

# *Annual Energy Outlook 2008*

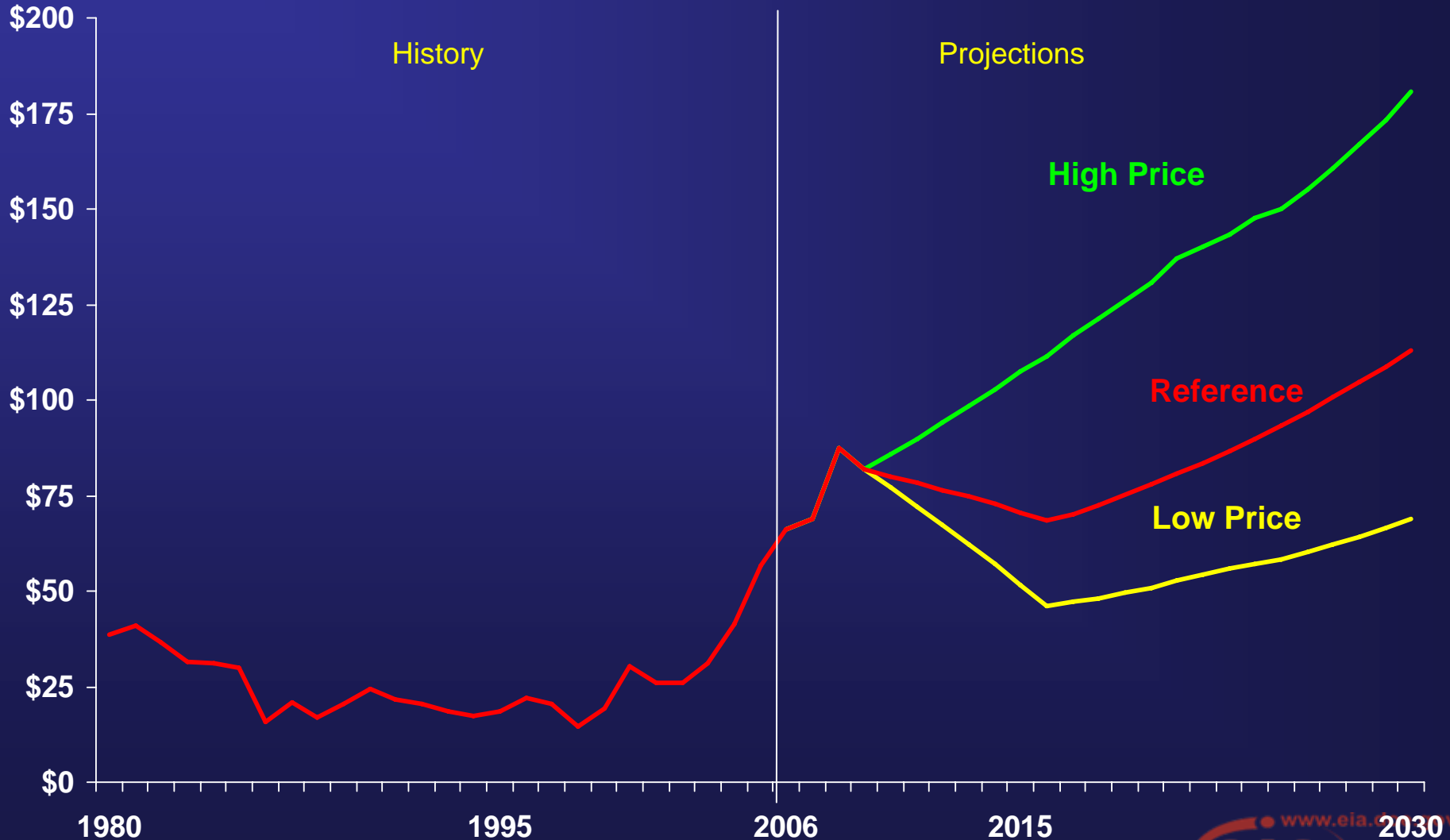
**Guy F. Caruso**  
**Administrator**  
**Energy Information Administration**

**University of Connecticut Energy Seminar**

**April 16, 2008**

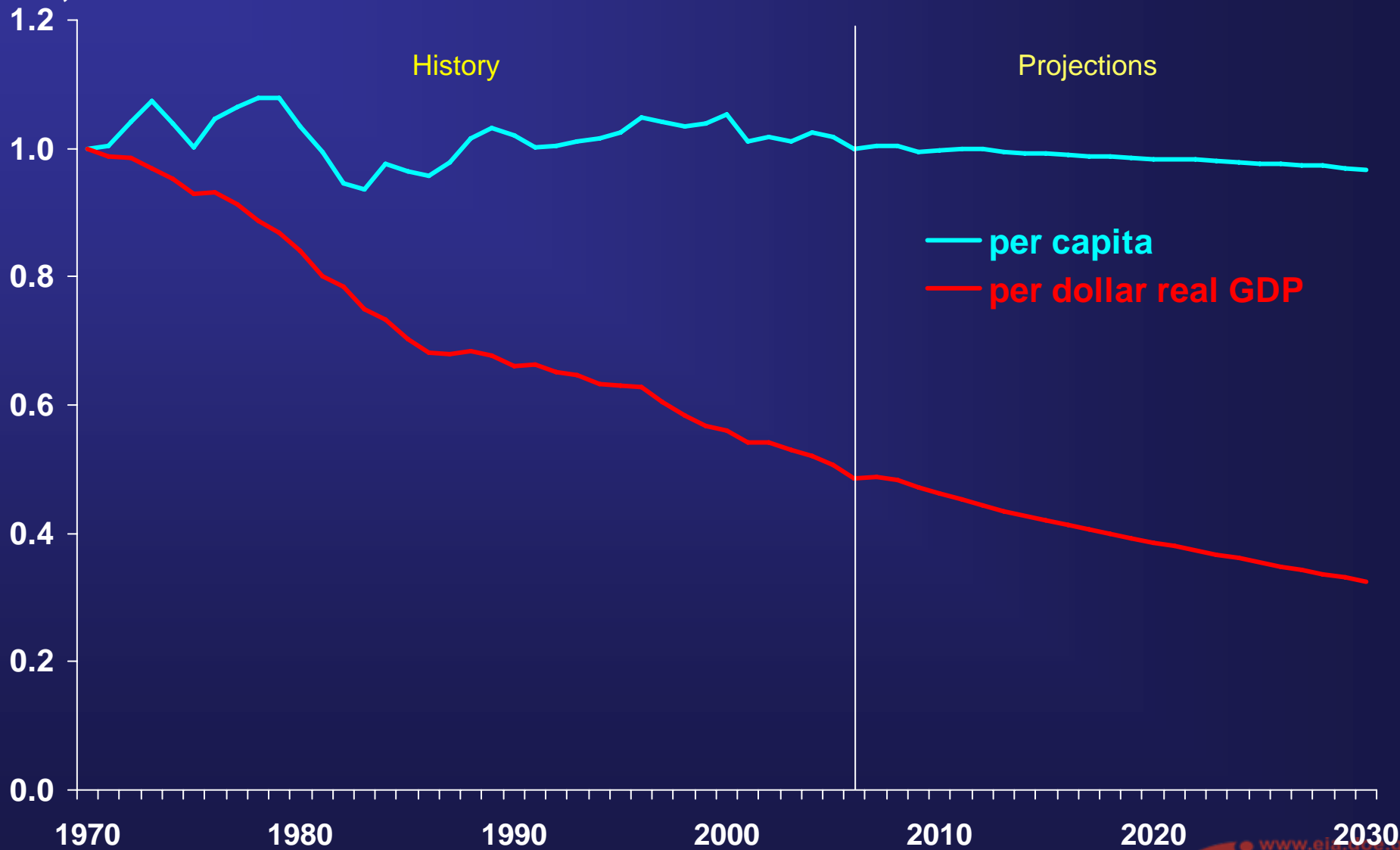
# World oil prices are higher in all AEO2008 cases

nominal dollars per barrel



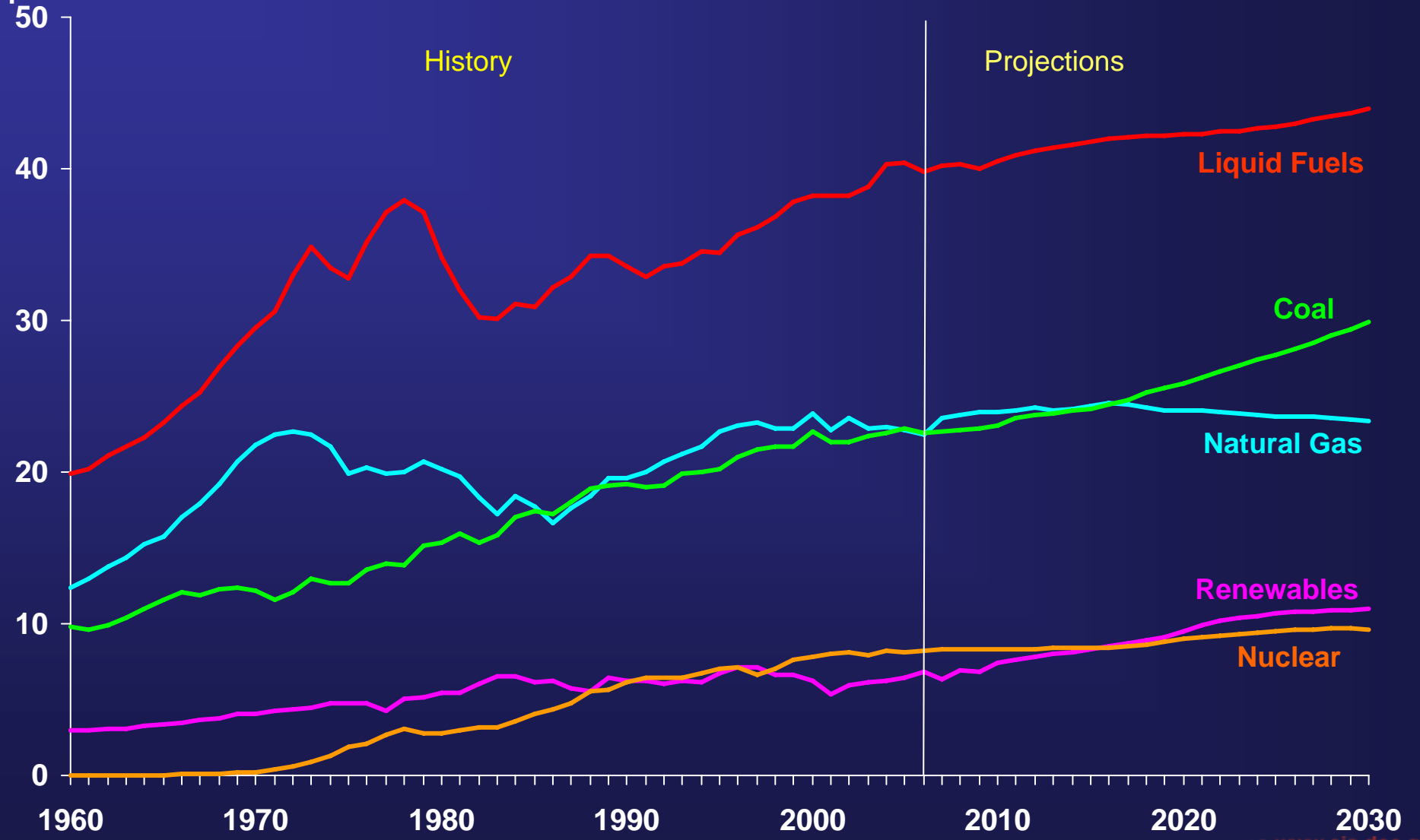
# Energy use per capita declines slightly and energy intensity falls by 1.7 percent per year

