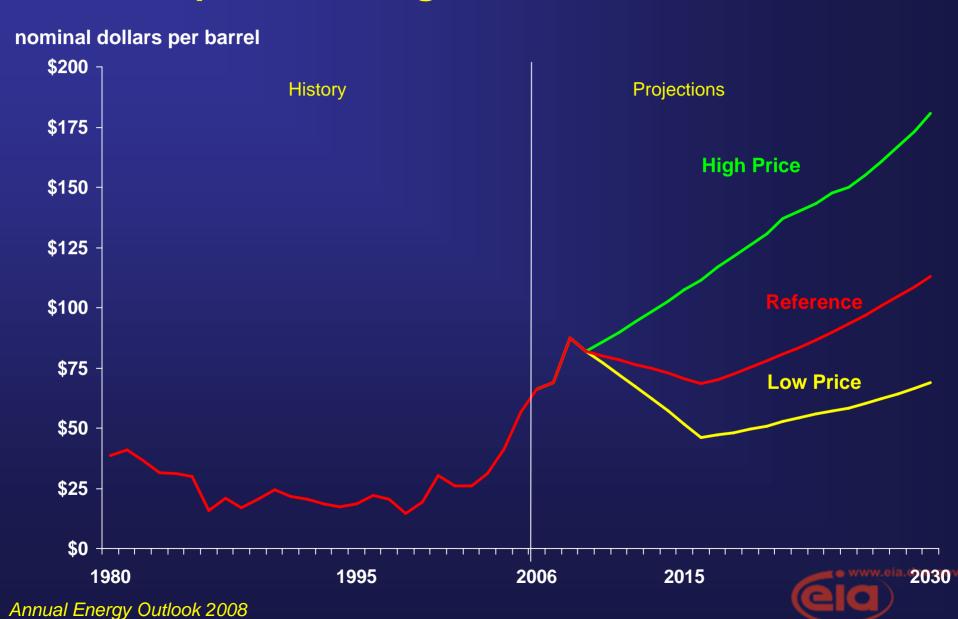
# United States Energy Outlook and Policies Affecting the Outlook

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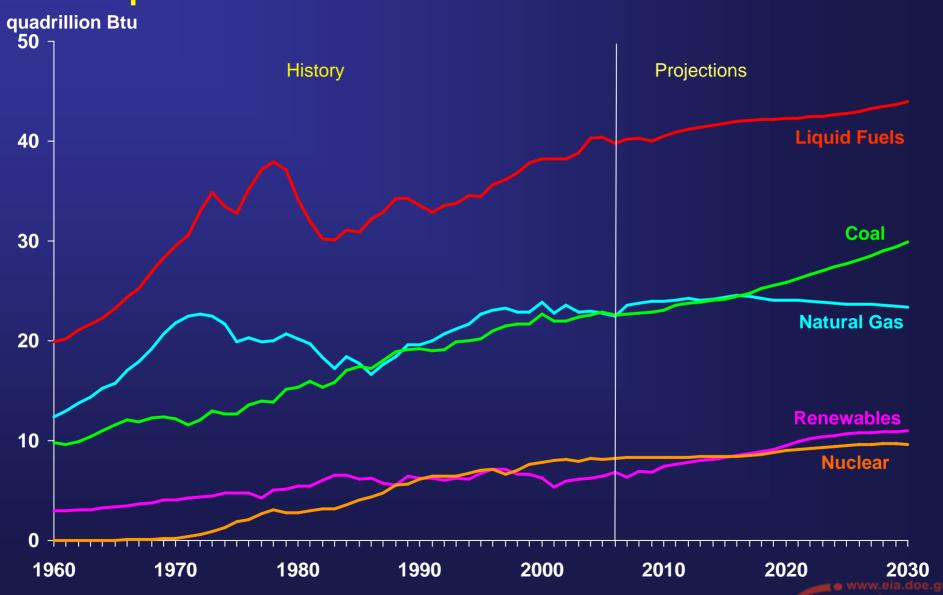
Paris, France May 2008



