President Obama's Energy Plan & Natural Gas

The Plan

On March 30, President Obama introduced an energy plan in which he emphasized the need for America to reduce foreign energy dependence. Turmoil in Middle East and in Japan leads us to question the security and cost of our energy. In an effort to reduce oil imports by a third, the President's plan aims to use reserves from offshore drilling in U.S. as we develop more sustainable and renewable energy sources.

Offshore drilling highly unpopular because of recent Gulf Coast incident. Higher standards have been put in place on drilling companies to prevent such an accident.

This is a short-term solution. America holds 2% of world's proven oil reserves. But consume 25% of world's oil.

Long-Term Goals

President has developed a plan to create clean energy standards and require the U.S. to double its use of clean sources from 40% to 80% by 2035. No formal definition for "clean" but includes wind, solar, nuclear, natural gas, and coal plants that can capture and store CO_2 emissions they produce.

Renewable Biofuels (ethanol, biomass, switchgrass, woodchips)

- Offer incentives to switching to these sources
- Need to increase availability and distribution

Plan includes creating higher efficiency standards for vehicles

- 70% of America's Petroleum consumption goes to transportation
 - This is also what takes the second largest portion of family incomes
- Standards will ultimately lead to saving of 1.8 billion barrels of oil over the life of the program
 - Subsequently saving Americans \$3,000 at the pump over same time period.

Natural Gas

Natural gas is considered the cleanest of all fossil fuels. Mostly comprised of methane, releases lower emissions of CO_2 , NOx, and SO_2 (Shown in Fossil Fuel Emission Levels table).

Problem with use of natural gas, however, is its methane emissions. Methane accounts for only 1.1 percent of total greenhouse gas emissions in the U.S., but account for 8.5 percent of the global warming potential.

EPA performed a study to find if the increase in methane emissions would be more detrimental to the atmosphere than the advantage of decreasing CO₂, NOx, and SO₂ emissions. Study revealed reduction from these harmful pollutants outweighs increased methane emissions.

Industry joined with EPA to launch Natural Gas STAR Program in attempt to reduce methane emissions. Between 1993 and

Fossil Fuel Emission Levels
- Pounds per Billion Btu of Energy Input

| Pollutant | Natural Gas | Oil | Coal |
|-----------------|-------------|---------|---------|
| Carbon Dioxide | 117,000 | 164,000 | 208,000 |
| Carbon Monoxide | 40 | 33 | 208 |
| Nitrogen Oxides | 92 | 448 | 457 |
| Sulfur Dioxide | 1 | 1,122 | 2,591 |
| Particulates | 7 | 84 | 2,744 |
| Mercury | 0.000 | 0.007 | 0.016 |

Source: EIA - Natural Gas Issues and Trends 1998

2008, program was able to eliminate 822 Billion cubic feet (Bcf) of methane emissions.

We currently sit on 100 years of natural gas reserves.