index, 1970=1



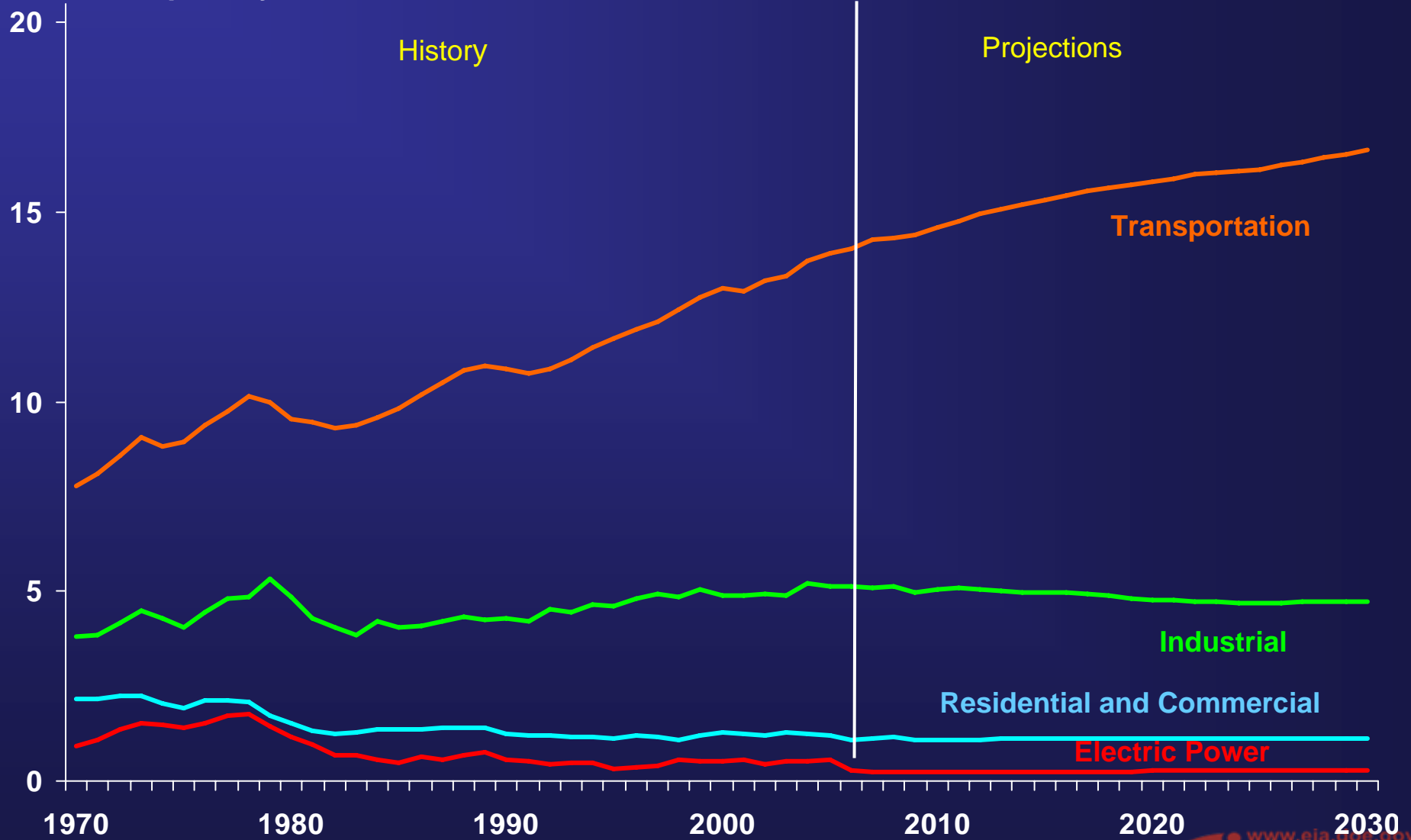
# Liquid fuels continue to dominate primary energy consumption in the United States

quadrillion Btu



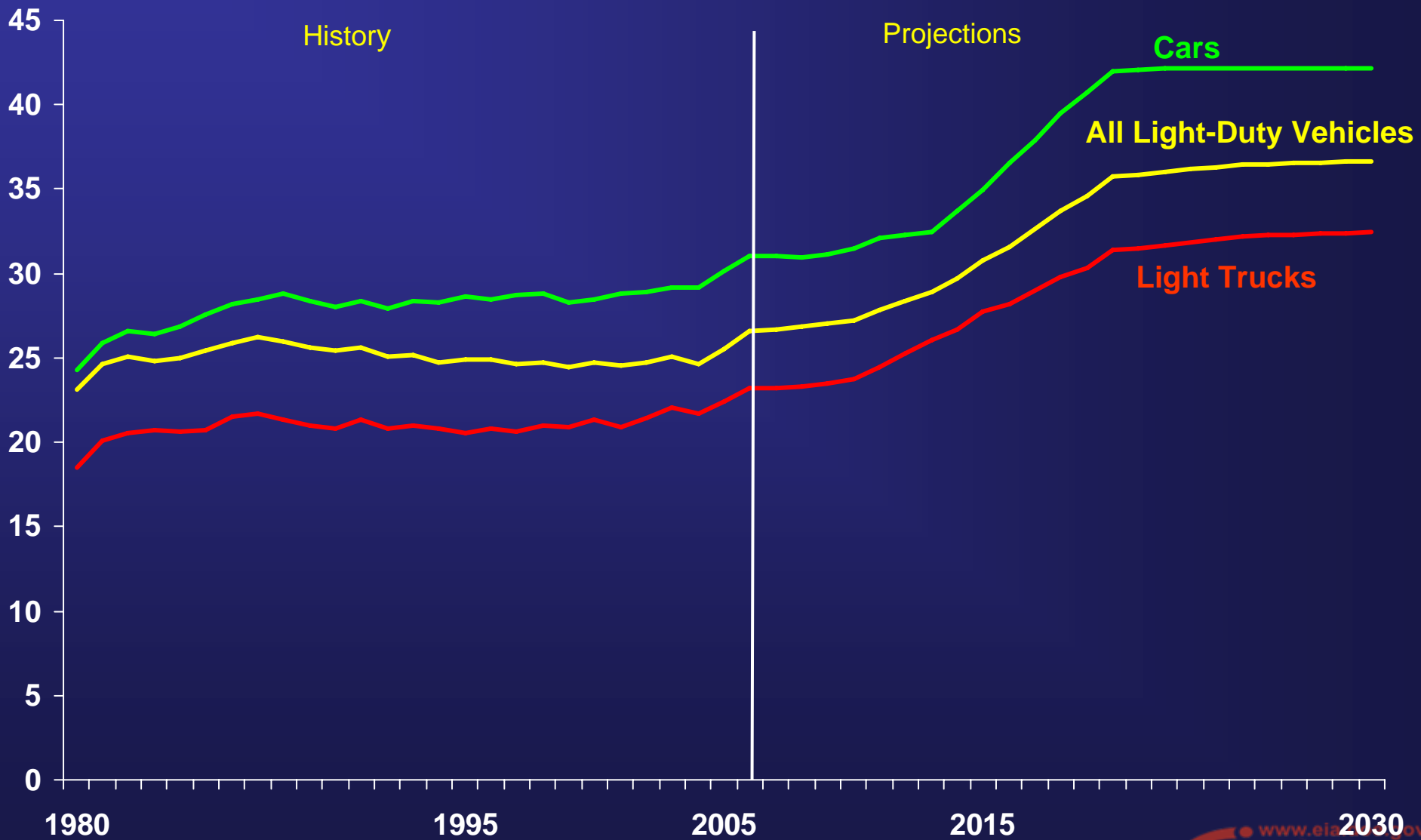
# The transportation sector dominates liquid fuel consumption

