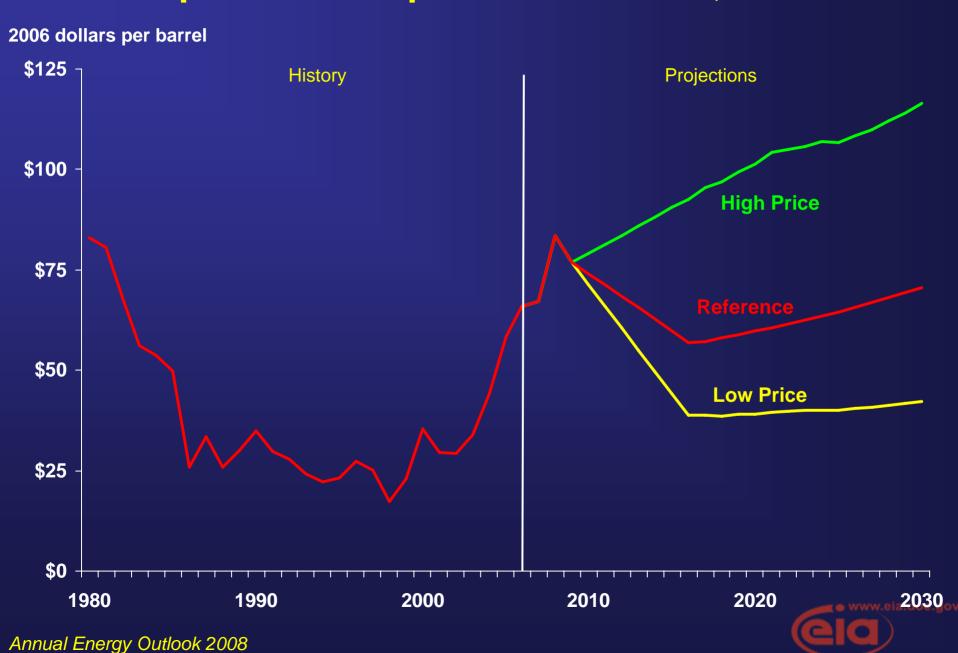
#### Annual Energy Outlook 2008

Guy F. Caruso
Administrator
Energy Information Administration

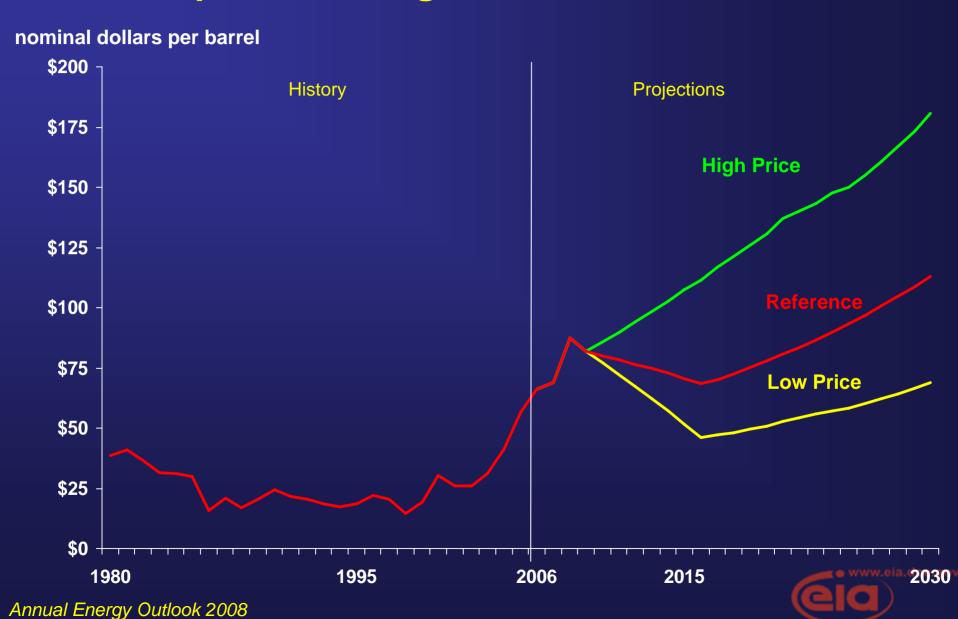
School of Advanced International Studies
The Johns Hopkins University
Washington, DC
March 27, 2008



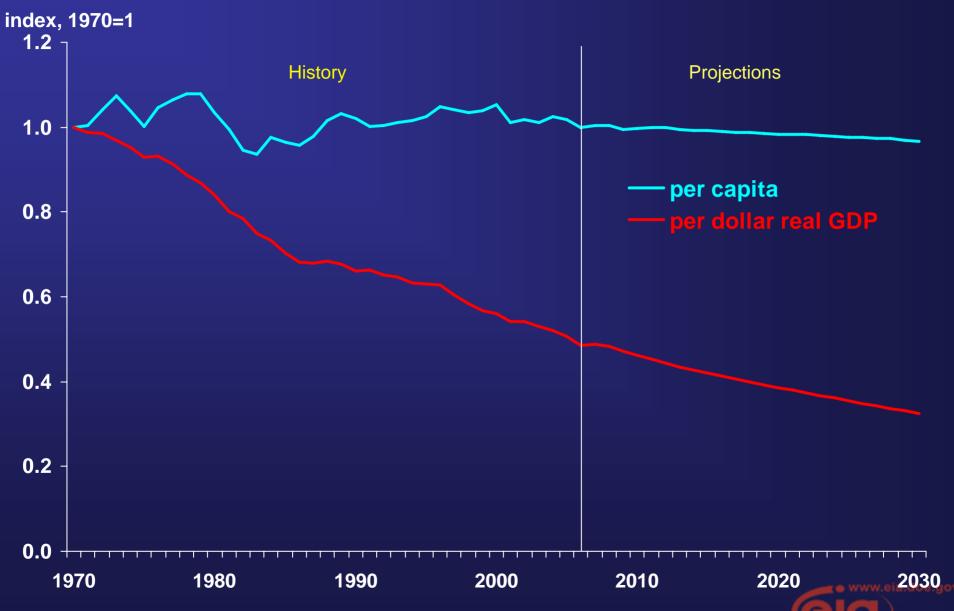
#### World oil prices are expected to decline, then rise