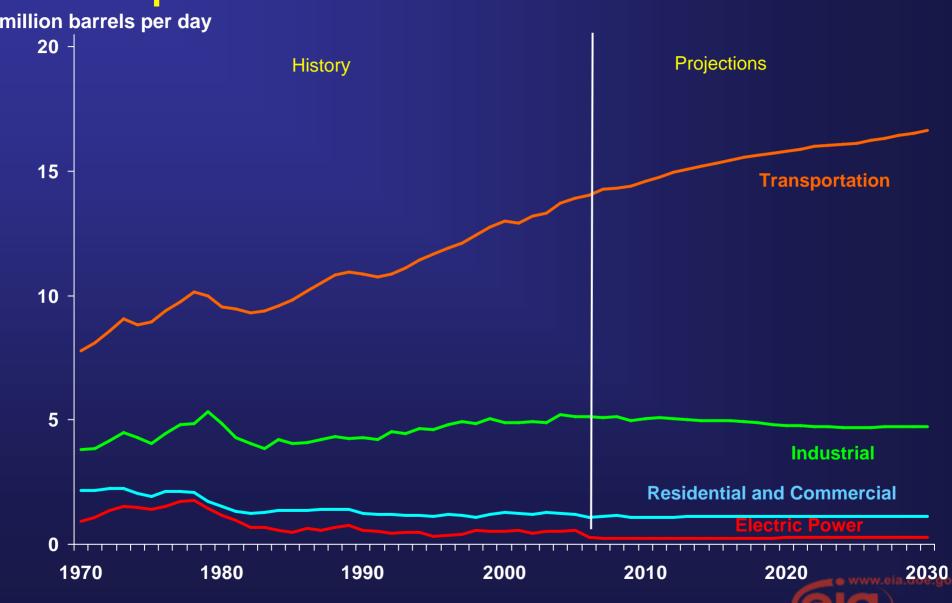
#### World oil prices are higher in all AEO2008 cases