million barrels per day



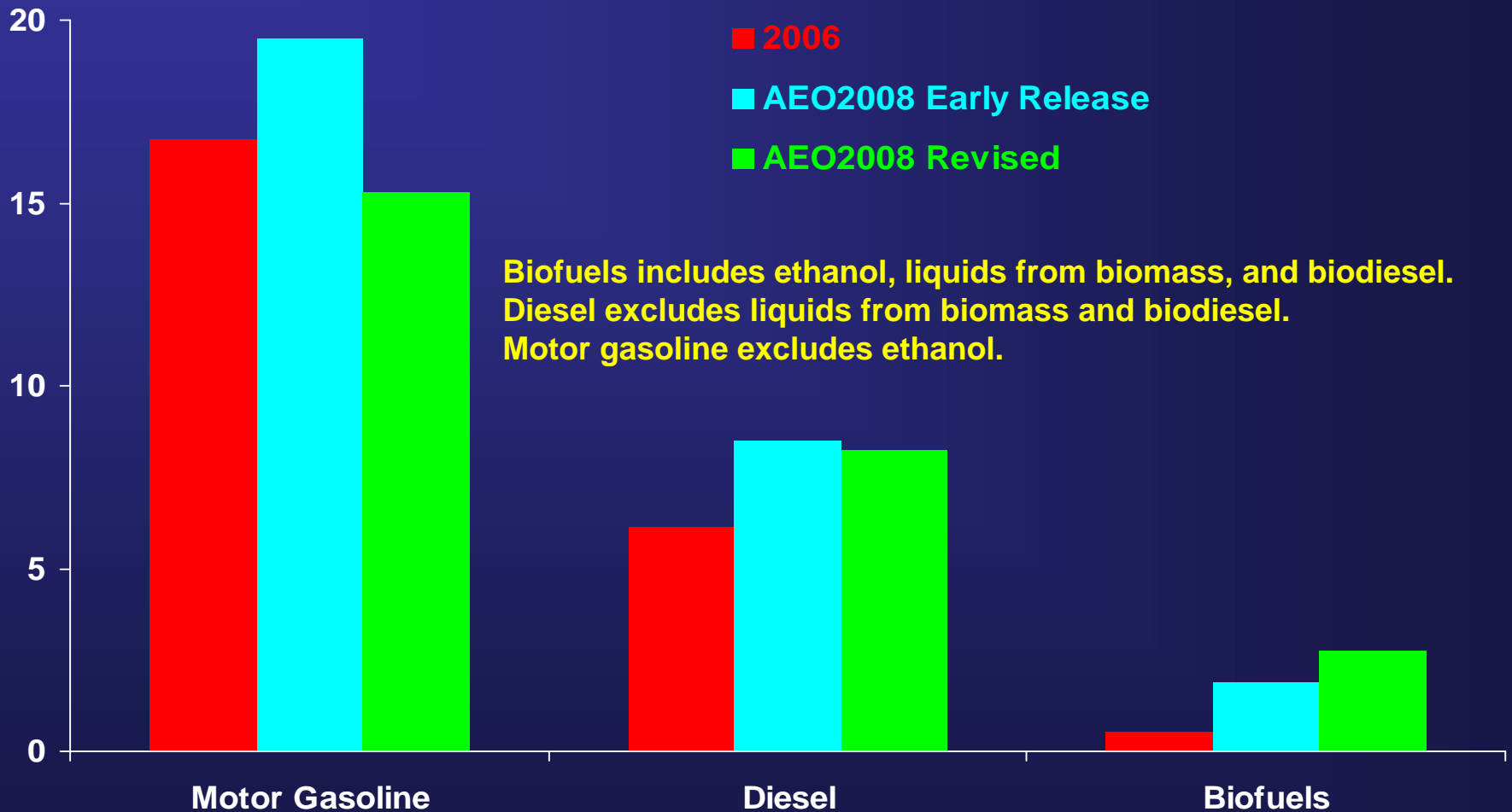
# Average fuel economy of new light-duty vehicles is expected to reach 36.6 miles per gallon

miles per gallon



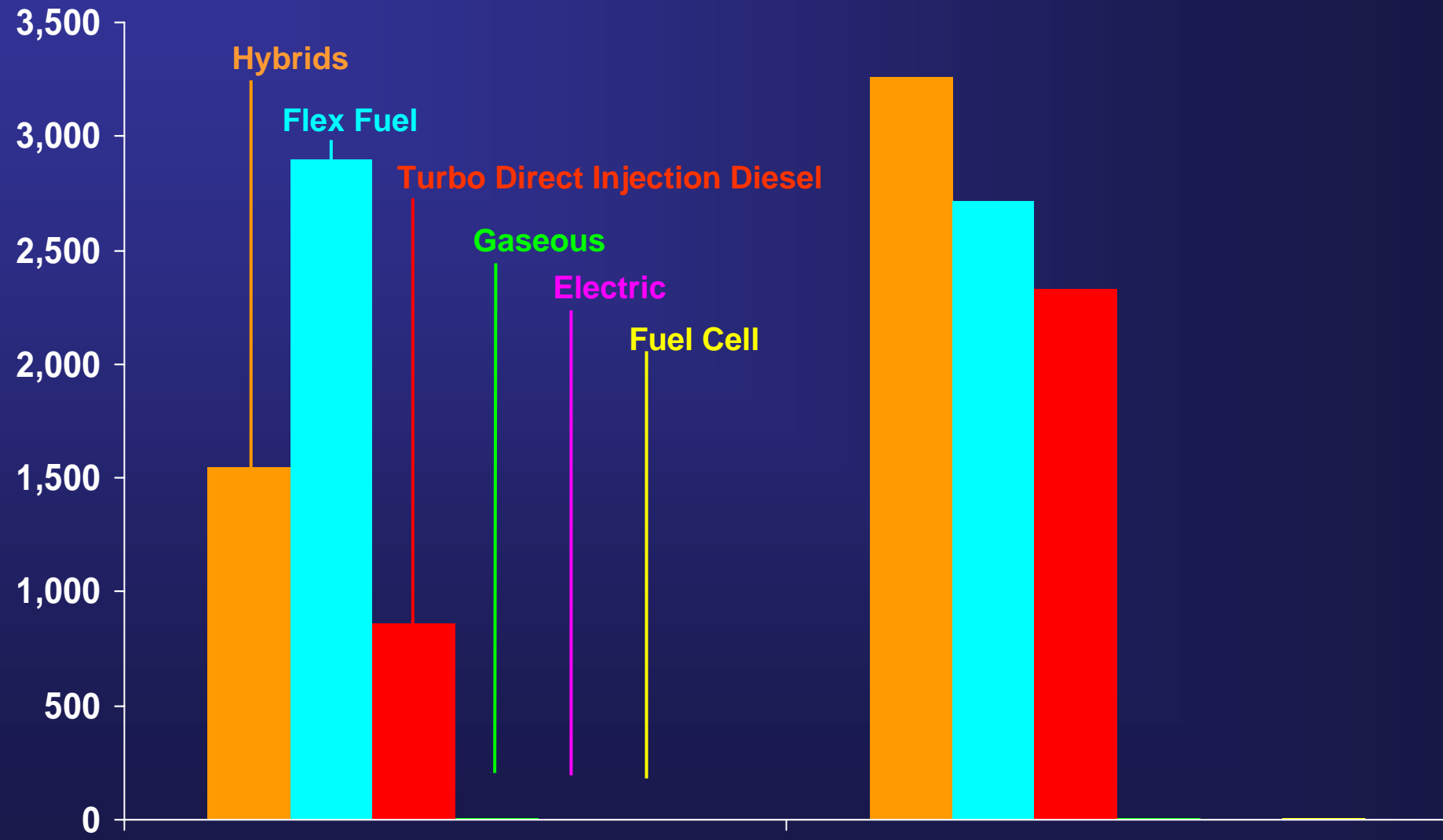
# Transportation energy use shifts slightly from petroleum to biofuels