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

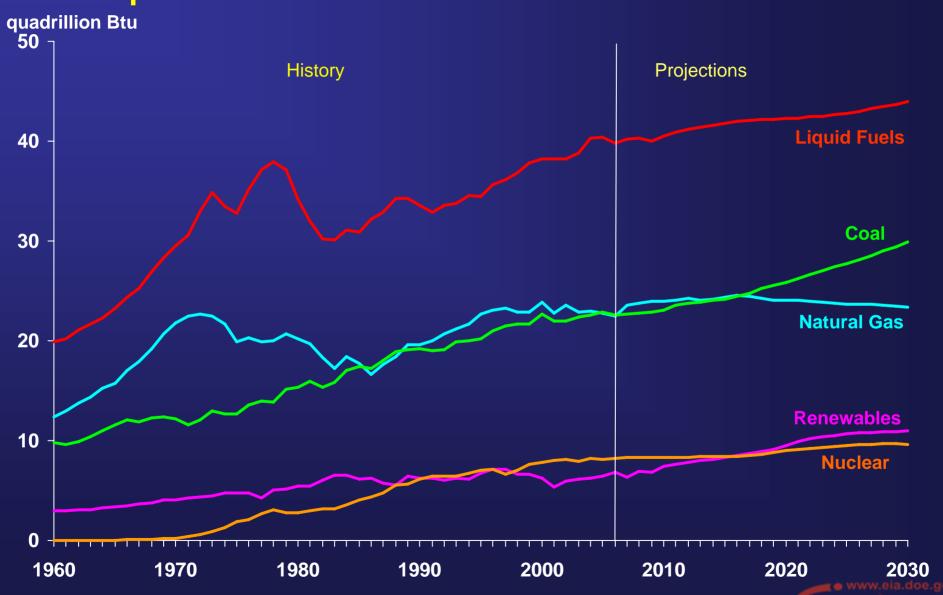


#### Energy use per capita declines slightly and energy intensity falls by 1.7 percent per year

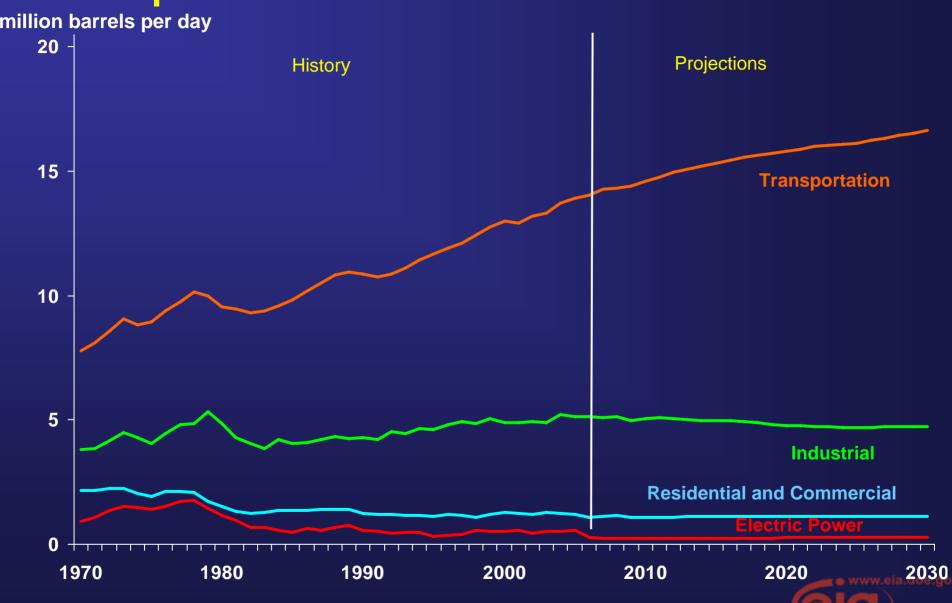


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#### Liquid fuels continue to dominate primary energy consumption in the United States



