



NATIONAL
OCEAN
INDUSTRIES
ASSOCIATION

ENERGY CHALLENGES FOR GEORGIA 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.

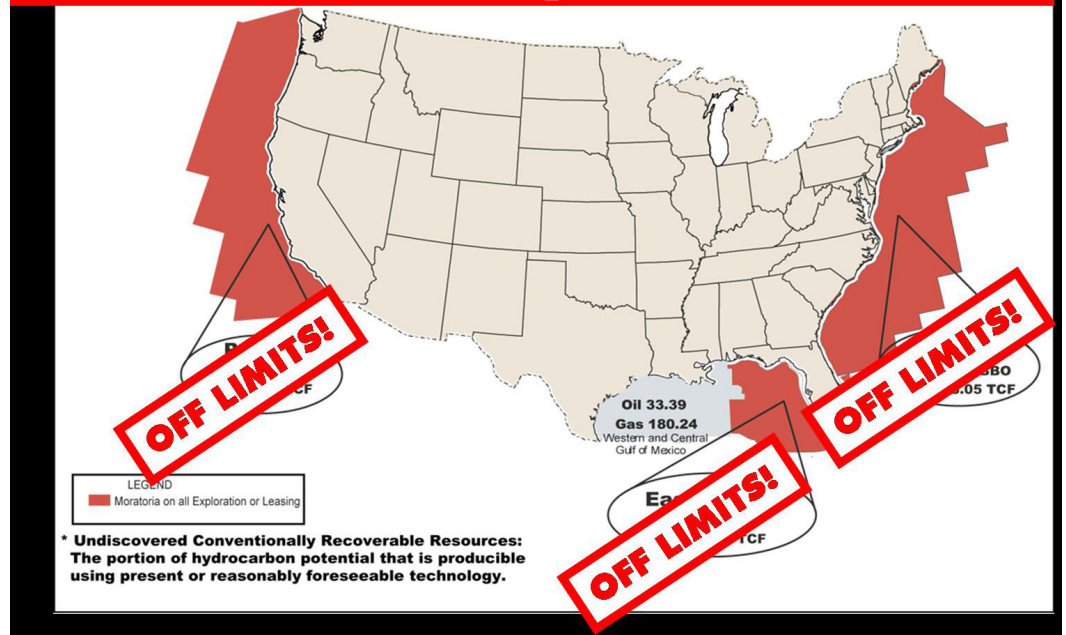
Today, energy prices are on the rise across the nation. This affects individual citizens, industrial consumers, and the agricultural industry. But why is this so?

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.

GEORGIA ENERGY OUTLOOK AND CONSUMPTION:

OVERALL ENERGY CONSUMPTION

- Georgia currently ranks 10th nationally in total energy consumption.
- Over the next 25 years, Georgia's population is projected to increase nearly 50 percent, which will lead to significant increases in energy demand.
- Between 1984 and 2004, the state's total energy consumption grew 76 percent from 1,731 trillion British thermal units (TBTu) to 3,050 TBTu, far outpacing the state's 51 percent population growth over the same time period.

Electricity

- Georgia's demand for electricity grew 61 percent from 1990 to 2004 and is projected to have a face annual load growth rates of over 3 percent per year from through 2010.
- Georgia relies predominantly on 11 large coal plants and two nuclear power plants to produce more than 90 percent of Georgia's electricity. In 2004, natural gas generation accounted for only 5 percent of statewide generation. Non-hydropower renewables accounted for about 3 percent of the electricity generation in the state.
- Georgia currently generates more than 60 percent of its electricity from coal.
- Georgia consumed 393 billion cubic feet of natural gas in 2004, equivalent to 405 trillion Btu of heat energy. Natural gas accounts for roughly 13 percent of Georgia's total energy consumption, for roughly 27 percent of net energy consumed in the commercial and industrial sectors and 39 percent of residential net consumption. During the last 20 years, Georgia's consumption of natural gas has grown gradually, from 307 TBTu to the current level, representing a 28 percent overall increase.
- According to the Energy Information Administration forecasts, natural gas prices in the South Atlantic Coast Census Region will remain high, and residential consumers can expect to pay 15 to 20 percent more than the national average for the next two years.

Petroleum Products

- Georgia consumed 185.1 million barrels of refined petroleum products in 2004, equivalent to 976 trillion Btu of heat energy, according to the Georgia Energy Review 2005. This level of consumption makes refined petroleum products the chief energy source for Georgia, outpacing energy from coal by more than 10 percent. The transportation sector accounted for 90 percent of this consumption, and motor gasoline is the single largest petroleum fuel type, accounting for 66 percent of transportation energy use in Georgia in 2004.





- In 2004, Georgia consumed 13 million gallons per day of motor gasoline and 5.5 million gallons per day of distillate fuel oil, the majority of which was sold for on-road diesel fuel use.
- Transportation is closely tied to Georgia’s economy, security and health. High prices for fuel divert household dollars from other uses and prices climb for a broad range of consume goods, including food.
- Georgia currently produces no crude oil and has no oil wells, no proven crude reserves and no petroleum refining capability. Therefore, the state must rely on imports or refined petroleum products to meet its growing demand.