quadrillion Btu



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

thousand units



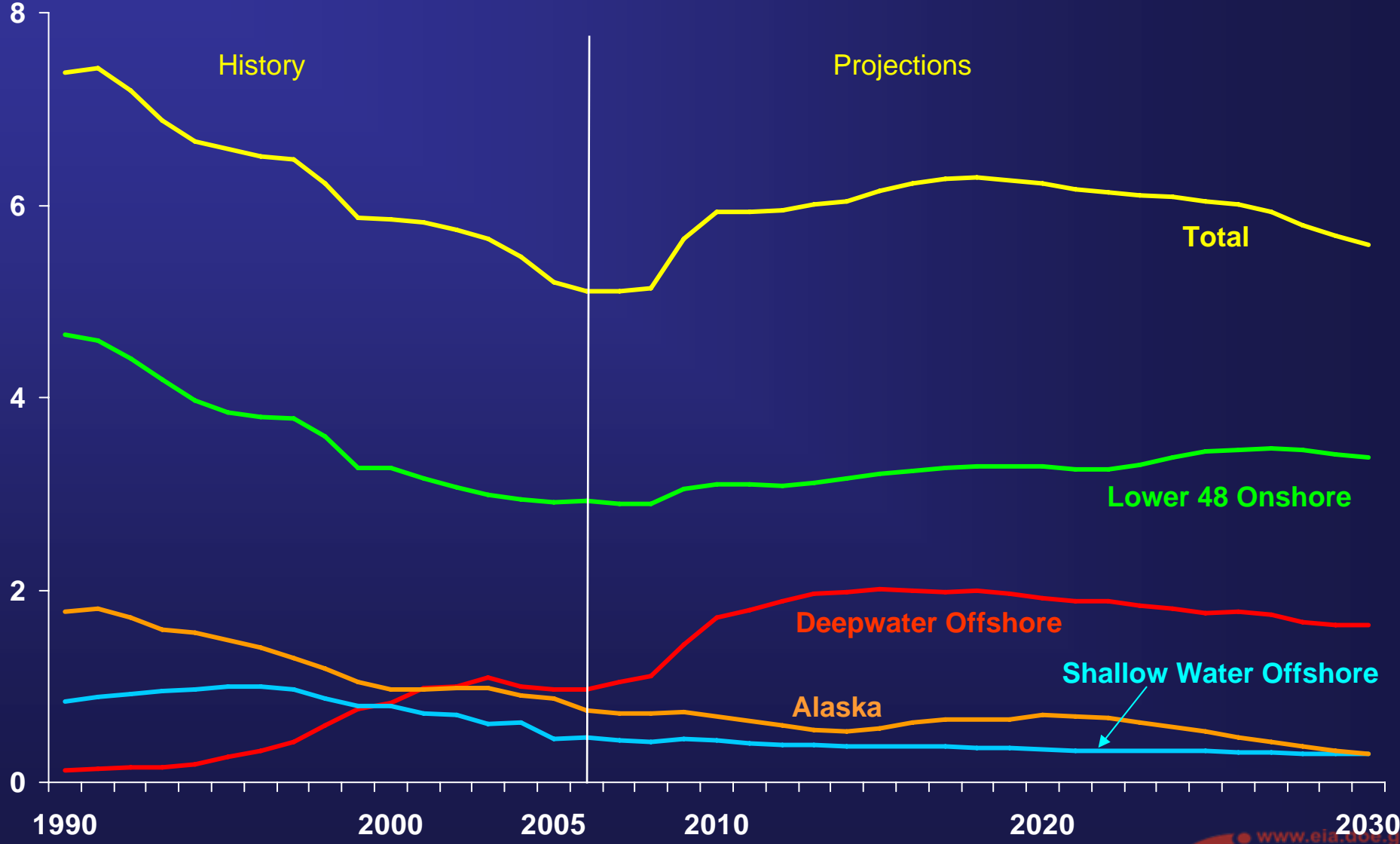
2015

2030



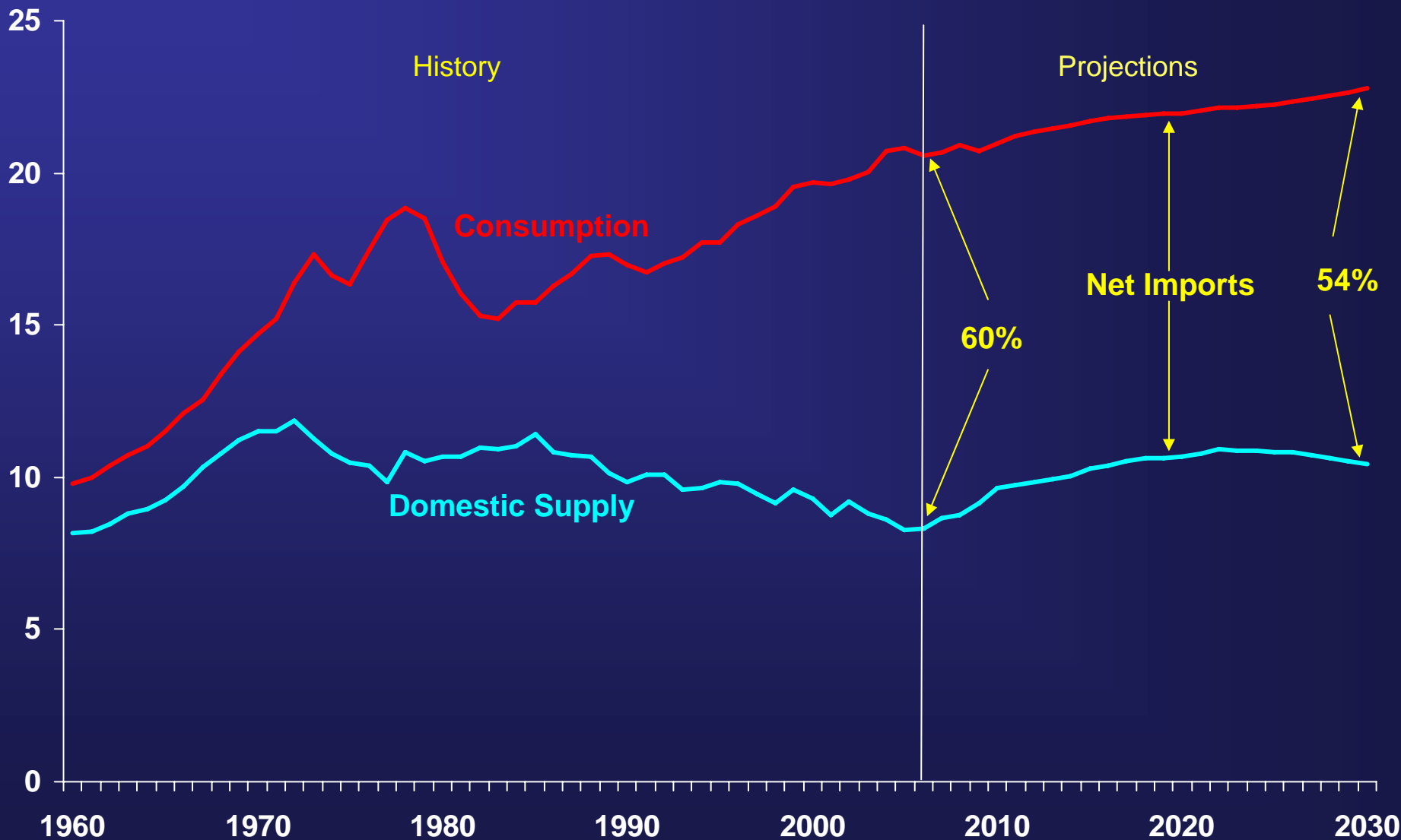
# Crude oil production is primarily from the onshore and deep offshore

million barrels per day



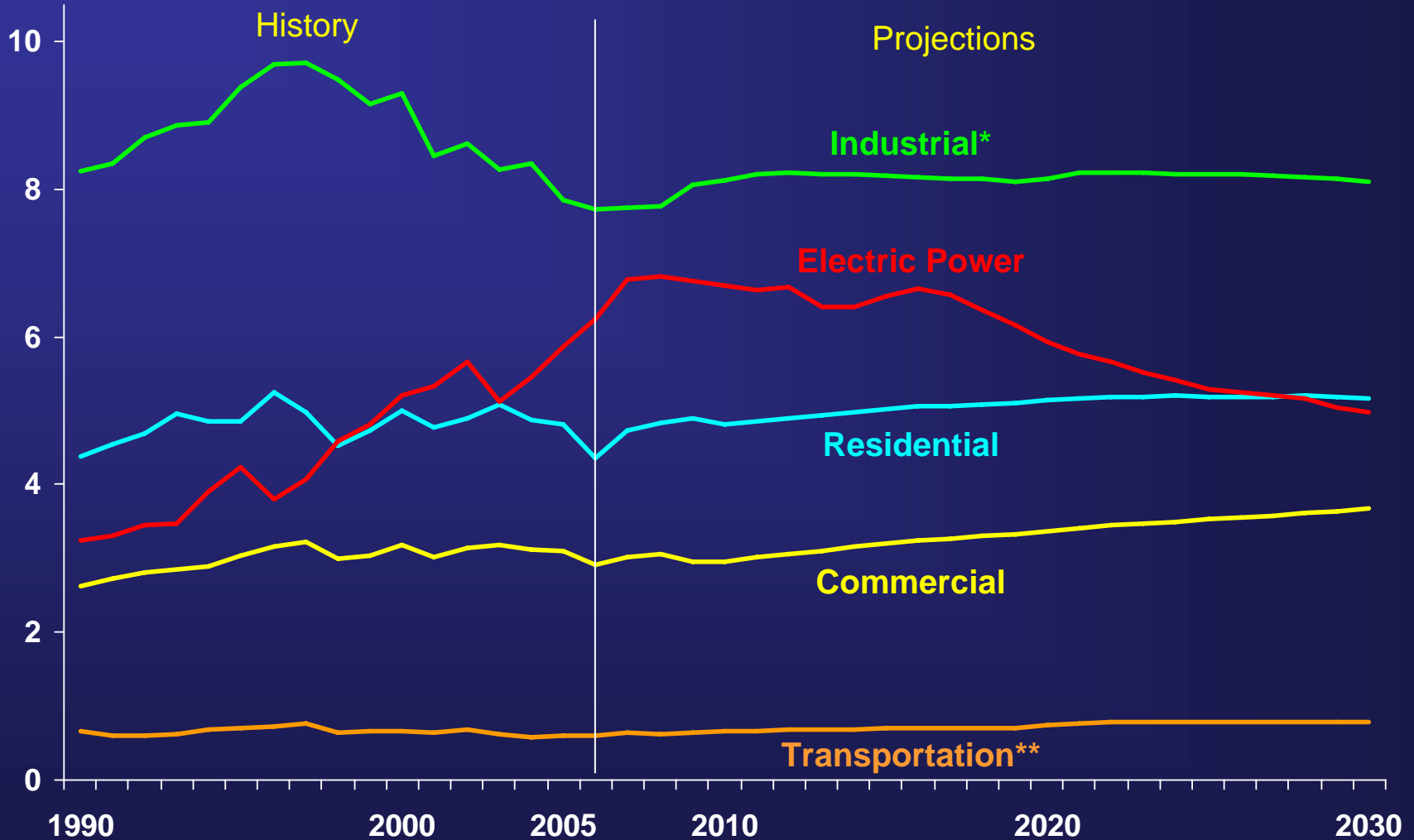
# Dependence on imports of liquid fuels and other petroleum declines by 2030