# The transportation sector dominates liquid fuel consumption



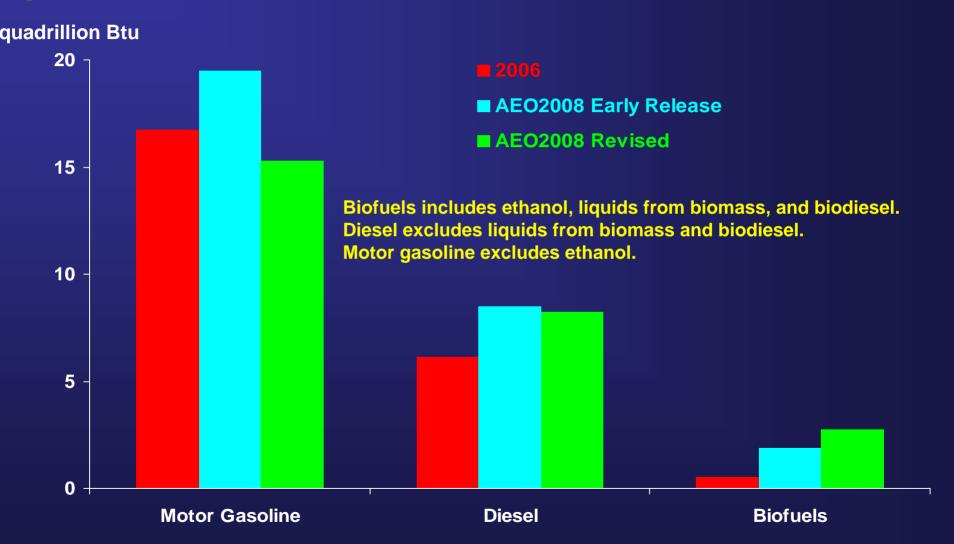
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# Average fuel economy of new light-duty vehicles is expected to reach 36.6 miles per gallon



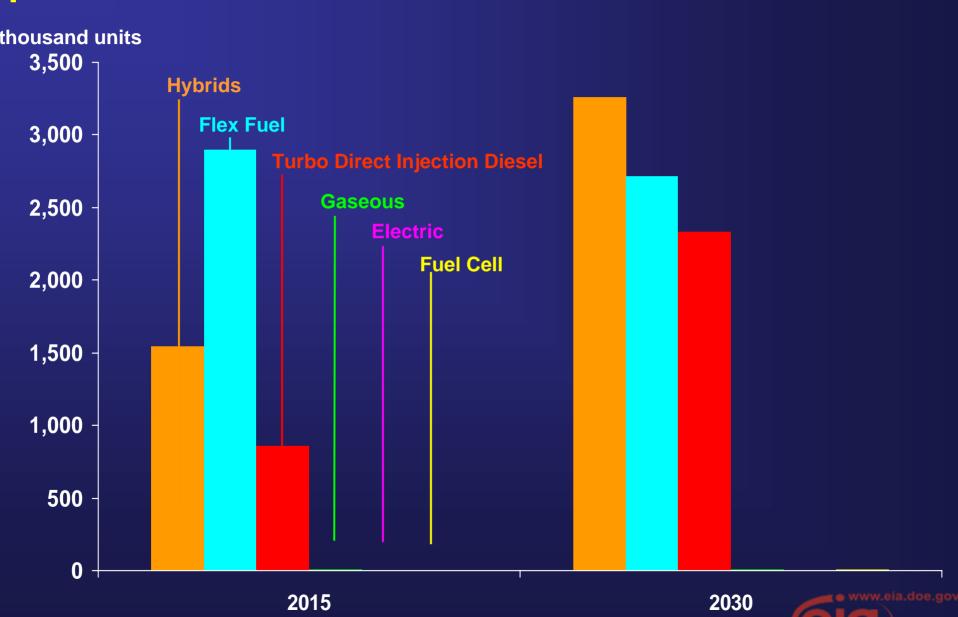
Annual Energy Outlook 2008

### Transportation energy use shifts slightly from petroleum to biofuels





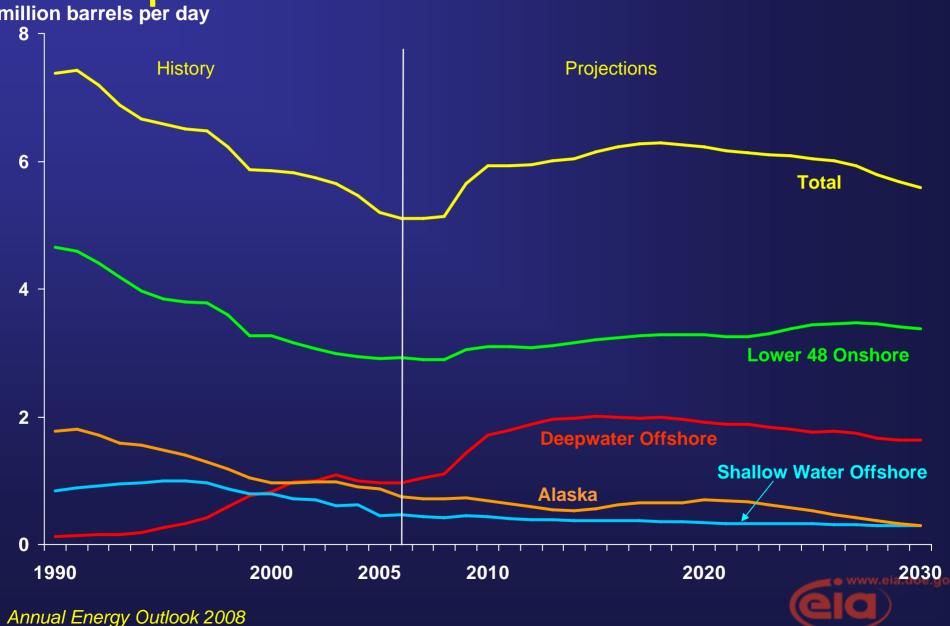
#### Unconventional light-duty vehicles constitute 45 percent of sales in 2030