#### Liquid fuels continue to dominate primary energy consumption in the United States

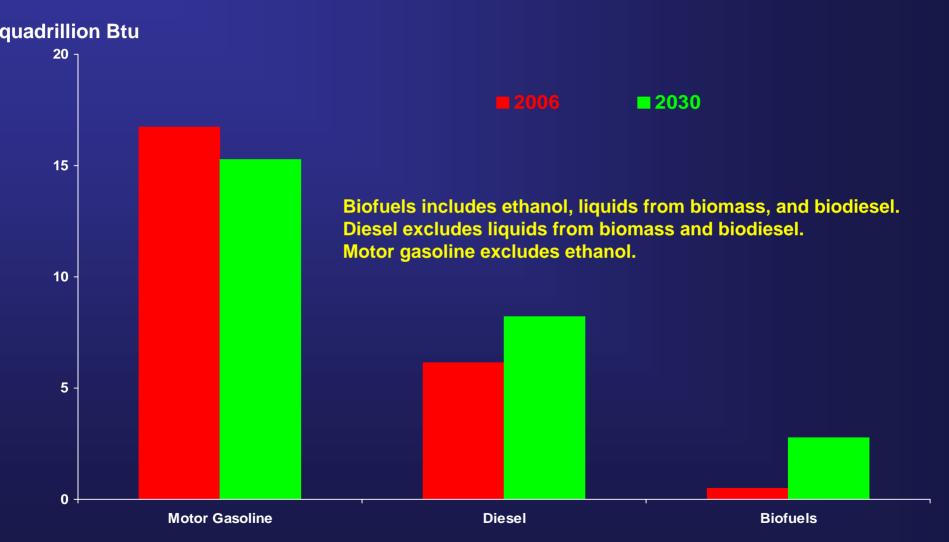


## The transportation sector dominates liquid fuel consumption



Annual Energy Outlook 2008

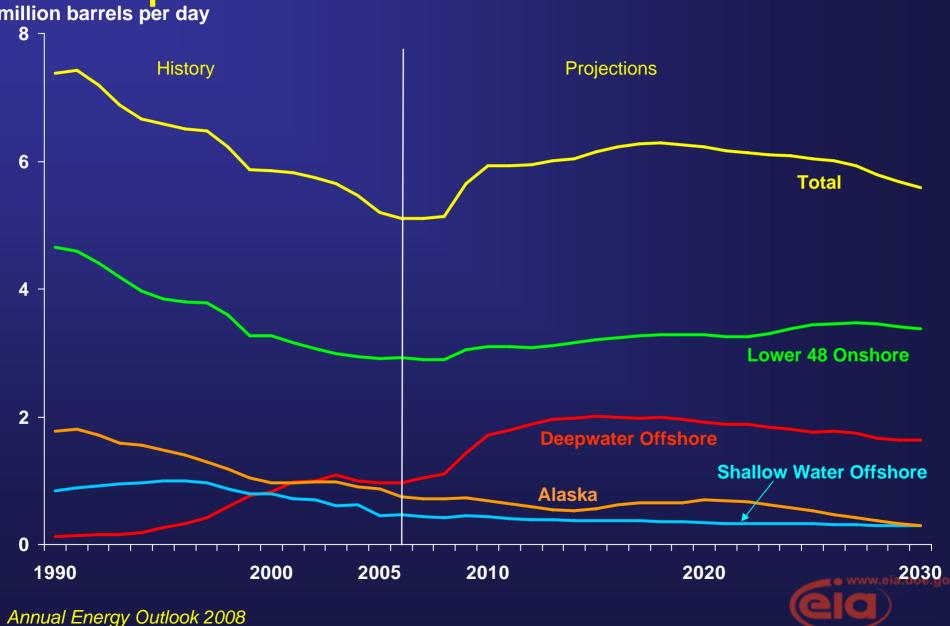
## Transportation energy use shifts slightly from petroleum to biofuels