million barrels per day



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

trillion cubic feet



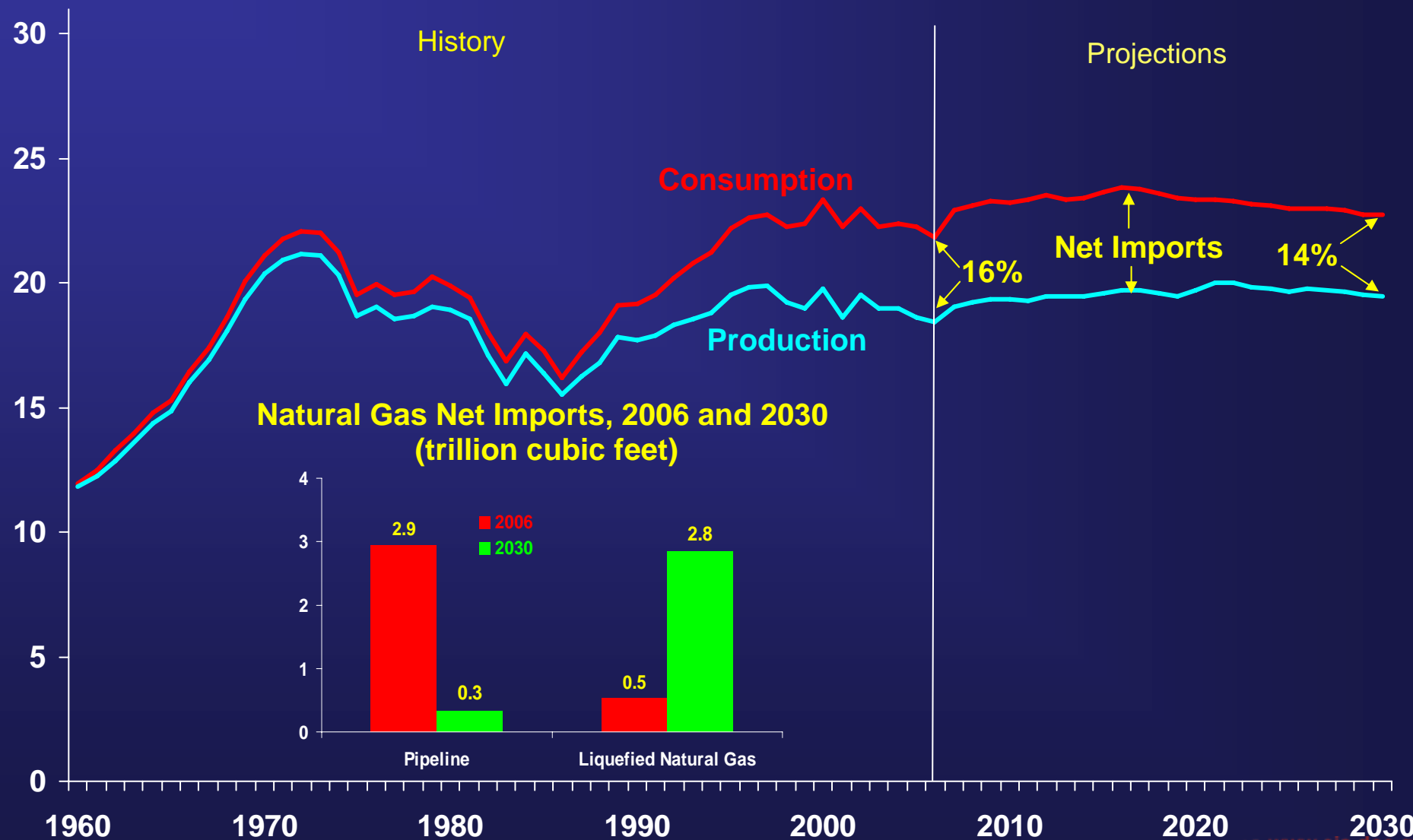
\* Includes lease and plant fuel

\*\* Includes pipeline fuel

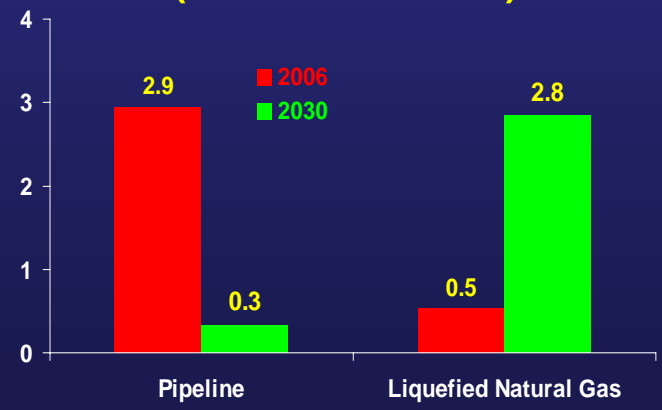
Annual Energy Outlook 2008

# Dependence on natural gas net imports declines slightly

trillion cubic feet

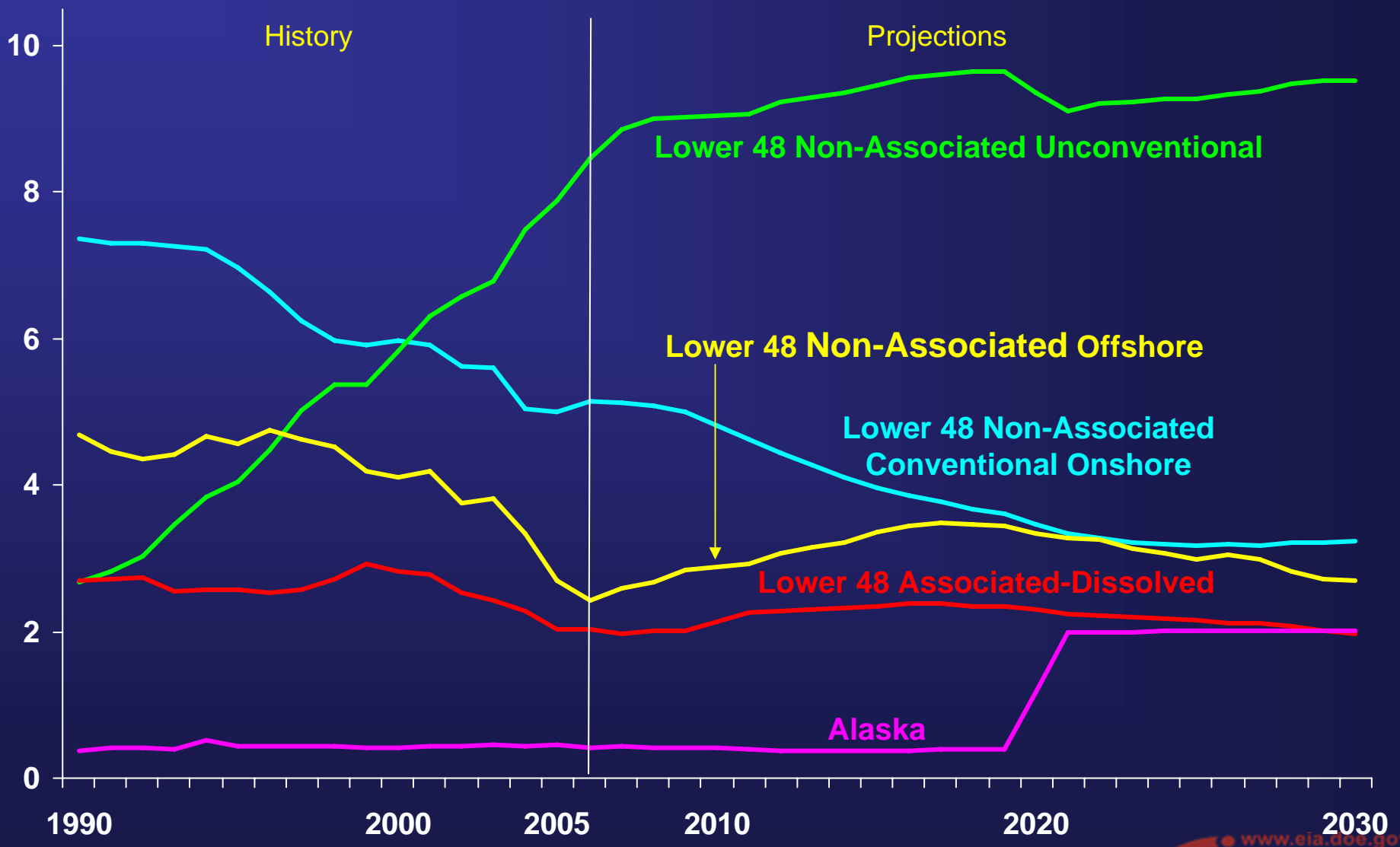


**Natural Gas Net Imports, 2006 and 2030 (trillion cubic feet)**



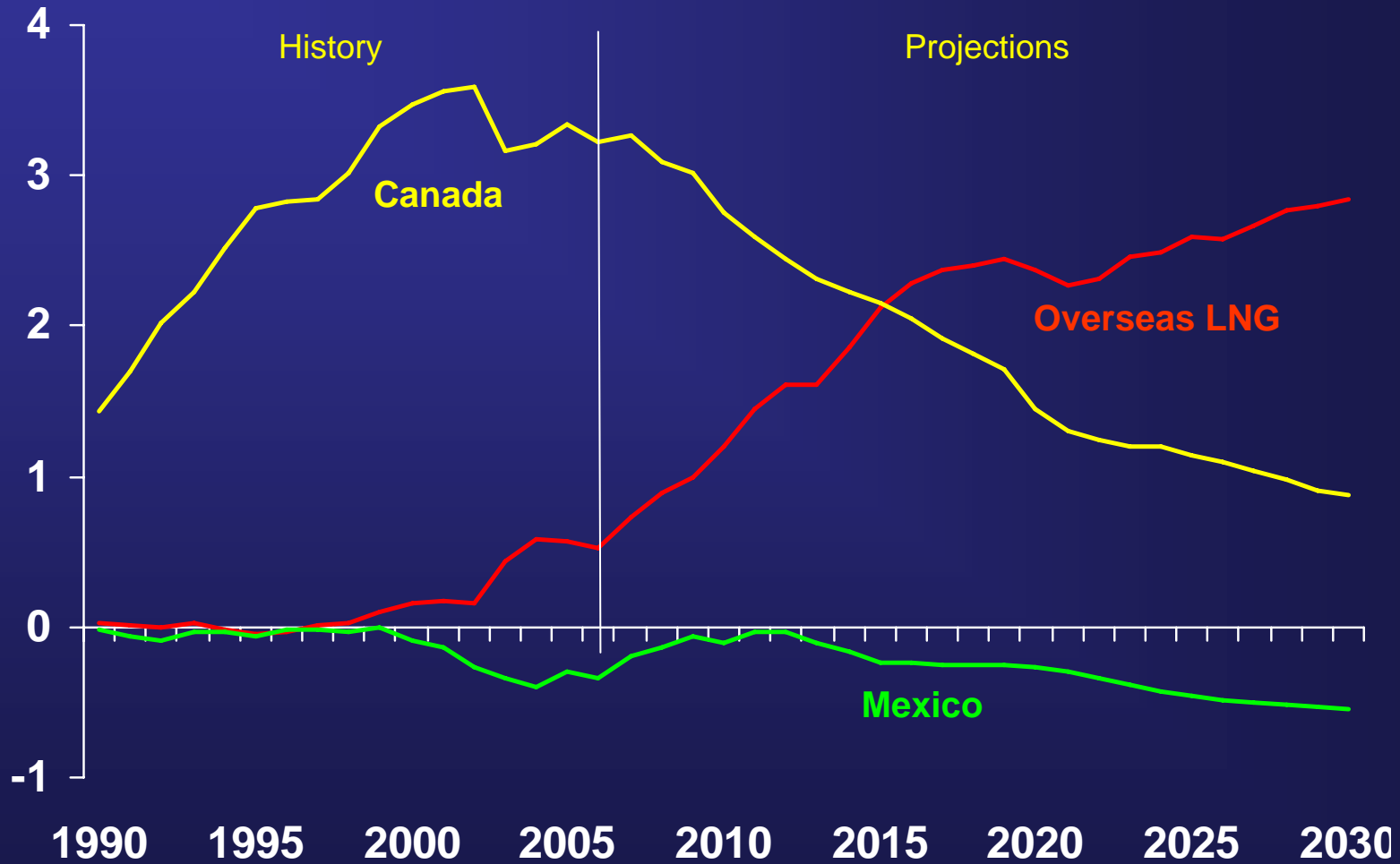
# Unconventional natural gas production will account for nearly half of domestic supply