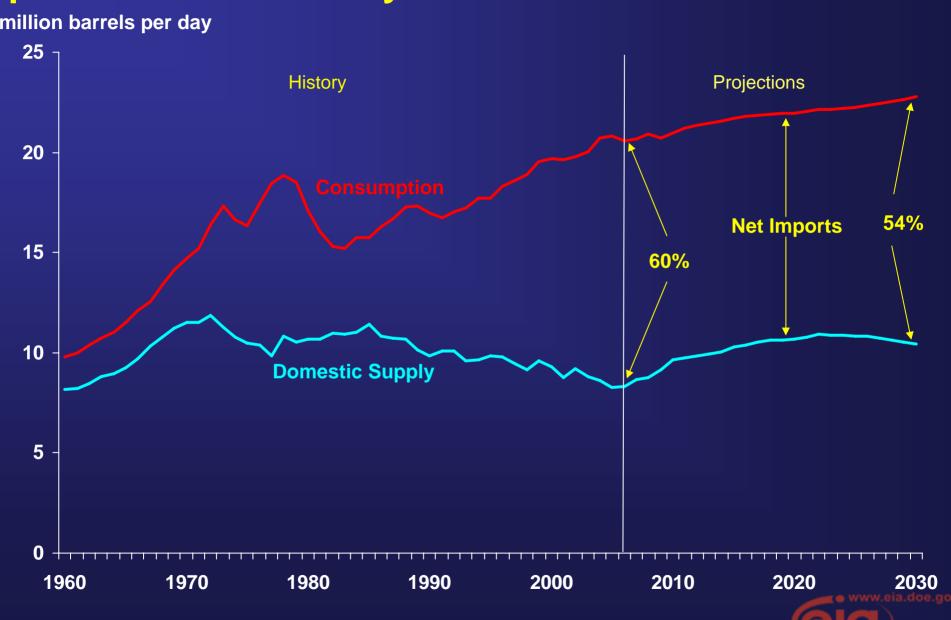
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Crude oil production is primarily from the onshore and deep offshore

