



NATIONAL
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ASSOCIATION

ENERGY CHALLENGES FOR MINNESOTA 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.

MINNESOTA ENERGY CONSUMPTION AND OUTLOOK:



- Energy costs Minnesotans approximately \$12 billion each year, with the majority of that money moving out of state. In 2000, Minnesotans spent \$3.5 billion on electricity, \$2 billion on natural gas and \$6.7 billion on petroleum products.
- According to the 2004 Minnesota Energy Policy and Conservation Report:
 - Consumption of electricity is expected to increase at an average rate of about 1.5% annually over the next few years. Minnesota's utilities will need additional base load generation capacity of 2730 megawatts by 2015 and another 695 megawatts of intermediate generation capacity by that time.
 - Total demand for electricity has increased an average of 3.1% annually over the 1970-2002 periods. Demand from commercial customers has grown the most in that span, increasing 3.7% annually. The annual growth rates for residential and industrial customers for the same period were 2.7% and 3% respectively.
 - Traditional, non-renewable fuels provide the vast majority of Minnesota's generation including nuclear, coal, petroleum, and natural gas.
 - In 2002, 85% of Minnesotans' spending on petroleum was for air, land and water transportation. Gasoline accounted for 2.6 billion gallons of the 2002 total, an increase of 44 million gallons over the prior year. Minnesota imports all of its petroleum products, sending over \$4 billion out of state each year.
 - Today, about one-fourth of Minnesota households use either oil or propane for their heating source.

INCREASING ENERGY PRICES HURT MANUFACTURING INDUSTRIES, IMPERILING MINNESOTA JOBS:

- In November 2005, Minnesota was home to more than 350,700 manufacturing jobs, paying employees an average of \$49,110/year, 21% higher than the state's overall average. Unfortunately, rising energy costs have contributed to the loss of more than 45,800 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 \$1.1 billion in Minnesota exports in 2005 and support more than 9,650 jobs directly. These manufacturing jobs are also in jeopardy due to the high price of natural gas.



- Minnesota's forest products industry is one of the state's top manufacturing industries, employing nearly 56,000 workers with an annual payroll over \$2.8 billion. Minnesota's paper and wood manufacturing workforce represents more than 7.8% 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 SCHOOLS, SMALL BUSINESSES AND INDIVIDUAL CONSUMERS:

- During the 2005/2006 winter, St. Paul spent \$7.5 million to pay for the electricity, fuel oil and natural gas needed in its 80 buildings. St. Paul Schools prepared for a 34% jump in heating costs alone, over \$1.3 million more than in 2004/2005. In addition, Elk River and the North St. Paul-Maplewood-Oakdale districts both saw 80% increases in heating costs. Nationally, school districts across the country spend \$6 billion on energy in a given year, the second-largest expense for schools after personnel.
- In November 2005, the University of Minnesota requested \$6.3 million in onetime funds and \$8.3 million in recurring funds to meet unexpected fuel cost increases. The University had projected energy related costs to be \$71 million from January 2006 to June 2007, but due to high natural gas prices the University now projects these costs to be \$87 million.
- 55% of Minnesota's small businesses said of their total costs, that the cost of energy is the first or second most rapidly rising, according to a November 2005 survey by the Minnesota chapter of the National Federation of Independent Business.
- Over half of Minnesota residents' energy bills go to home heating, bills that are only getting bigger. The average energy bill for Minnesota homes heated with natural gas will increase by about \$490 in 2006. Homes heated with oil will go up by about \$285. Propane-heated home owners will see their bills rise by about \$250, while electric heating costs will rise by about \$90.
- In Minnesota, energy costs account for up to 13% of a typical low-income household budget as compared to 3% for other households.





- In 2005, Minnesota distributed over \$84 million in Low Income Home Energy Assistance (LIHEAP) funding to more than 117,500 eligible households to help pay their heating and cooling bills.
- Minnesota's gasoline prices are currently about 30% higher than one year ago. At today's prices, Minnesota households pay about \$3,000 annually for gasoline.

INCREASING ENERGY PRICES SQUEEZE FARMERS AND AGRICULTURAL INDUSTRIES:

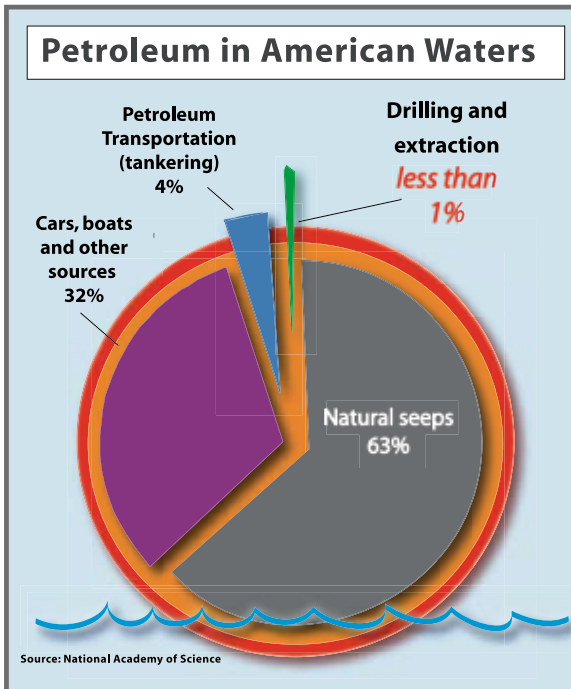
- Minnesota is home to more than 79,600 farms. Minnesota's agriculture and food industry contribute over \$8 billion annually to the state's economy and is Minnesota's second largest employer.
- The dairy sector alone employs more Minnesotans than Northwest Airlines, 3M and Target Corporation combined.
- Minnesota produced more than 8.1 million pounds of milk in 2004 which was used for both milk and cheese. In 2004, cash receipts by Minnesota milk producers were more than \$1 billion. Across the nation, dairy farmers have been impacted by high energy costs, which raise prices for feed stock, motors, lighting, and transportation.
- Minnesota ranks second nationally in spring wheat production and fourth in corn production. Both of these crops require fertilizer to boost yields. Unfortunately, fertilizer costs have gone up by double digits in line with rises in energy prices. As a result, for the first time since the Great Depression, a gallon of diesel fuel is more expensive than a bushel of wheat. In 2006, it will cost 24 - 27% more to grow wheat than in 2005.
- The United States Department of Agriculture has forecasted a 22% decline in national farm income from 2005 to 2006 due to lower livestock and crop values and increased energy costs. Minnesota farmers can expect a similar decline in their farm income.
- 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