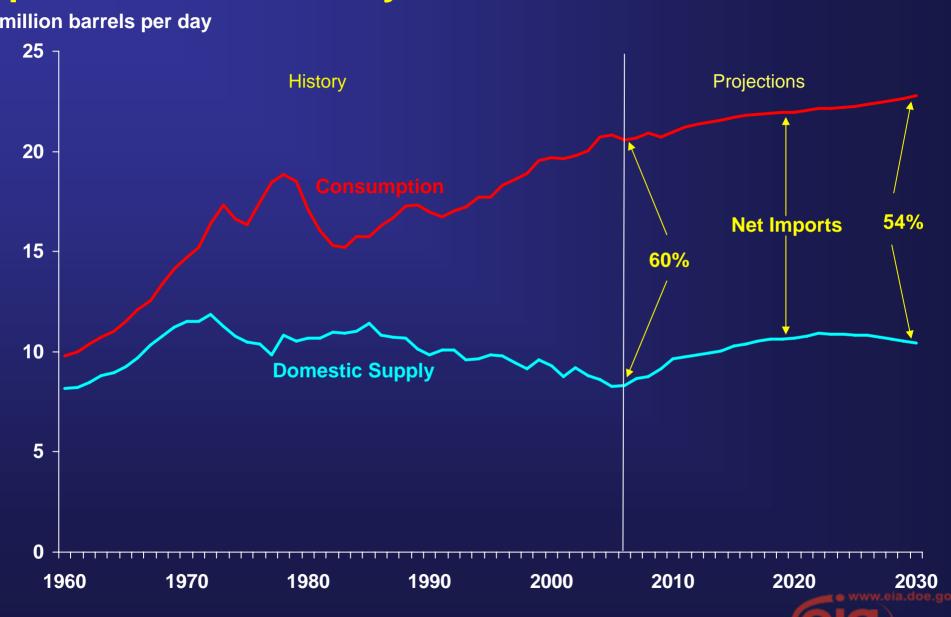


Crude oil production is primarily from the onshore and deep offshore

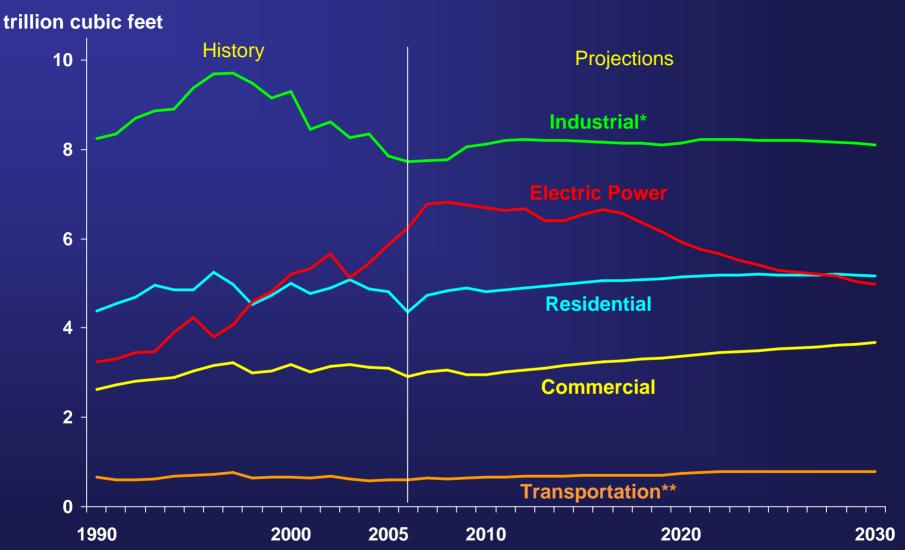
million barrels per day



### Dependence on imports of liquid fuels and other petroleum declines by 2030



### Natural gas consumption in the electric power sector declines after the next 10 years

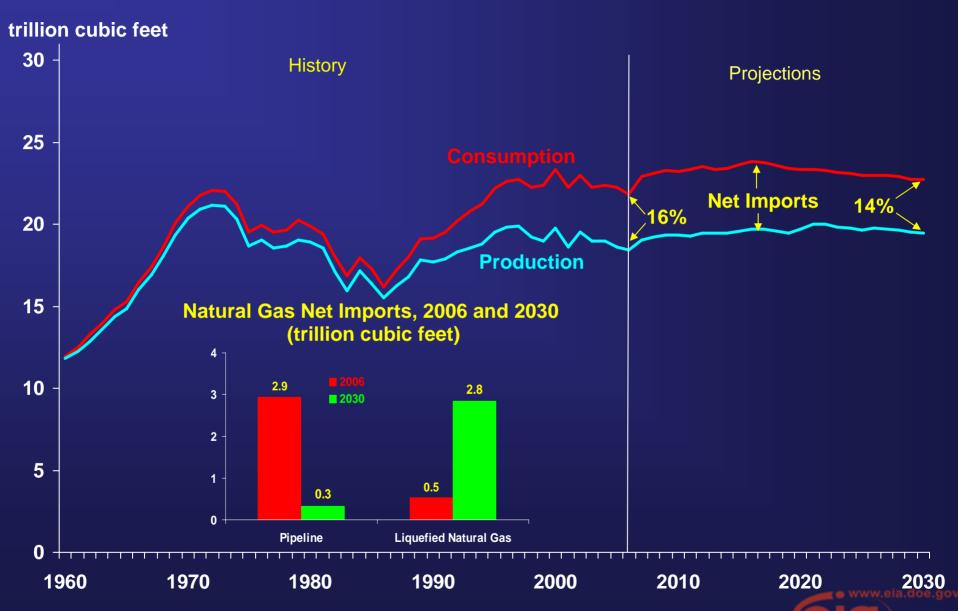


<sup>\*</sup> Includes lease and plant fuel



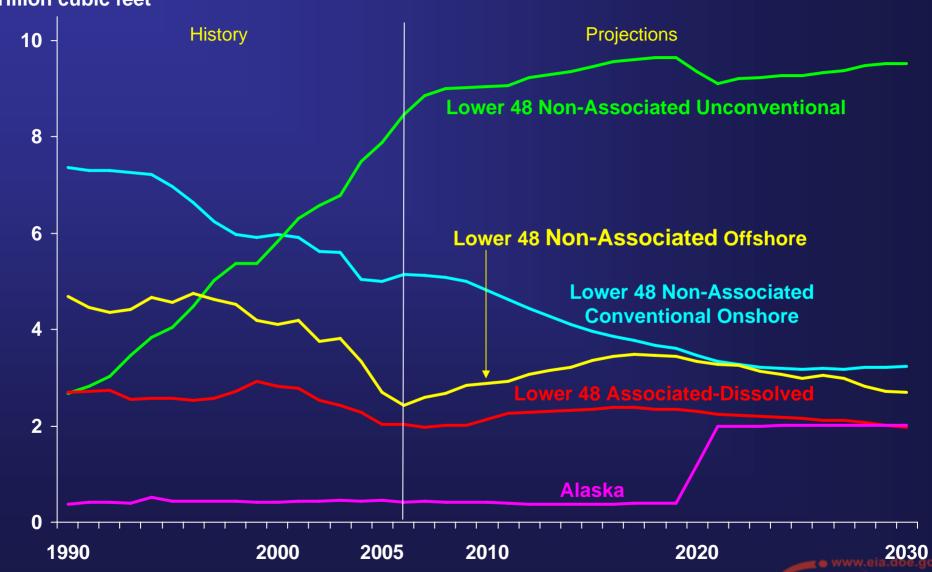
<sup>\*\*</sup> Includes pipeline fuel

### Dependence on natural gas net imports declines slightly

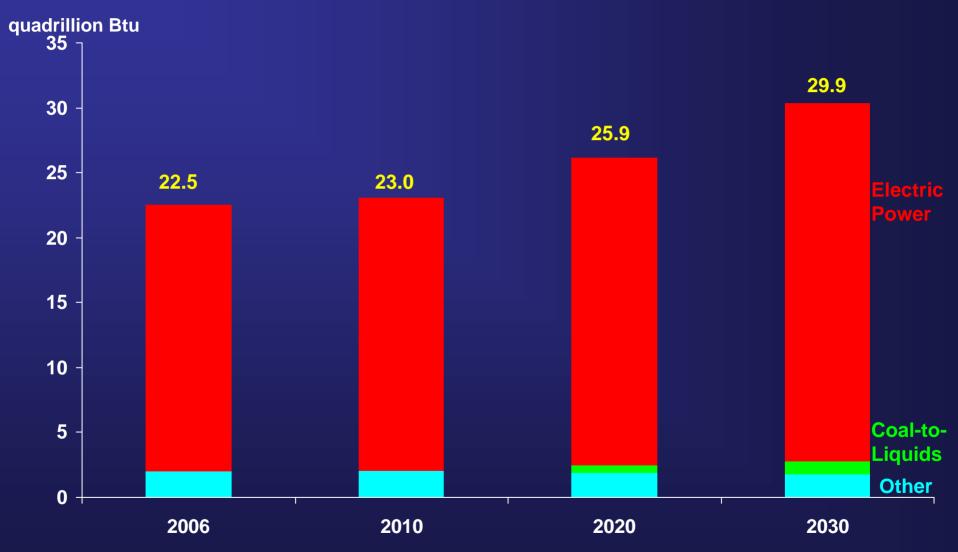


## Unconventional natural gas production will account for nearly half of domestic supply



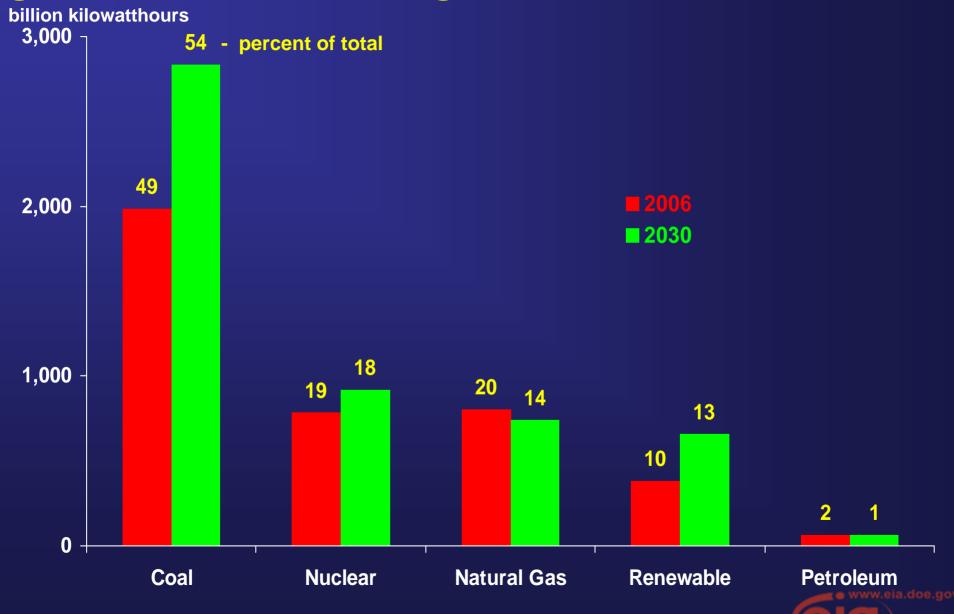


## Coal is predominantly consumed for electricity generation with growing use for CTL.



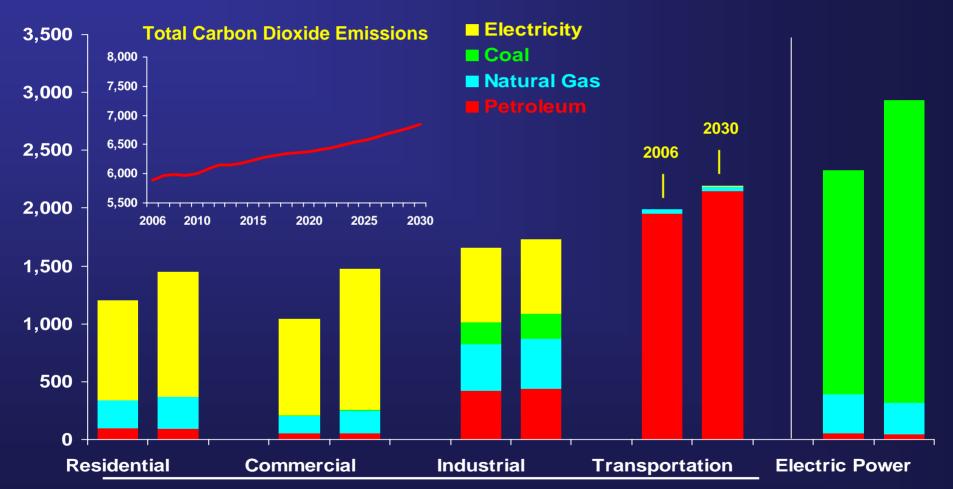


## Coal and renewables gain larger shares of electricity generation, but nuclear generation also increases



## Carbon dioxide emissions grow at a slower rate than energy consumption

million metric tons



**Delivered, including electricity losses** 



#### **Key Uncertainties in the Projections**

- Macroeconomic growth
- Energy prices
- Technological changes