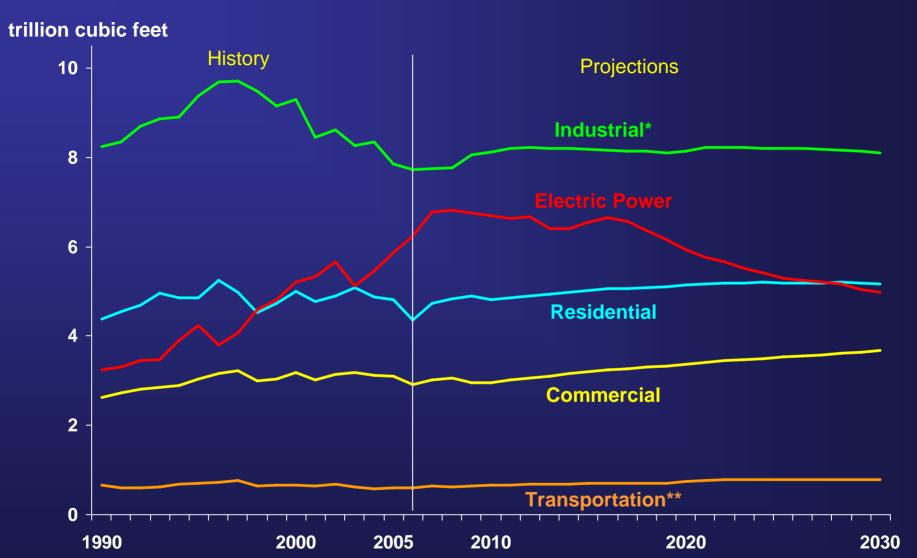
million barrels per day



### 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

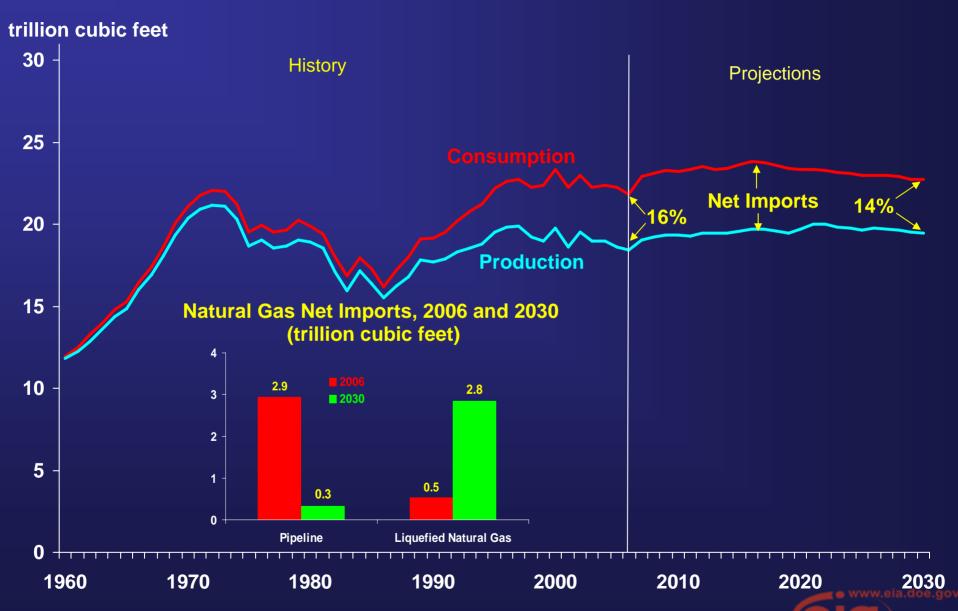


<sup>\*</sup> Includes lease and plant fuel



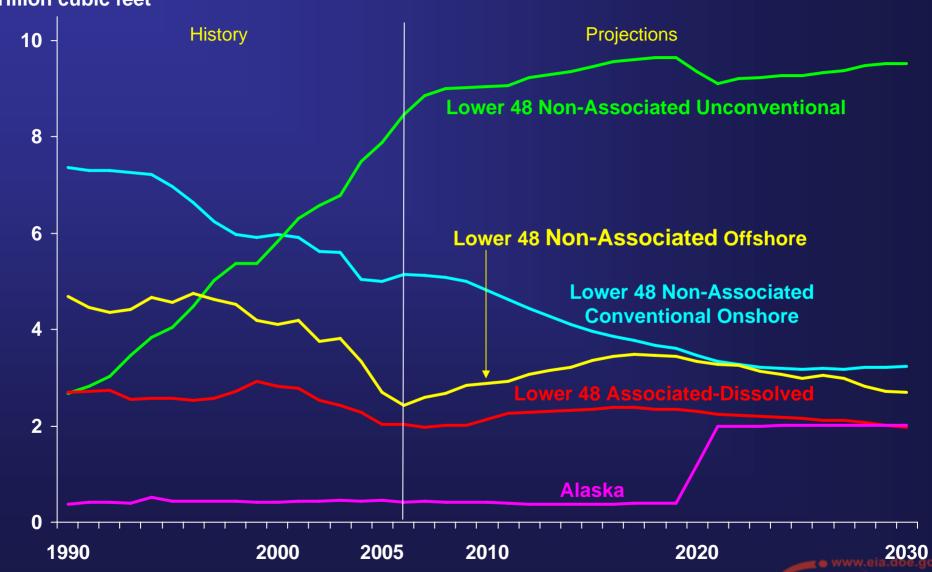
<sup>\*\*</sup> Includes pipeline fuel

#### Dependence on natural gas net imports declines slightly

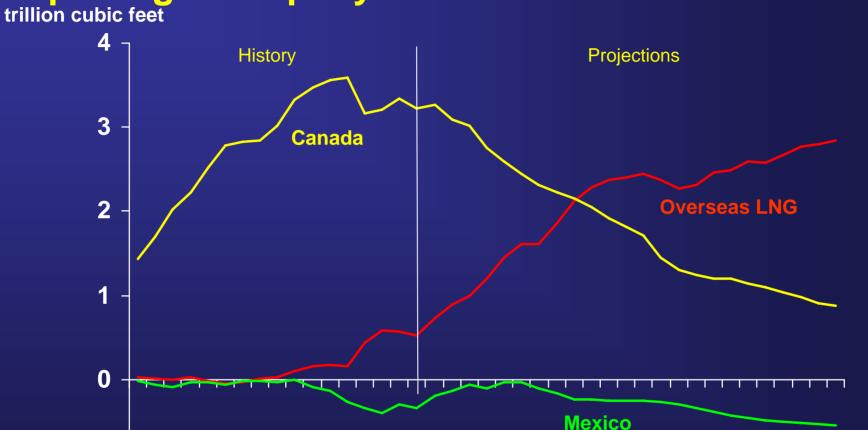


### Unconventional natural gas production will account for nearly half of domestic supply





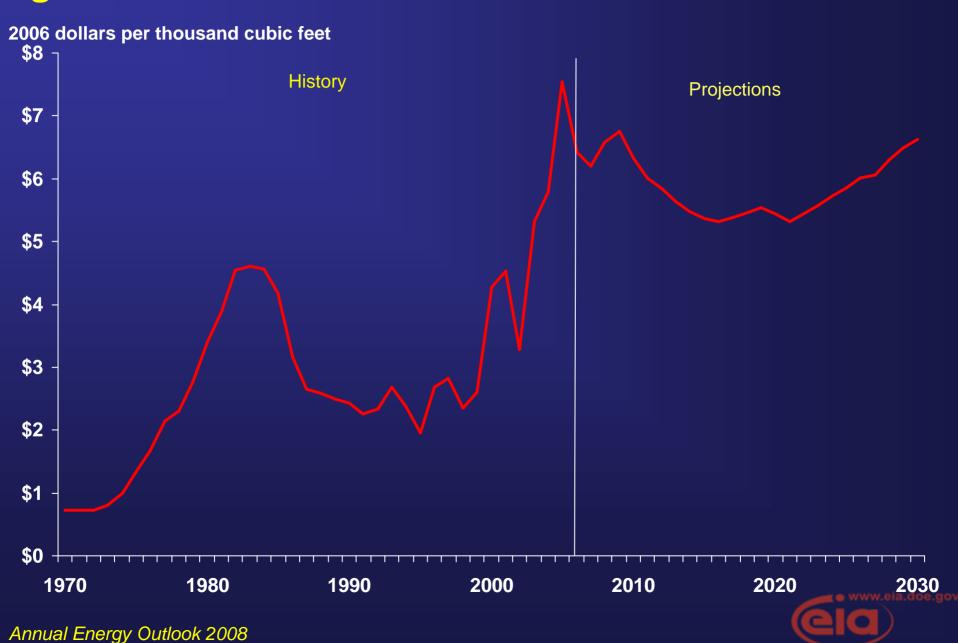
# Net pipeline imports fall as supplies from Canada decline and exports to Mexico increase; LNG imports grow rapidly