Renewable Fuels

- In recent years, several biofuel (ethanol and biodiesel) production facilities have begun operations in Georgia. In 2004, US Biofuels opened a plant in Rome that converts chicken fat and soy oil into biodiesel, producing more than 2.2 million gallons of biodiesel in 2005. In 2005, Georgia biofuel producers exported all of their ethanol production and more than 75 percent of their biodiesel production to other states.

(Data is drawn from the “State Energy Strategy for Georgia, December 2006” and the Energy Information Administration)

INCREASING ENERGY PRICES HURT MANUFACTURING INDUSTRIES, IMPERILING GEORGIA JOBS:



- According to the 2005 Georgia Manufacturing Survey, nearly one in five companies reported concerns about energy costs and conservation – even prior to the cost increases spurred by the destruction from Hurricanes Katrina and Rita.
- As of August 2006, Georgia was home to more than 451,500 manufacturing jobs, paying employees an average of \$42,200/year, 6% higher than the average wage and salary for the state. Unfortunately, rising energy costs have contributed to the loss of more than 79,000 of these high-wage manufacturing jobs since 2000.
- Chemical manufacturing – which depends on natural gas as a critical input – accounted for more than \$2.1 billion in Georgia exports in 2005 and supported more than 21,100 jobs directly. These jobs are also in jeopardy due to the high price of natural gas.
- Approximately 66 percent of Georgia is forested, accounting for 22.7 million acres of state’s land area. Georgia’s forest products industry ranks as one of the state’s top manufacturing industries, employing more than 57,400 workers with an annual payroll over \$3.1 billion. Georgia’s paper and wood manufacturing workforce represents 10.5 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 percent 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 percent for pulp and paper mills), growing quickly enough to eclipse employee compensation.

INCREASING ENERGY PRICES SQUEEZE BUSINESSES AND INDIVIDUAL CONSUMERS:

- State government in Georgia operates more than 15,000 buildings and spends approximately \$140 million dollars annually for electricity and natural gas.
- The residential and commercial sectors together account for 42 percent of Georgia's total energy consumption, much of which is used to heat, cool and light buildings.
- In Georgia, yearly energy costs for a typical home can exceed \$1,200, while energy bills for a larger house or one that is older and less energy efficient may be double that amount.
- Georgia's average residential consumer uses 25 percent more electricity and pays 9 percent more each month than the national average.
- Natural gas accounts for heating 49 percent of Georgia's homes, followed by electricity-38 percent, liquid propane gas-11 percent, fuel oil 1 percent and other 1 percent.
- In 2006, the State of Georgia provided home heating assistance to more than 102,000 households, a 17 percent increase from 2005.

INCREASING ENERGY PRICES SQUEEZE FARMERS AND AGRICULTURAL INDUSTRIES:

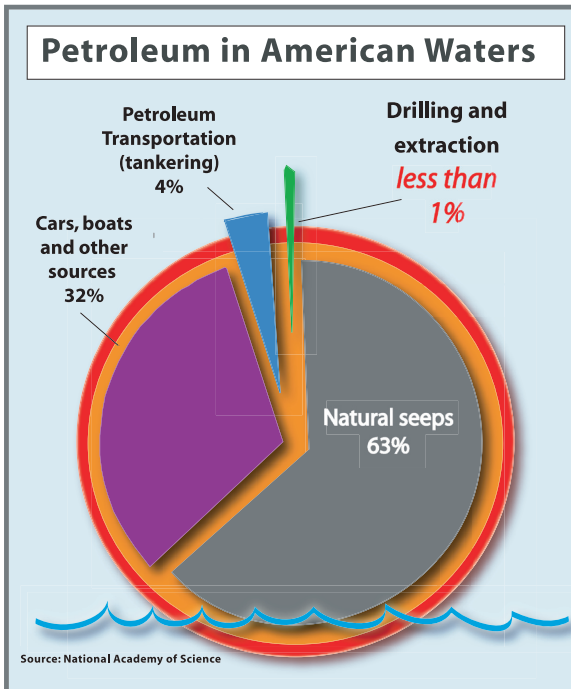
- Georgia is home to more than 50,000 farms, covering more than 11.1 million acres of land. One out of every seven Georgians works in agriculture, forestry or a related sector.
- Georgia's agriculture contributes more than \$57 billion, or about 16 percent, annually to Georgia's \$350 billion economic output.
- Georgia ranks first in the U.S. in the production of peanuts, pecans, rye, eggs and broilers.
- One of the highest operating expenses for poultry growers is the cost of electricity. With more electrical equipment in chicken houses, including computers, ventilation fans, automatic waterers, and lights, electric bills keep getting higher and higher.
- According to University of Georgia economists, Georgia farmers in 2006 will have to spend more per acre to farm major row crops, due to higher fuel and energy prices and the cost of chemicals and fertilizers. Georgia cotton farmers will spend about \$360 to produce an acre of cotton in 2006, a 20 percent increase since 2004. Peanut farmers will spend about \$400 per acre on nonirrigated land and \$509 per acre on irrigated land. That is a 15 to 20 percent increase in just two years.
- Between 2003 and 2006, fuel and fertilizer costs per acre increased for corn from \$26 to \$37, soybean costs increased \$10 to \$13, and wheat costs increased \$15 to \$31, according to the Food and Agriculture Policy Institute.



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