- Government policy initiatives



## The Energy Independence and Security Act of 2007

- Improves Fuel Economy
  - Sets national fuel standard at 35 miles per gallon by 2020, which will increase fuel economy standards by 40 percent and save billions of gallons of fuel
- Expands production of renewable fuels
  - Sets a mandatory Renewable Fuel Standard (RFS) requiring fuel producers to use at least 36 billion gallons of biofuel by 2022 representing a nearly five-fold increase over current levels
- Responds to the President's "Twenty in Ten" Initiative
- Demands Energy Efficiency
  - Federal buildings convert to Energy Star products by 2013 and new standards set for home appliances



#### **Energy Agenda for 2008**

The Energy Independence and Security Act of 2007 goes a long way, but the President has remaining energy proposals:

- Electric Power: Generate electric power using increased cleaner coal technology, solar and wind energy, and nuclear energy
- Domestic Supply of Oil: In a prudent and environmentallysensitive way, pass legislation opening access to domestic energy sources such as the Outer Continental Shelf and the Arctic National Wildlife Refuge
- Strategic Petroleum Reserve: Double the capacity to 1.5 billion barrels to protect against severe supply disruptions



# U.S. Climate Change Policy Approach: Department of Energy Overview

- Harnesses the power of markets and technological innovation, maintains economic growth, and encourages global participation
- Reaffirms U.S. commitment to goal of United Nations Framework Convention on Climate Change
- Places climate change in a broader context that includes enhancing energy security, encouraging economic growth, and reducing air pollution



#### **Periodic Reports**

Petroleum Status and Natural Gas Storage Reports, weekly

Short-Term Energy Outlook, monthly

Annual Energy Outlook 2008, March 2008, full report, May 2008

International Energy Outlook 2007, May 2007, next update July 2008

#### **Examples of Special Analyses**

"Economic Effects of High Oil Prices," Annual Energy Outlook 2006

Analysis of Crude Oil Production in the Arctic National Wildlife Refuge,

**May 2008** 

The Global Liquefied Natural Gas Market: Status and Outlook, December 2003

"Impacts of Increased Access to Oil and Natural Gas Resources in the Lower 48 Federal Outer Continental Shelf," *Annual Energy Outlook 2007* 

Energy Market and Economic Impacts of S.2191, the Lieberman-Warner Climate Security Act of 2007, April 2008

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