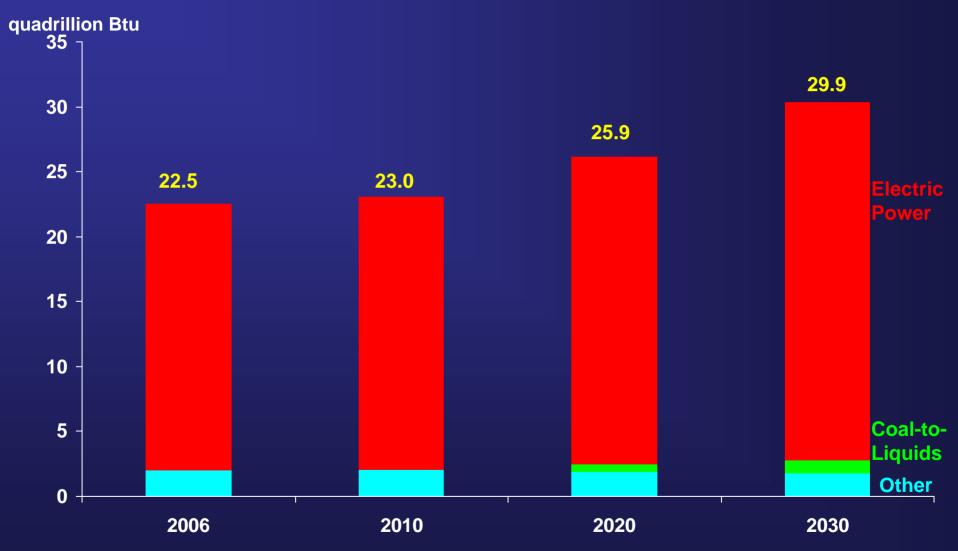


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#### Natural gas wellhead prices will decline before rising again

