

Annual Energy Outlook 2006

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**Office of Integrated Analysis and Forecasting
Energy Information Administration**

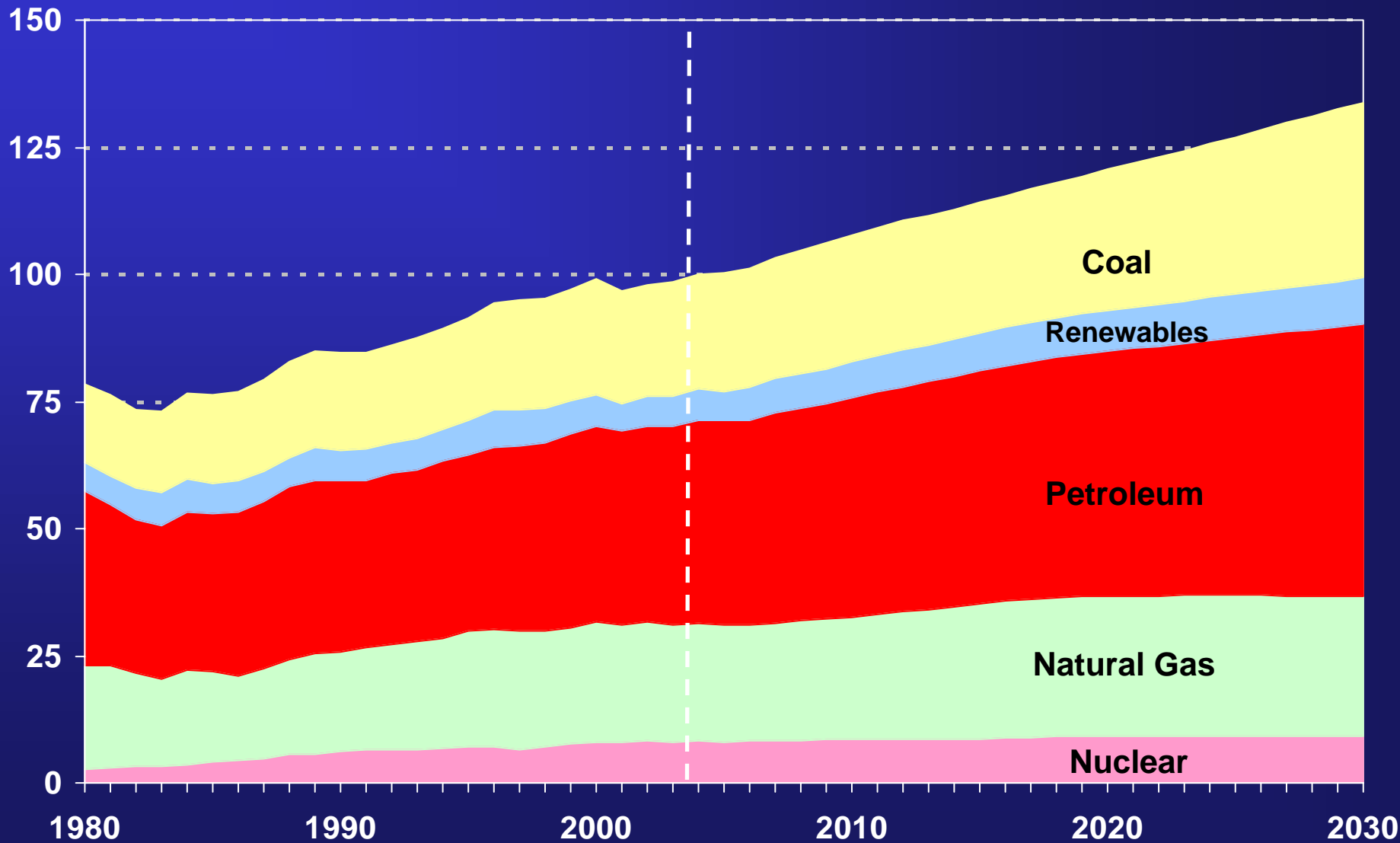
March 27, 2006



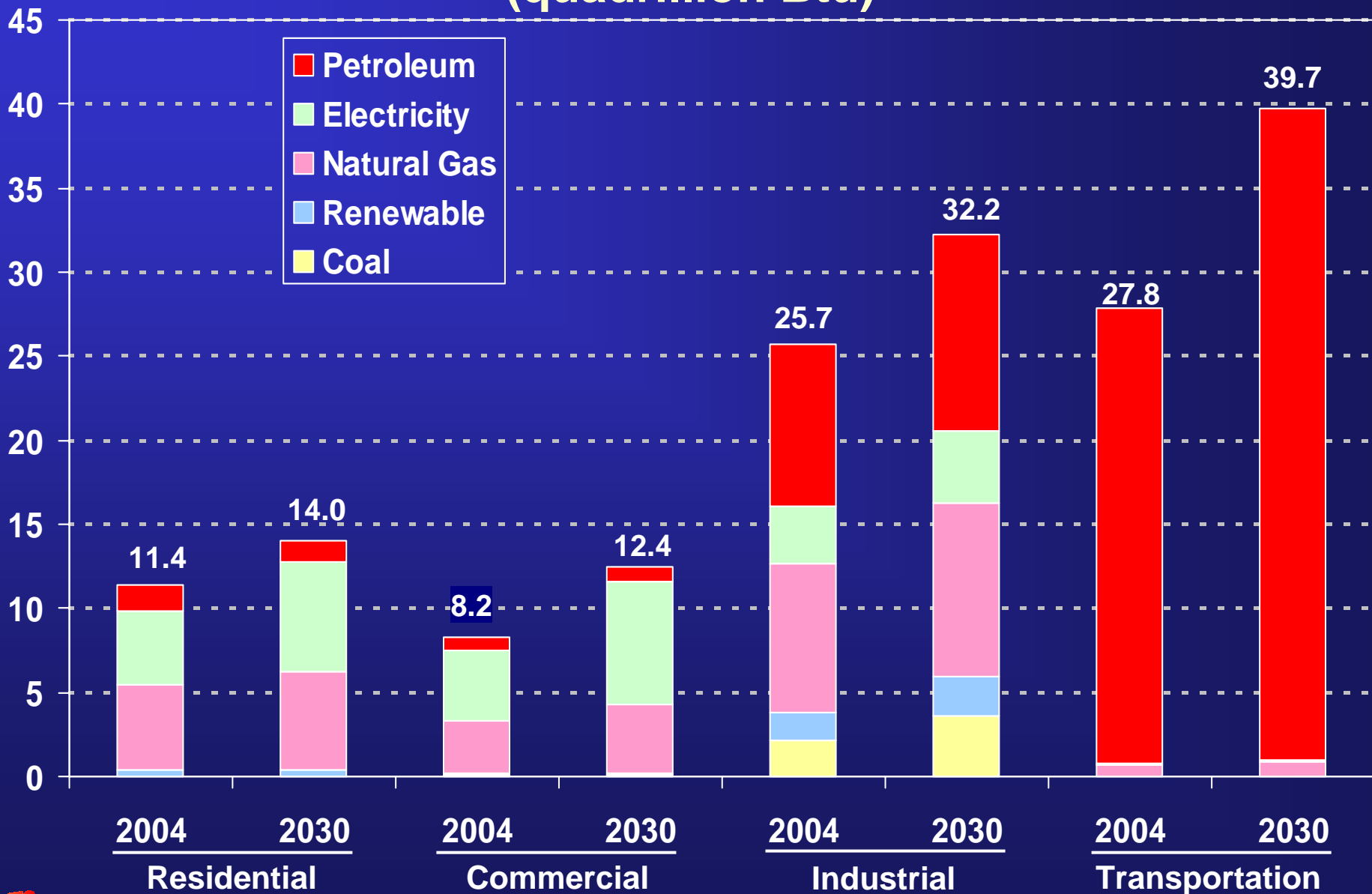
Presentation Overview

- AEO2006 reference case
- Oil market results in the context of low, reference, high price cases
- Natural gas market results in the context low, reference, and high LNG cases
- Coal market results in the context of low, reference, high coal cost cases.
- Electricity market results in the context of the reference, advanced, and vendor estimate nuclear cases
- Carbon dioxide emissions in the context of the low, reference and high growth cases.