trillion cubic feet



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

trillion cubic feet



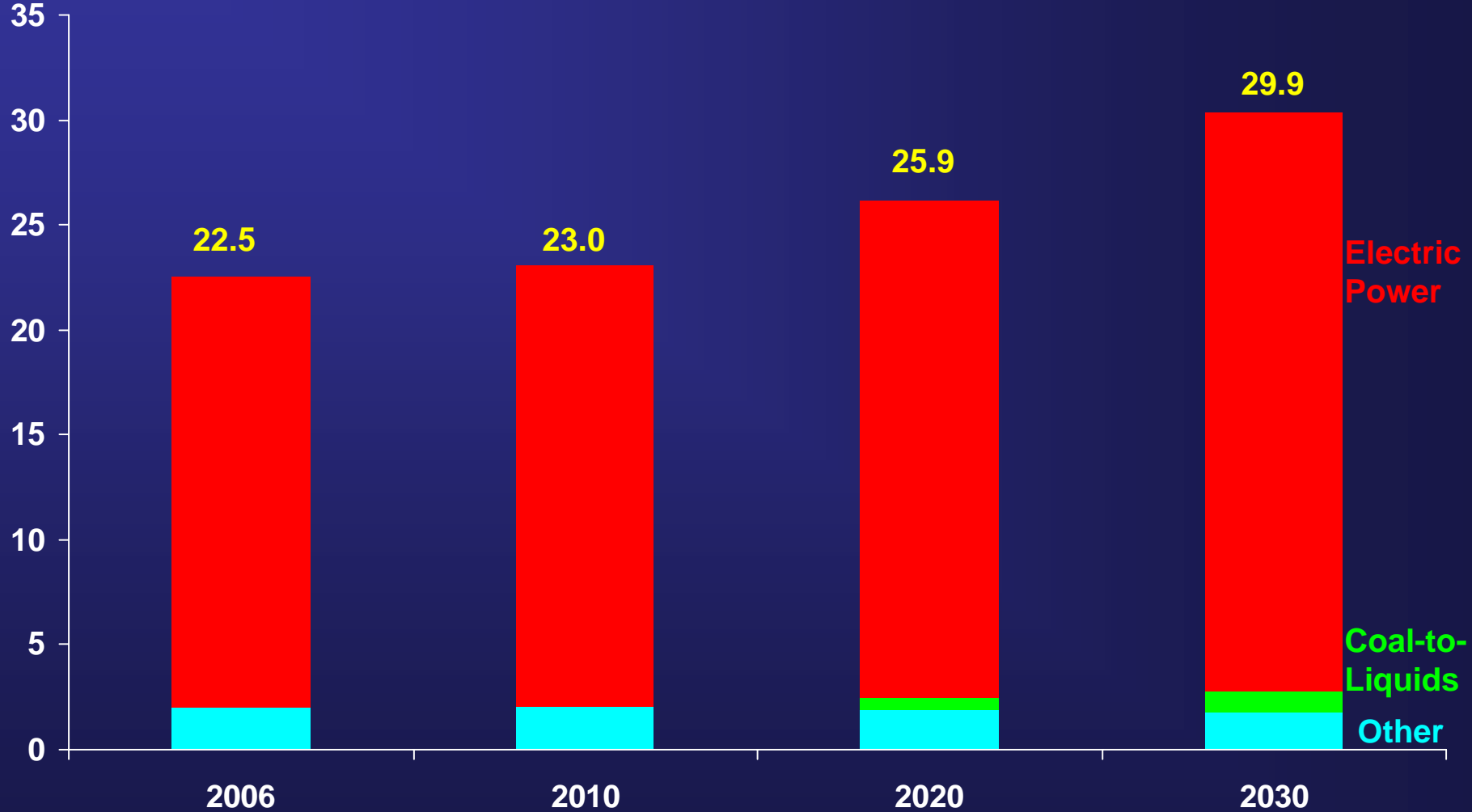
# Natural gas wellhead prices will decline before rising again