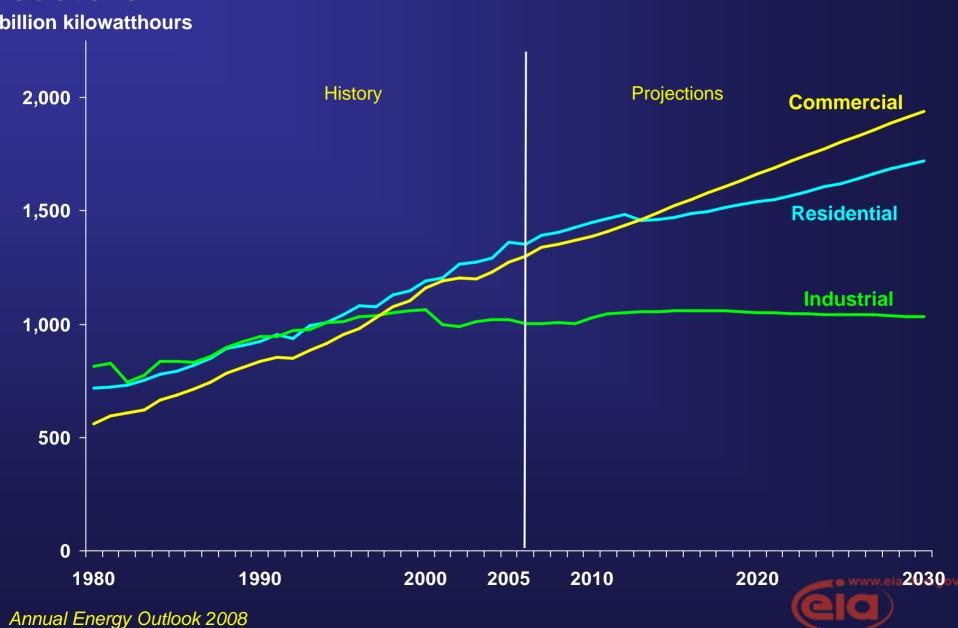


# Coal is predominantly consumed for electricity generation with growing use for CTL.

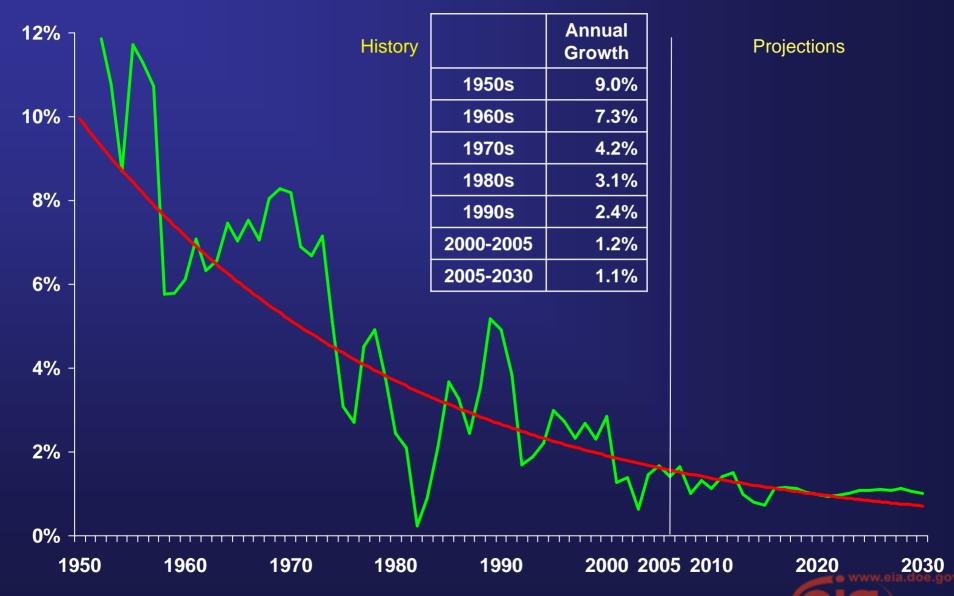




### U.S. electricity consumption grows slowly in all sectors

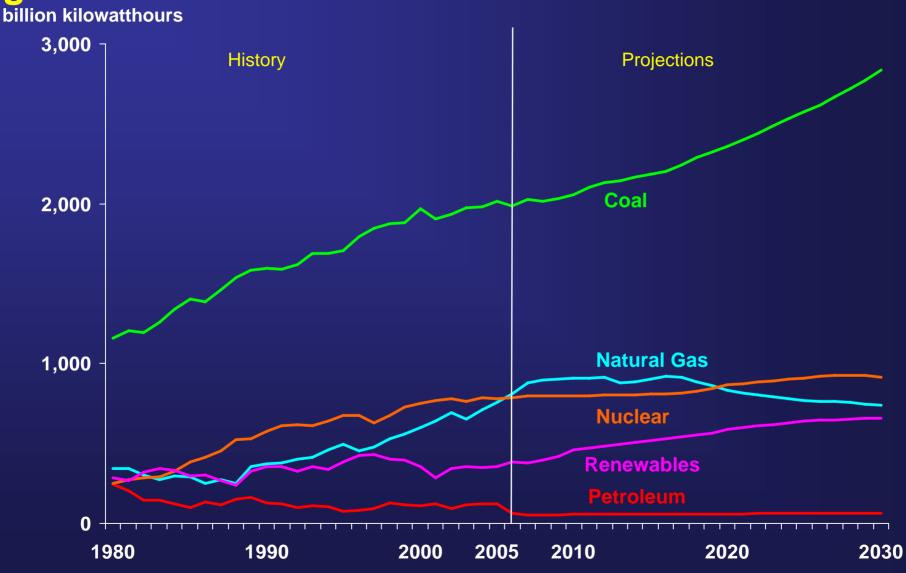


### U.S. electricity demand growth has been trending downward

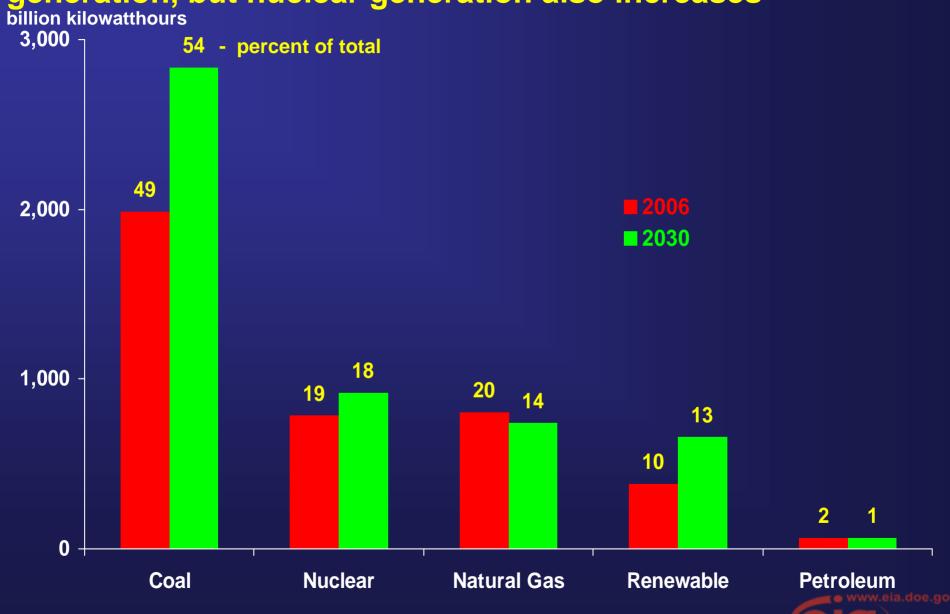


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### Coal remains the largest source of electricity generation

