



NATIONAL
OCEAN
INDUSTRIES
ASSOCIATION

ENERGY CHALLENGES FOR MAINE 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.



MAINE ENERGY CONSUMPTION AND OUTLOOK:

- According to the 2003 Maine Energy Policy Overview, energy use increased in all four major sectors from 1980 to 2000: industrial energy by 64%; transportation energy increased by 46%; commercial energy by 62%; and, residential energy by 18%.
- Petroleum comprises 45% of Maine's energy use, and most of it is used for transportation.
- Petroleum consumption in the late 1990's was about 25% higher overall than in the early 1980's.
- Between 1980 and 2000, vehicle miles traveled in Maine grew by 88% and motor fuel consumption increased by 55%, while the population increased by only 14%.
- Natural gas use grew over 400% from 1980 to 2000. Most of this increase has occurred since 1999, with the construction of five gas-fired power plants fed by two new pipelines from Canada. Natural gas consumption in 2001 was more than double that in 2000, and by 2003, 45% of Maine's generating capacity of 3,788 MW came from natural gas.
- In 2000, the commercial sector used more electricity than any other energy source. The transportation sector was completely dependent on petroleum while the residential sector was high dependent on both petroleum and electricity.
- Industrial energy consumers face rates in Maine that are 70% above the national average.
- Between 2002 and 2007, Central Maine Power Company forecasts cumulative growth at 2% for residential customers and 12% for commercial customers. ISO New England forecasts Maine's overall energy use and winter demand peaks will increase by an average 1.1% per year from 2003 to 2012. New England Power Pool's (NEPOOL's) summer capacity forecast from 2003 to 2012 shows annual growth at 1.3%. Natural gas and combined oil/natural gas fired capacity are expected to meet virtually all of the forecast demand growth.



INCREASING ENERGY PRICES HURT MANUFACTURING INDUSTRIES, IMPERILING MAINE JOBS:

- As of December 2005, Maine was home to more than 59,800 manufacturing jobs, paying employees an average of \$40,990/year, 15% higher than the average wage and salary for the state. Unfortunately, rising energy costs have contributed to the loss of more than 19,700 of these high-wage manufacturing jobs since 2000.
- Chemical manufacturing – which depends on natural gas as a critical input – accounted for more than \$75 million in Maine exports in 2005 and support more than 1,475 jobs directly. These jobs are also in jeopardy due to the high price of natural gas.
- Maine is the most forested state in the nation. Forests occupy almost 90%, or 17.6 million acres of Maine's land area. Maine's forest products industry employs nearly 30,000 workers with an annual payroll over \$1 billion. Maine's paper and wood manufacturing workforce represents more than 21 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% 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:

- The Small Business Administration estimates there were more than 141,000 small businesses in Maine in 2004, employing 65% of Maine's workforce. More than 93% of these small business owners believe that they face higher operating costs than other states, according to a 2005 survey by the Maine Economic Research Institute. More than 87% of the respondents cited energy costs as one of the main negative factors.
- The price of electricity in Maine is about 35% higher than the national average for residential and commercial customers.
- The commercial and residential sectors combined use 30% of the petroleum consumed in Maine. Most of this use is for heating and cooking.
- More than half of Maine residents' energy bills go to home heating, bills that are only getting bigger. The average energy bill for Maine homes heated with natural gas will increase by about \$375 in 2006. Average energy bills for homes heated with oil will go up about \$325. Propane-heated home owners will see their bills rise by about \$195, while electric heating costs will rise by about \$25.
- In 2005, an estimated 45,000 households throughout Maine received more than \$31.7 million in Low Income Home Energy Assistance (LIHEAP) funding to help pay their heating and cooling bills. In Maine, the \$480 provided to each household covered the cost of 275 gallons of heating oil during the winter of 2004/05 but only covered 172 gallons in winter 2005/06. The Director of the Maine Housing Authority estimates that the average household in Maine will use this fuel in just three to four weeks.
- Maine gasoline prices are currently about 30 percent higher than last year, costing Maine households about \$3,150 annually.

INCREASING ENERGY PRICES SQUEEZE FARMERS AND AGRICULTURAL INDUSTRIES:

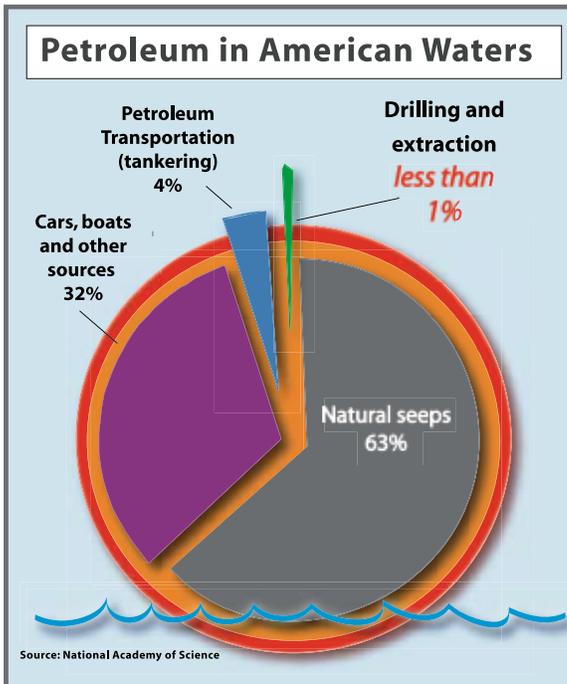
- Maine is home to more than 7,100 farms, covering more than 1.37 million acres of farmland.
- Maine was the second in the New England region in total cash receipts generated from all agricultural commodities produced in 2004, generating \$554 million. Milk receipts were the top individual contributor to the state's cash receipt total, with \$109 million in sales in 2004.
- Today there are about 400 dairy farms in Maine occupying about a third of Maine's cropland. In 2005, Maine lost 4% of its active farms and over 2.5% of its production in 2005 when compared to 2004, due to increased costs. Elizabeth Bullard, a ninth generation dairy farmer with 250 milking cows said that her fuel costs have increased 30% over the past year. Throughout the Northeast and the nation, many dairy farmers have been impacted by high energy costs with increases in feed stock, electricity and transportation costs.
- In 2005, farmers experienced a 28 percent hike in fuel costs.



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