2006 dollars per thousand cubic feet



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

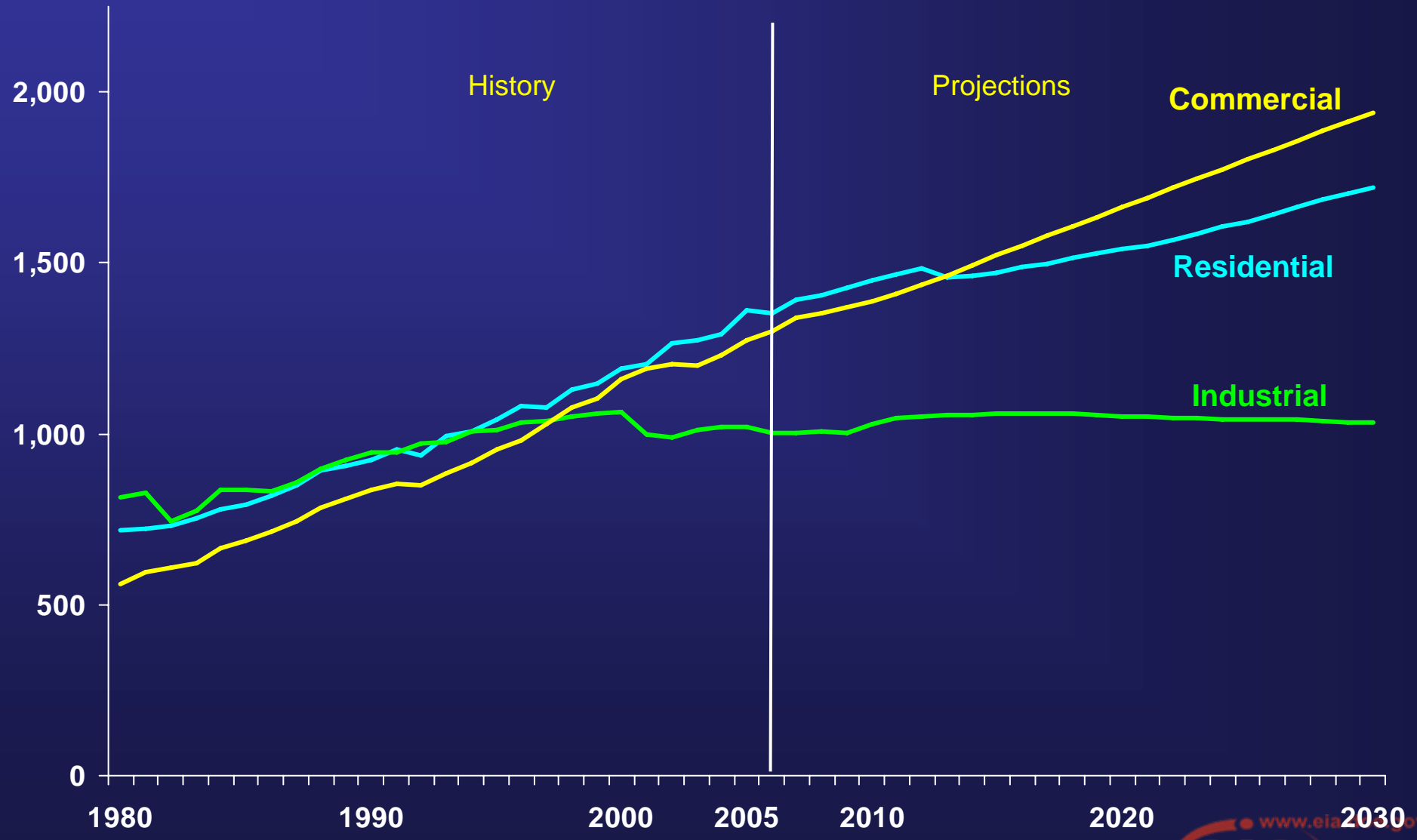
quadrillion Btu



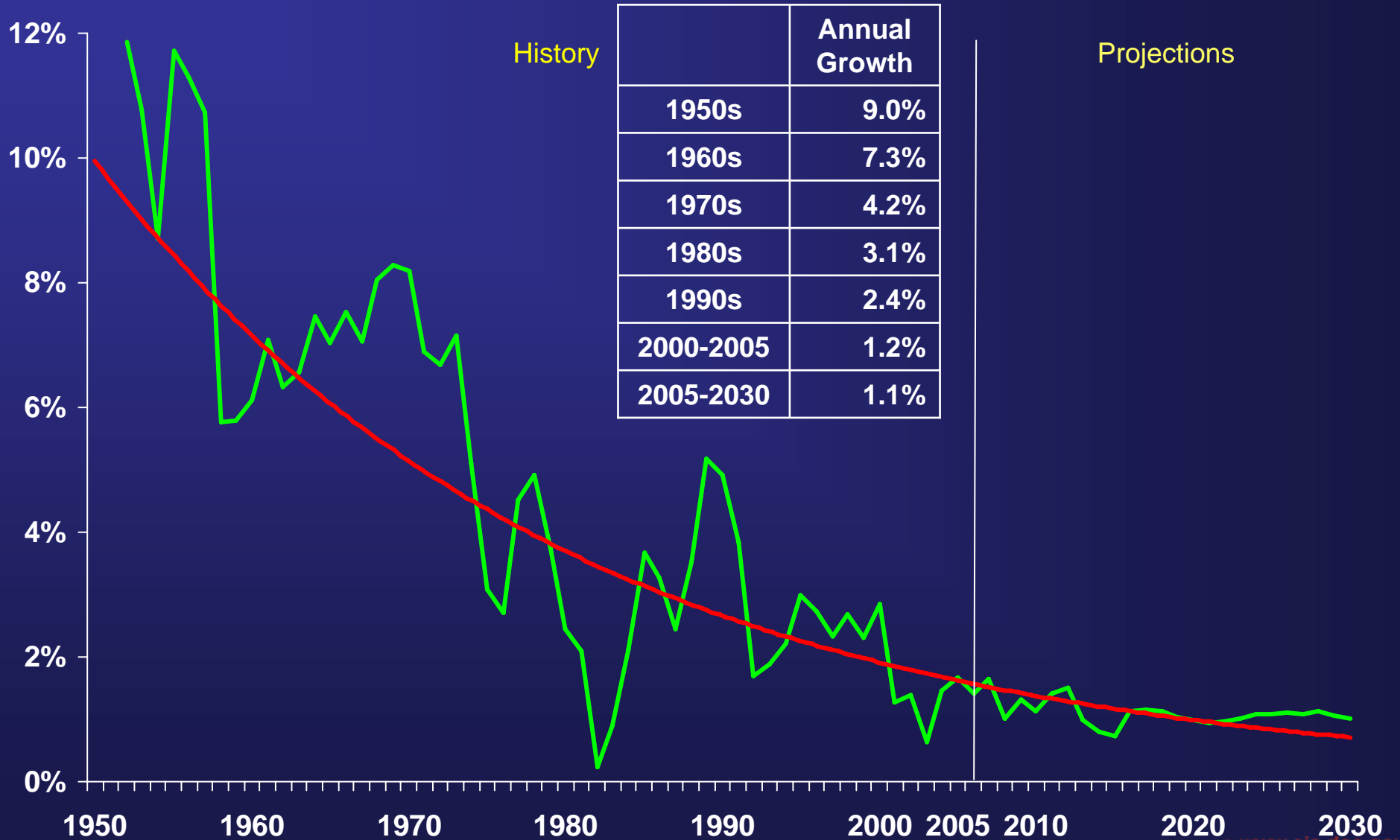


# U.S. electricity consumption grows slowly in all sectors

billion kilowatthours

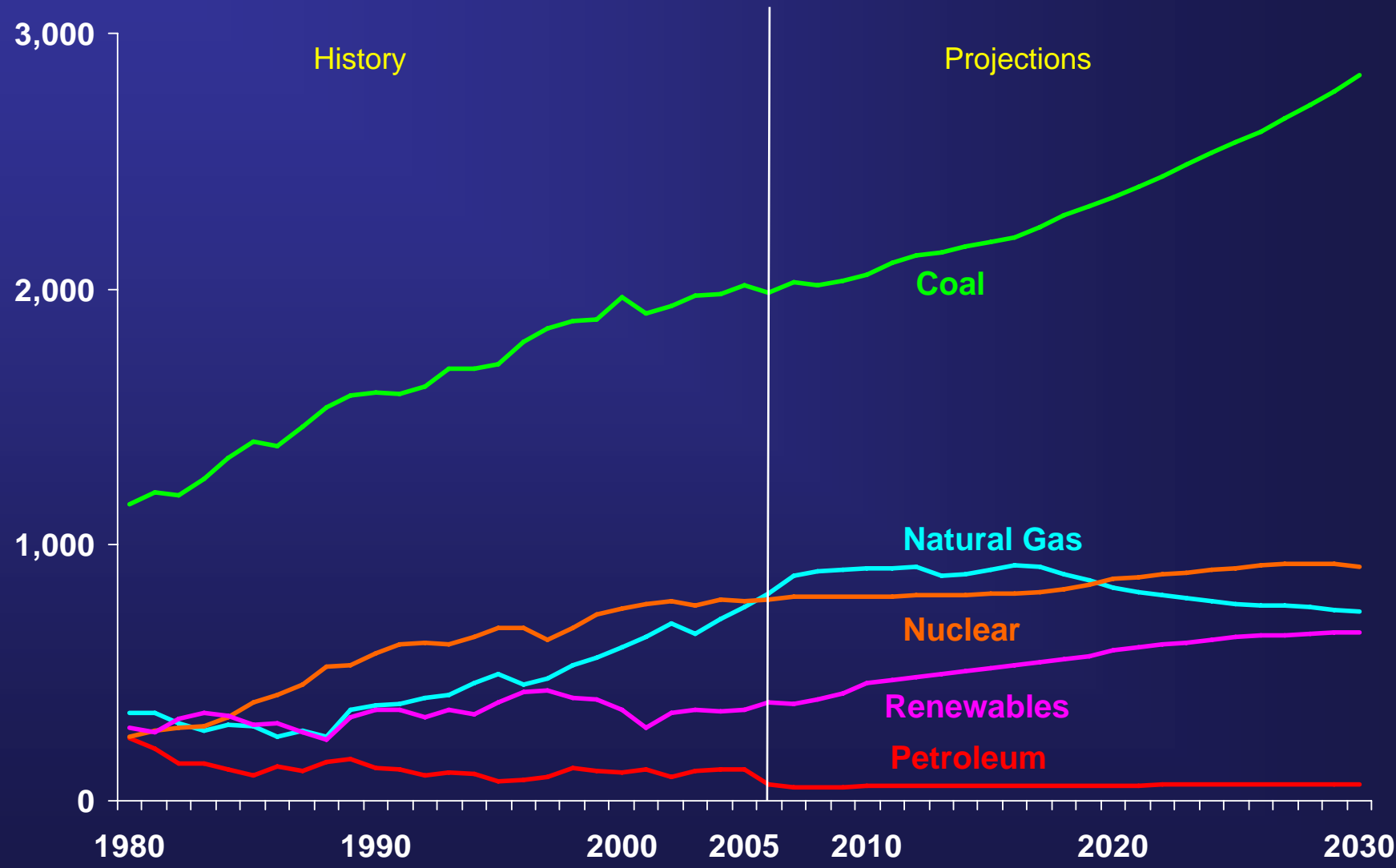


# U.S. electricity demand growth has been trending downward



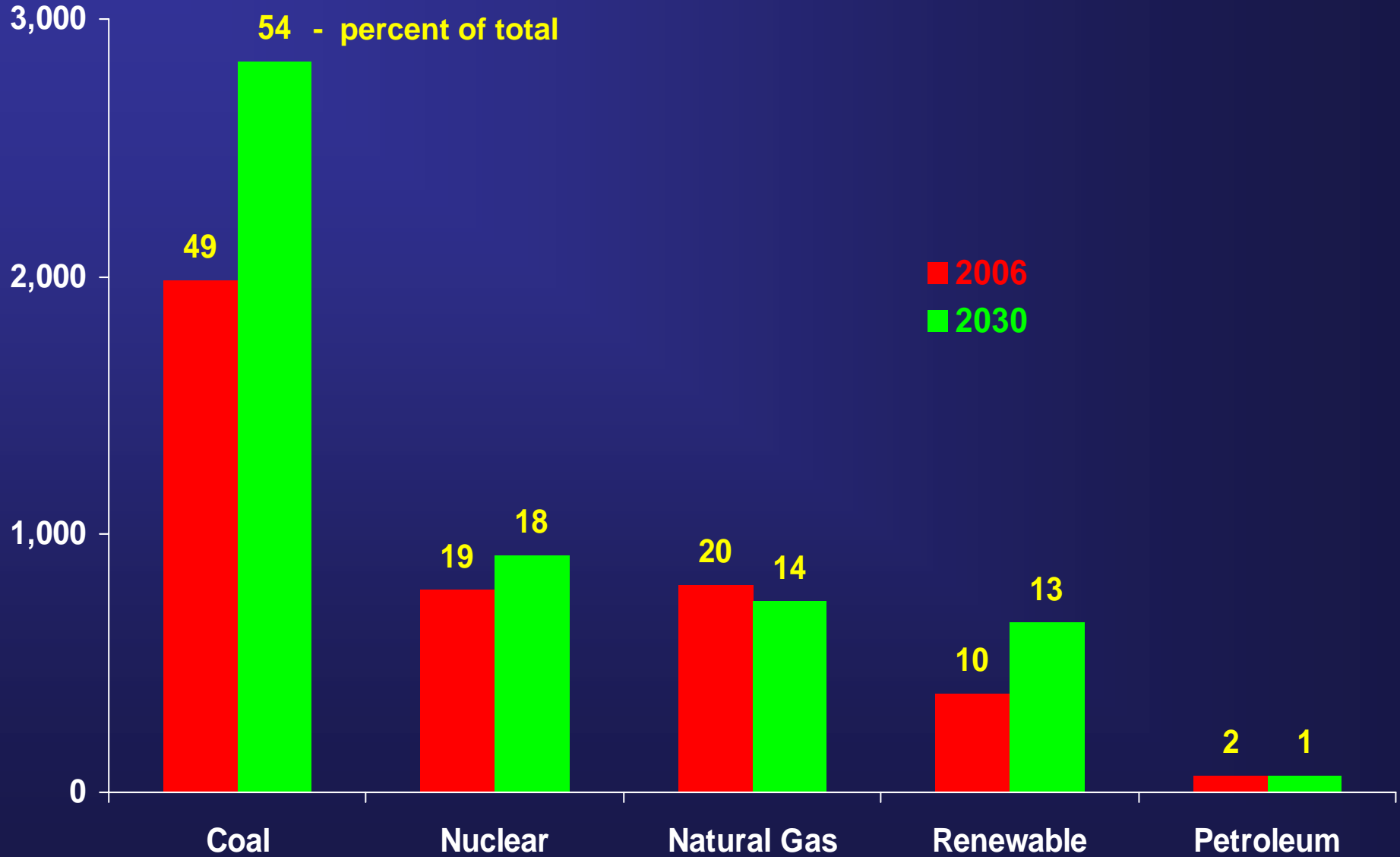
# Coal remains the largest source of electricity generation