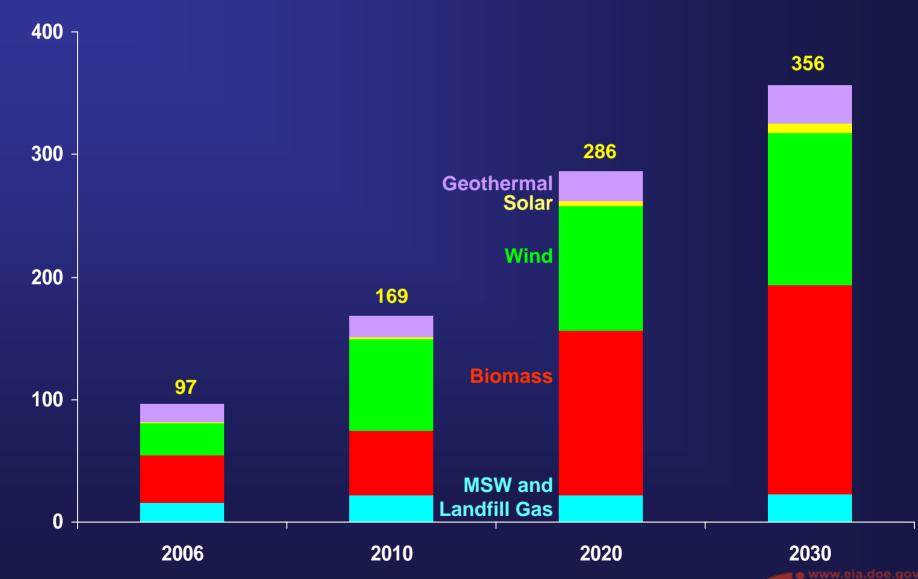


#### Coal and renewables gain larger shares of electricity generation, but nuclear generation also increases

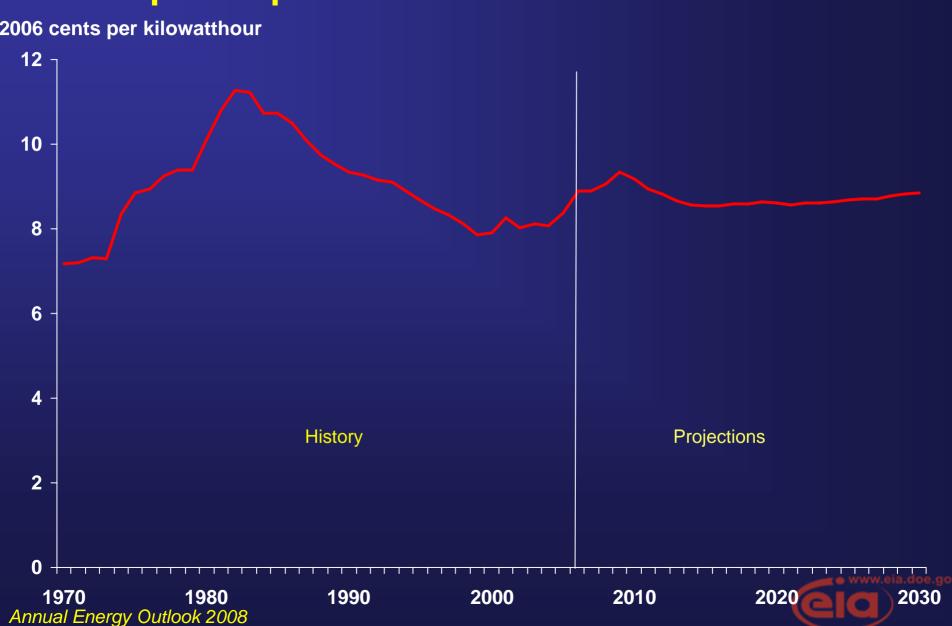


#### Nonhydroelectric renewables make significant gains

billion kilowatthours

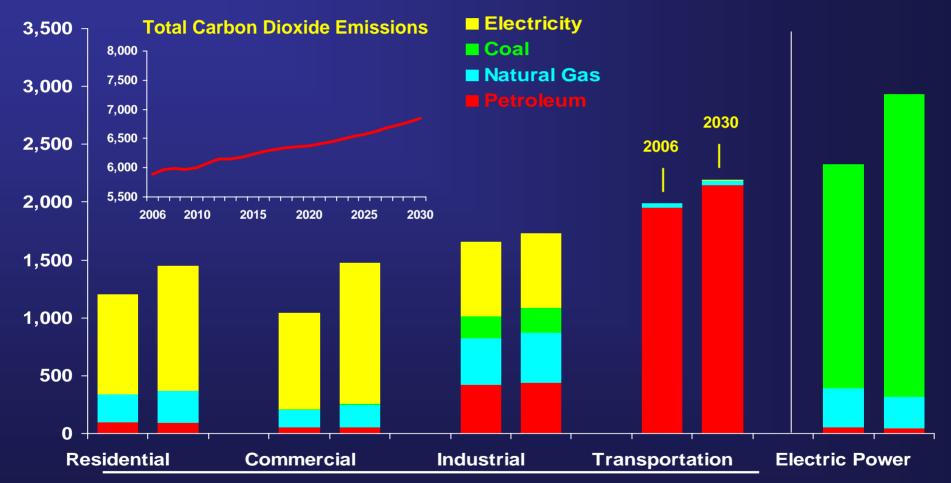


# Price of electricity follows pattern of delivered fuels used at power plants



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

million metric tons



**Delivered, including losses** 



#### Annual Energy Outlook 2008 reference case indicates that through 2030....

- Traditional fossil fuels are expected to continue to meet the bulk of energy requirements over the projection period
- U.S. energy demand is projected to grow at an average annual rate of 0.7 percent
- The energy efficiency of the economy is projected to increase at an average annual rate of 1.7 percent
- U.S. oil import dependence, measured as a share of U.S. oil use, is expected to decrease by 2030
- U.S. natural gas use is projected to decline after 2016
- Future growth in U.S. natural gas supplies depends on unconventional domestic production, natural gas from Alaska, and liquefied natural gas imports
- Carbon dioxide emissions from energy are projected to grow at an average annual rate of 0.6 percent



#### **Periodic Reports**

Petroleum Status and Natural Gas Storage Reports, weekly

Short-Term Energy Outlook, monthly

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

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

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

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

Analysis of Oil and Gas Production in the Arctic National Wildlife Refuge,

March 2004

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

"Restricted Natural Gas Supply Case," Annual Energy Outlook 2005

www.eia.doe.gov

**Guy F. Caruso** 

guy.caruso@eia.doe.gov

