



NATIONAL
OCEAN
INDUSTRIES
ASSOCIATION

ENERGY CHALLENGES FOR THE NATION AND COLORADO

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.



DON'T HIT THE SNOOZE BUTTON ON AMERICA'S ENERGY WAKE-UP CALL!

In the summer of 2008 gasoline averaged a record \$4 per gallon. Americans called on leaders to increase access to domestic oil and gas supplies. Policy makers took notice and ended the Executive and Congressional bans which had locked up over 80% of our Outer Continental Shelf (OCS) to exploration for valuable oil and natural gas for nearly 30 years.



FOSSIL FUELS ARE THE BRIDGE TO AMERICA'S ENERGY FUTURE.

In order to achieve energy security, America must foster all sensible sources of energy. Fossil fuels provide about 85% of our nation's energy supply. Renewable energy sources provide less than 10%. These figures are forecasted to remain nearly unchanged through 2030. As we strive toward greater reliance on renewable energy sources, fossil fuels, particularly natural gas, will serve as bridge fuels to the future.



AMERICA CANNOT HAVE ENERGY SUPPLY WITHOUT ENERGY ACCESS.

America must secure maximum access to offshore domestic energy resources. Energy consuming states must push for changes to policies that would limit offshore domestic energy supply. This is key to long-term strategies to moderate prices, increase energy supply and security, and stimulate economic growth and employment at home.

THE OFFSHORE INDUSTRY SAFELY DELIVERS:

Energy: Only 13% of OCS areas are available for leasing under the current 5 year leasing plan. Roughly 2% of the OCS is actually leased, and these leased areas provide about 14% of domestic natural gas production and 27% of domestic oil production. The OCS is conservatively estimated to hold over 419 trillion cubic feet of undiscovered natural gas and 86 billion barrels of undiscovered oil. That's estimated to be enough natural gas to heat 100 million homes for 60 years, and enough oil to drive 85 million cars for 35 years or to replace current Persian Gulf imports for almost 60 years.



Jobs: Leased areas provide hundreds of thousands of well paying and high-tech jobs. Development of resources previously off-limits could contribute to more than 160,000 new energy-related jobs by 2030.

Money: Nearly \$200 billion in federal revenues from offshore oil and gas have been collected since 1982 – more than \$23 billion in FY 2008.

Technology: Energy companies are safely exploring in waters more than 10,000 feet (nearly 2 miles) deep. Technology that powers the offshore energy industry rivals that of the space industry. The injury and illness rate for offshore workers is about 70% lower than for all of private industry. Highly regulated, the offshore industry has a 99.999% record for clean operations with less than 0.001% of the oil produced in federal offshore waters being spilled.

