



NATIONAL
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ASSOCIATION

ENERGY CHALLENGES FOR RHODE ISLAND 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 – 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.

RHODE ISLAND ENERGY CONSUMPTION:

- Rhode Island spends over \$2 billion each year on energy, ranking 49th nationally in total energy consumption.
- In 2003, Rhode Island's energy consumption by sector was: 34.6 % residential, 28 % transportation, 26 % commercial and 11.4 % industrial.
- Between 1980 and 2001, Rhode Island's electricity consumption increased by 2.2 billion kilowatt-hours, an average annual increase of 2 %.
- Natural gas fuels 98 % of Rhode Island's electricity generation.
- Natural gas demand in the New England Census Region – Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont – will remain high, increasing from 1.08 Bcf per day in 2007 to 1.11 Bcf per day in 2008.
- Rhode Island receives its natural gas supply by pipeline from production areas along the U.S. Gulf Coast, and from natural gas storage sites in the Appalachian Basin.
- Rhode Island's Port of Providence is a key petroleum products hub for New England. Almost all of the transportation and heating fuel products consumed in Rhode Island, eastern Connecticut, and parts of Massachusetts are supplied via marine shipments through this port.
- About two-fifths of Rhode Island households use fuel oil as their primary energy source for home heating.
- Rhode Island is the location of one of four Northeast home heating oil reserve sites, intended to cushion the effect of disruptions in the supply of home heating oil.



RHODE ISLAND ALTERNATIVE / RENEWABLE ENERGY

- In May 2007, the Governor submitted legislation to the General Assembly to spur development of renewable energy sources, such as wind, wave, solar, and hydroelectric projects.
- The Governor has accelerated the State's renewable energy target from 15 % by 2016 to 20 % by 2011.
- In 2005, groundbreaking for Rhode Island's first utility-scale wind turbine took place at the Portsmouth Abbey & School in Portsmouth, Rhode Island. The school is one of the State's largest consumers of electricity, yet the turbine is expected to generate 40 % of the school's annual electricity needs.
- In Warwick, Rhode Island, more than 70 % of the school buses run on B20, a blend of 80 % diesel and 20 % biodiesel.

INCREASING ENERGY PRICES HURT MANUFACTURING INDUSTRIES, IMPERILING RHODE ISLAND JOBS:



- As of November 2006, Rhode Island was home to approximately 53,000 manufacturing jobs, paying employees an average of \$41,700 per year, 12 % higher than the average for the State. Rising energy costs, however, have contributed to the loss of more than 18,000 of these high-wage manufacturing jobs since 2000.
- Chemical and plastic manufacturing – which depend on natural gas as a critical input – accounted for more than \$200 million in Rhode Island exports and directly supported more than 4,000 jobs in 2005. These jobs, however, are in jeopardy due to the high price of natural gas.
- Rhode Island has nearly 400,000 acres of forested land, and its forest products industry employs more than 2,000 workers with an annual payroll of nearly \$112 million.
- Today, energy is the third largest manufacturing cost, at 18 %, for the forest products industry, eclipsing even employee compensation.
- Nationally, more than 230 forest products mills have closed and 180,000 jobs have been lost – 12 % of the industry’s national employment – since 2000 when energy prices started to rise. Likewise, many of Rhode Island’s paper and wood manufacturing jobs are endangered by the high price of natural gas.

INCREASING ENERGY PRICES SQUEEZE THE STATE AND INDIVIDUAL CONSUMERS:



- The State of Rhode Island is itself a major consumer of electricity, oil, and natural gas. In FY2004, prior to the recent natural gas and electric rate increases, state government’s total utility cost was \$36 million. Natural gas use continues to increase across nearly every state department and agency.
- Home heating costs have risen significantly, regardless of the energy source used. Natural gas accounts for heating 46 % of Rhode Island’s homes, followed by fuel oil (42 %), electricity (8 %), liquefied petroleum gas (3 %), and other sources (1 %).
- In 2006, Congress and the State provided home heating assistance to more than 29,000 Rhode Island households, a 10 % increase from 2005.

INCREASING ENERGY PRICES SQUEEZE FARMERS AND AGRICULTURAL INDUSTRIES:

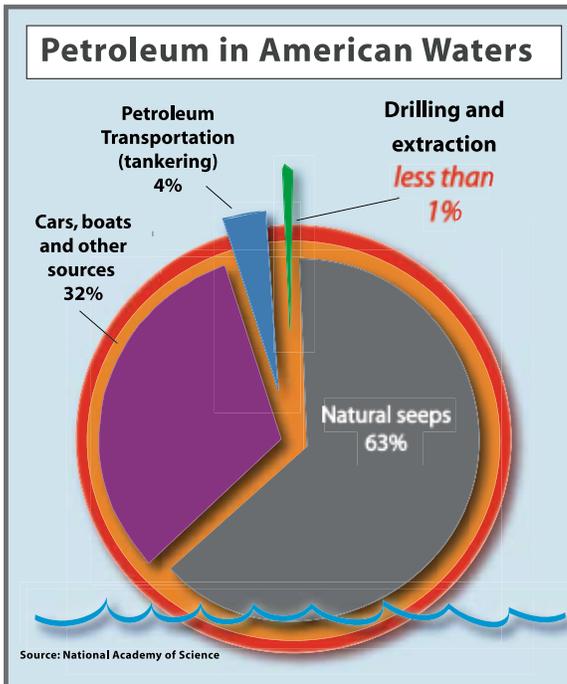
- Rhode Island is home to more than 750 farms, covering more than 60,000 acres of land, and generating nearly \$64 million in farm receipts in 2005. The State's greenhouse and nursery industry dominated agricultural cash receipts, bringing in \$42 million.
- Agricultural production uses energy directly in grain production, drying, and marketing, and indirectly through many of the purchased inputs such as fertilizer and agricultural chemicals. Many of the manufacturing industries, including agricultural processing, are also intensive energy users.
- The Economic Research Service of the United States Department of Agriculture estimates that principal crop related expenses in 2007 – seed, fertilizers, and pesticides – are forecast to be \$36.1 billion, up 5 percent from 2006. This is the fourth straight increase of \$1.8 billion or more.



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