for the cost of one million British Thermal Units (Btus), and ranked 19th in dollars spent on energy per capita.
- Petroleum-derived energy, whether for transportation or home heating, dominates the New Hampshire energy picture, constituting more than 54% of the state consumption, and more than 85% of energy costs.
- · New Hampshire's gasoline and petroleum distillates, used as both #2 heating oil and diesel fuel for transportation, represents 70% of the state's energy consumption costs and 40% of the Btus consumed statewide.
- · Coal is the state's fourth largest energy source, primarily because of its use in electric generation, followed by wood. On the cost side, however, natural gas is third, while propane is fourth in overall costs.
- New Hampshire energy demand is expected to grow at an average rate of 2.2% annually between 2000 and 2020. Demand for oil is highest, and is expected to grow at 2% per year, while electricity will grow at 3.1%.
- The demand for natural gas is predicted to grow from 86 trillion British Thermal Units (tBtu) in 2000 to over 200 tBtu in 2020. This growth is expected to occur at a steady 4% to 5% per year. In 2002, natural gas was available to approximately 53 communities in New Hampshire, serving about 100,000 customers.
- The government agencies of New Hampshire are the largest energy users in the state with heating, cooling and electricity costs exceeding \$18 million in 2004.



- In November 2005, New Hampshire was home to more than 81,400 manufacturing jobs, paying employees an average of \$50,630/year, 28% higher than the average for the state. Unfortunately, rising energy costs have contributed to the loss of more than 21,100 of these high-wage manufacturing iobs since 2000.
- Chemicals, plastics and rubber manufacturing which depend on natural gas as a critical input – accounted for more than \$175 million in New Hampshire exports in 2005 and support more than 1,700 jobs directly. These jobs are also in jeopardy due to the high price of natural gas.

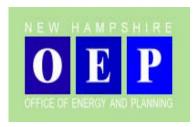


#### Increasing energy prices squeeze individual consumers:

 According to the New Hampshire Office of Energy and Planning, in 2005 the average household will spend roughly \$4300 on energy - including home energy bills and gasoline. That is about \$600 more than they paid in 2004, and 2006 is projected to be even more costly.







- Between 2003 and 2005, New Hampshire residents have seen a cost increase of 105 percent for home heating oil.
- More than half of New Hampshire residents' energy bills go to home heating, bills that are only getting bigger. The average energy bill for New Hampshire homes heated with natural gas will increase by about \$395 in 2006. Average energy bills for homes heated with oil will go up about \$290. Propane-heated home owners will see their bills rise by about \$165, while electric heating costs will rise by about \$25.
- In 2005, an estimated 30,000 households throughout New Hampshire received more than \$18.2 million in Low Income Home Energy Assistance (LIHEAP) funding to help pay their heating and cooling bills.
- New Hampshire gasoline prices are currently about 25 percent higher than last year, costing New Hampshire households about \$2,750 annually.



### INCREASING ENERGY PRICES SQUEEZE FARMERS AND AGRICULTURAL INDUSTRIES:

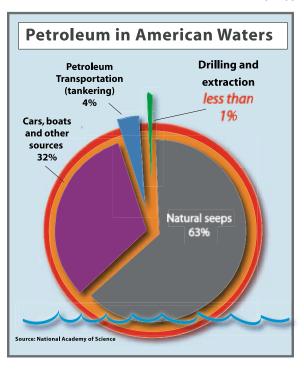
- New Hampshire is home to more than 3,400 farms, covering more than 440,000 acres of land.
- In 2005, farmers experienced a 28 percent hike in fuel costs.
- Ornamental Horticulture operations account for the fastest growing segments of New Hampshire agriculture in 2004, New Hampshire greenhouse and nursery were valued at approximately \$430 million. 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 margins.
- Over 40 million gallons of milk are produced each year on 168 New Hampshire dairy farms. Throughout the Northeast and the nation, many dairy farmers have been impacted by high energy costs with increases in feed stock and transportation costs.
- In 2004, New Hampshire's agriculture cash receipts totaled \$169 million, with greenhouse and nursery sales and milk comprising over two-thirds of all receipts.
- New Hampshire is the second most forested state in the nation. Forests occupy 84 percent, or 4.8 million acres. New Hampshire's forest products industry employs 11,400 workers, representing more than 8 percent of the state's total manufacturing workforce, but these jobs are in jeopardy due to the high price of natural gas. Nationally, more than 232 mills have closed and 182,000 jobs (12% of the industry's employees) have been lost since 2000 when energy prices started to rise.
- Today, energy is the third largest manufacturing cost for the forest products industry, at 18 percent for pulp and paper mills, with the cost of energy about to eclipse employee compensation.



#### 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