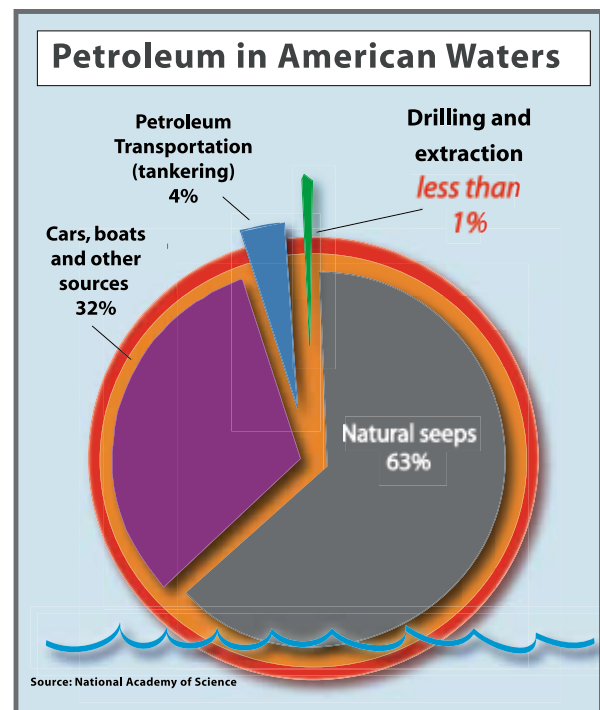




ENERGY PRICES: A NATIONAL PERSPECTIVE

- In the last 25 years, US energy consumption has grown by 30%, while supply increased at half that rate.
- Between now and 2030 we will need 55% more electricity than we generate today, and consumption of all sources of energy are expected to increase:
 - o Petroleum by 41%
 - o Natural gas by 33%
 - o Coal by 41%
 - o Renewable energy by 39%
- High energy prices, particularly for natural gas, have cost the economy more than 2.8 million jobs since 2000.
- More than 118,000 well-paying jobs in the chemical industry disappeared between 2000 and 2007, due in large part to natural gas costs.
- Costs paid by the chemical industry for fuel, power and feedstocks - such as natural gas - tripled between 1999 (\$25.178 billion) and 2007 (\$72.887 billion).
- During 2007 farmers paid \$16.9 billion in fuel, oil and electricity expenses. This was a 12% increase over 2006, according to USDA's Economic Research Service.

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.





COLORADO - AN ENERGY SNAPSHOT

- In 2005, CO ranked 27th in overall energy consumption in the US, spending over \$12.4 billion. (EIA)
- More than 55% of Colorado residents' energy bills goes to heat their homes; the remainder goes to electric AC, water heating, refrigerators, lighting and other uses. (ASE)
- Average energy bill increases in 2008 for homes heated with electricity: \$40, natural gas prices increased by about \$10. (ASE)
- Seven of the Nation's 100 largest natural gas fields and two of its 100 largest oil fields are found in Colorado. (EIA, State Energy Profile 2009)
- Colorado's enormous deposits of oil shale rock, concentrated in the Piceance Basin, hold an estimated 1 trillion barrels of oil which can be converted into crude oil through destructive distillation. (EIA, State Energy Profile 2009)
- CO Energy Consumption by Source (EIA, State Energy Data 2005)
 - Coal: 28%
 - Natural Gas: 35%
 - Petroleum: 35%
 - Nuclear: 0%
 - Hydro: 0%
 - Biomass: <1%
- CO Energy Consumption by Sector (EIA, State Energy Data 2005)
 - Residential: 23%
 - Commercial: 20%
 - Industrial: 27%
 - Transportation: 30%

BUSINESSES AND INDIVIDUAL CONSUMERS:

- In 2008, CO was home to 144,300 manufacturing jobs, paying employees an average of \$75,818/year, over 28% higher than the state's average salary. (NAM)
- Computer and electronic products, Colorado's top manufacturing sector (which depends on petroleum for production), made more than \$2.7 billion in 2007. (NAM)
- In 2009, 93,500 homes in CO will receive over \$63 million in Low Income Home Energy Assistance (LIHEAP) funding to help pay their heating and cooling bills. (LIHEAP)
- CO households spent more than \$3,400 on gasoline costs in 2008, about \$490 (17%) more than they did in 2007. (ASE)

FARMERS AND AGRICULTURAL INDUSTRIES:

- CO was home to more than 36,500 farms in 2008, covering more than 31 million acres of land. (USDA State Agriculture Overview)
- Feed grains and products, which use petroleum in their production, are Colorado's 3rd highest agricultural export, bringing in over \$237 million in 2008 and ranking 14th nationally. (2002 Census, USDA)
- Cattle and calves are CO's main agricultural commodity, bringing in 50.5% of their cash farm income and 6.4% of U.S. value. (2002 Census, USDA)
- Since Jan. 2004, CO farmers have seen a 240% hike in gasoline costs. (EIA)
- In 2006, CO farmers faced fertilizer prices of \$500 or more per ton, more than double the 2002 price. (USDA)



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. The OCS is conservatively estimated to hold over 419 trillion cubic feet of natural gas resources and 86 billion barrels of oil. This is enough:
 - o natural gas to heat 100 million homes for 60 years.
 - o oil to drive 85 million cars for 35 years.
 - o oil to replace current Persian Gulf imports for 59 years.