billion kilowatthours



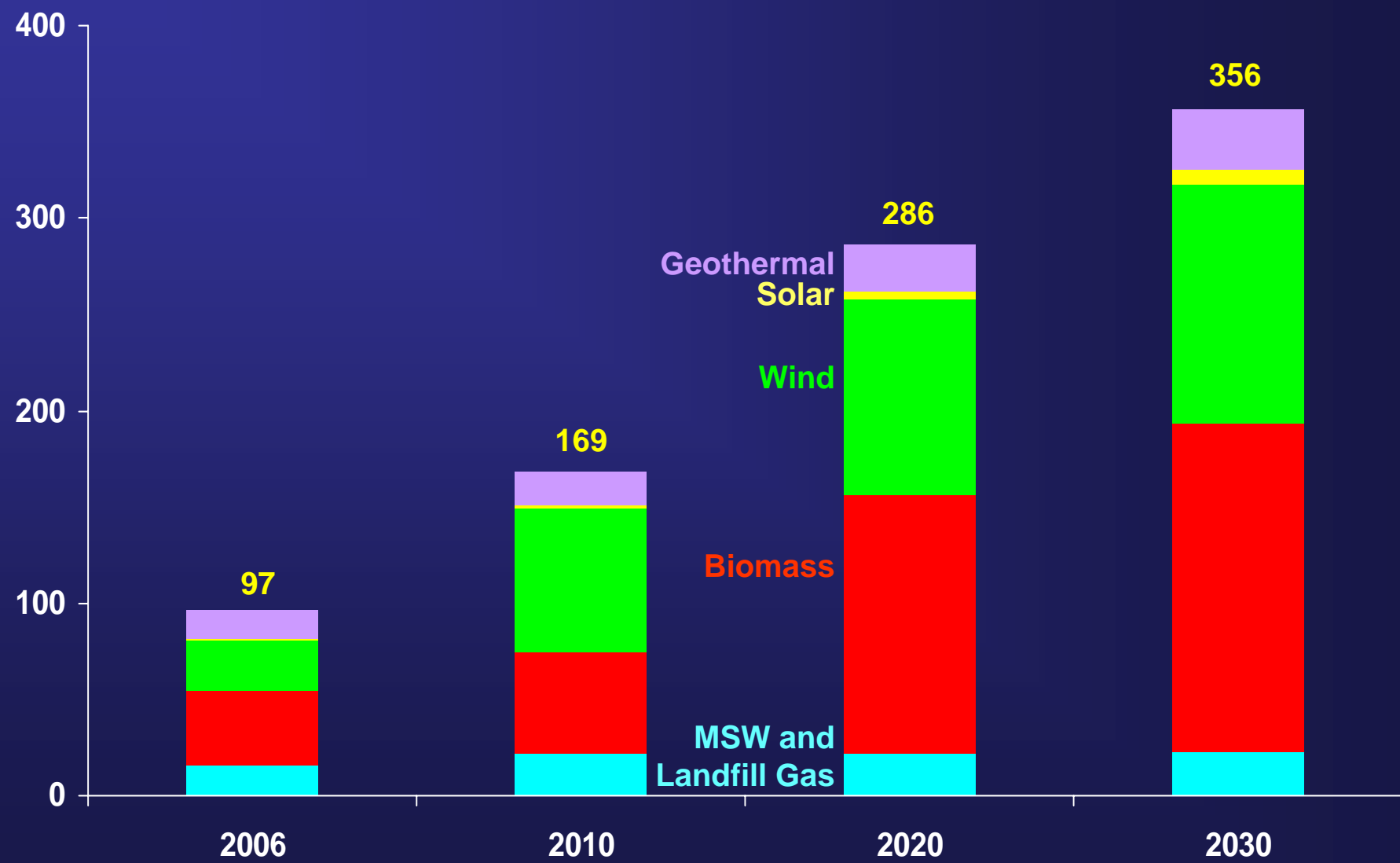
# Coal and renewables gain larger shares of electricity generation, but nuclear generation also increases

billion kilowatthours



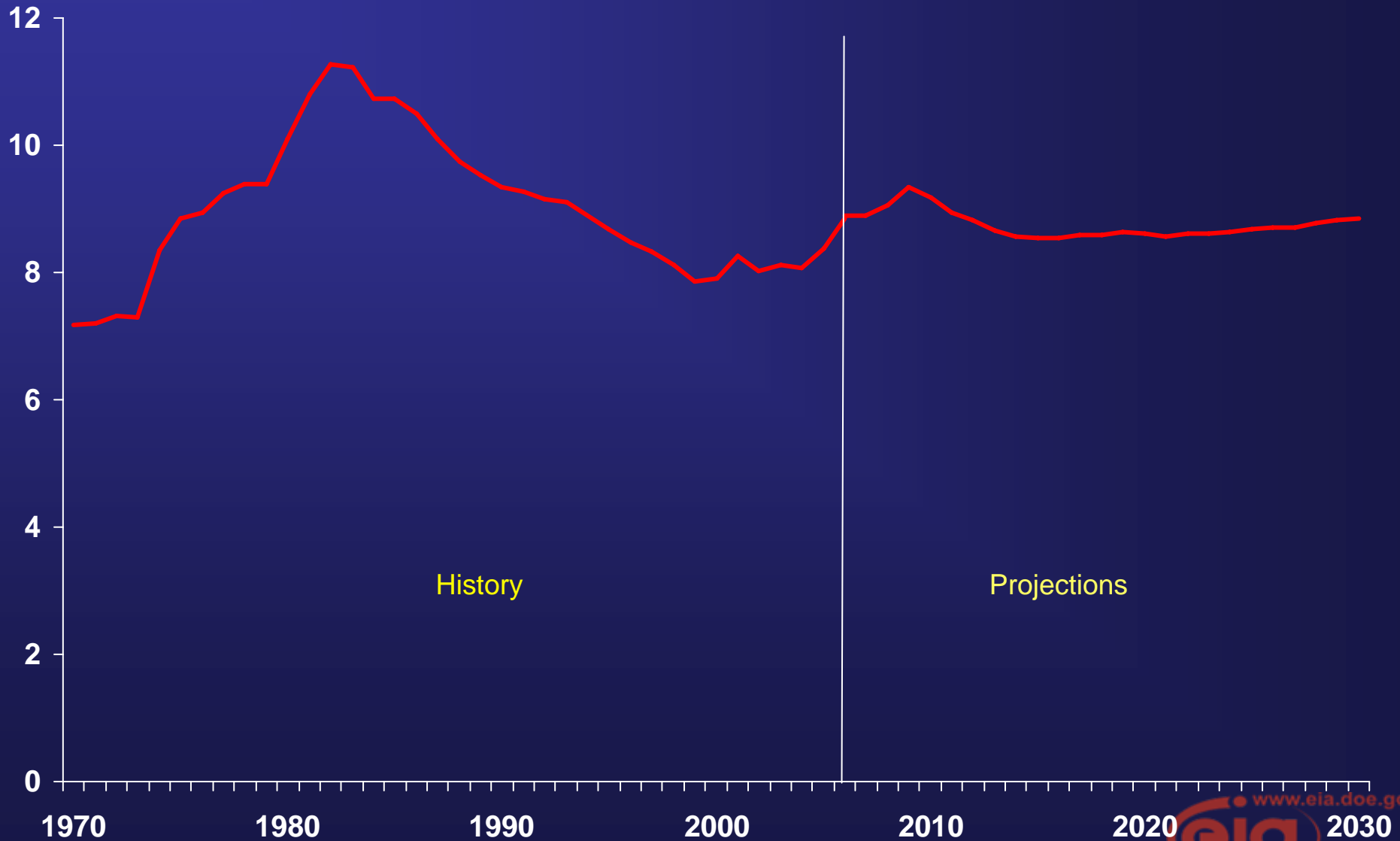
# Nonhydroelectric renewables make significant gains

billion kilowatthours



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

2006 cents per kilowatthour

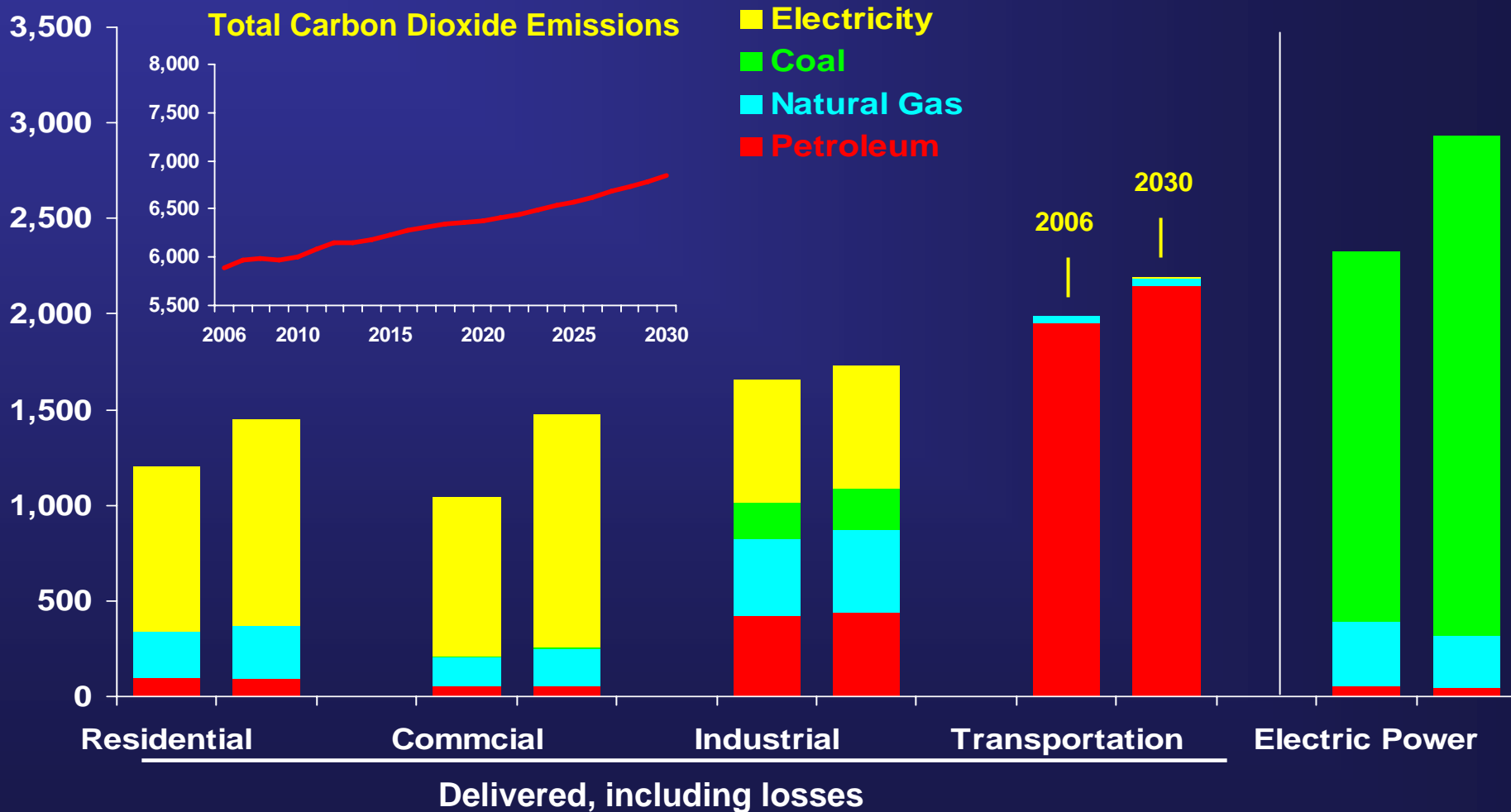


History

Projections

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

million metric tons



## ***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*

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