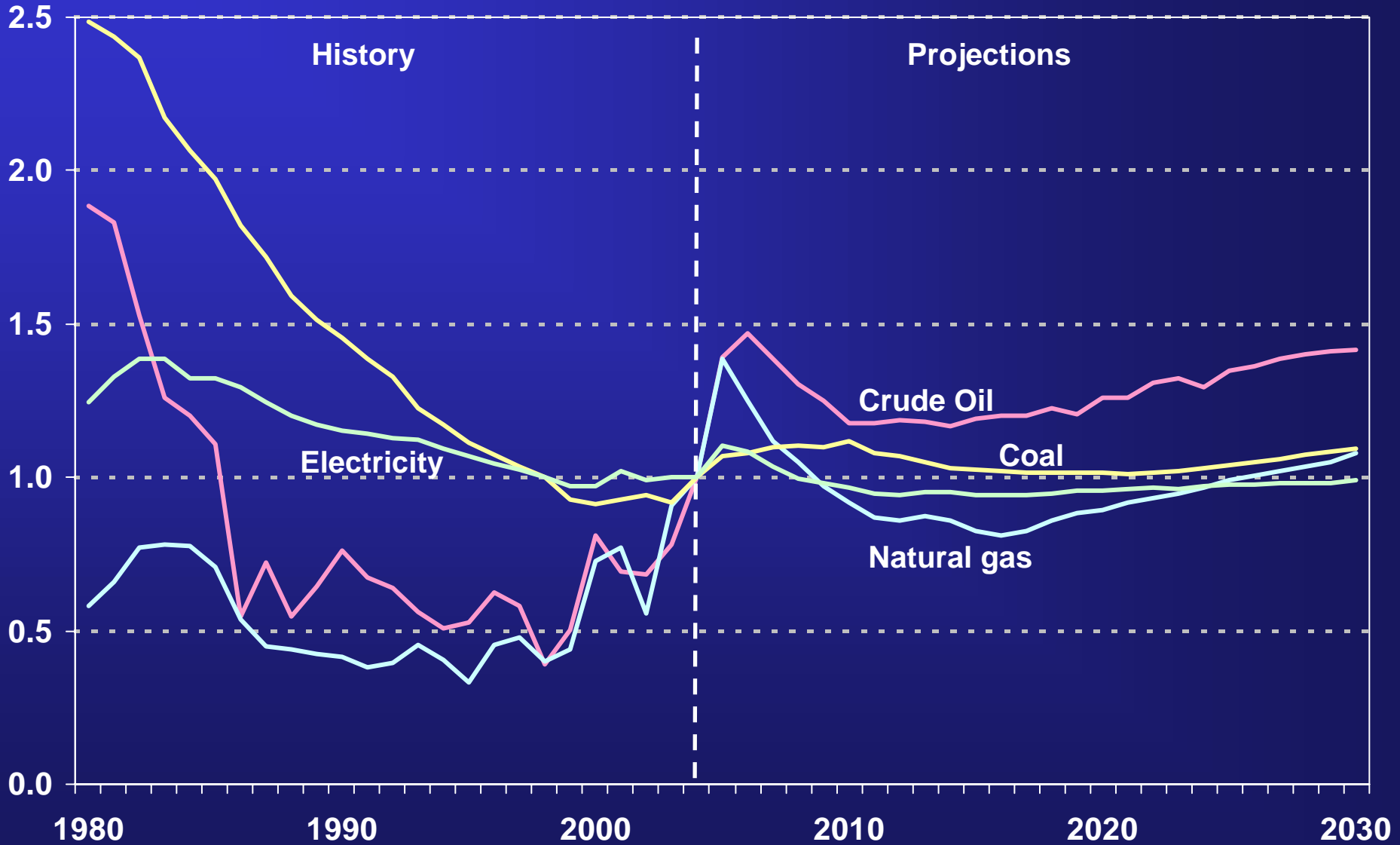
Primary Energy Consumption by Fuel (quadrillion Btu)



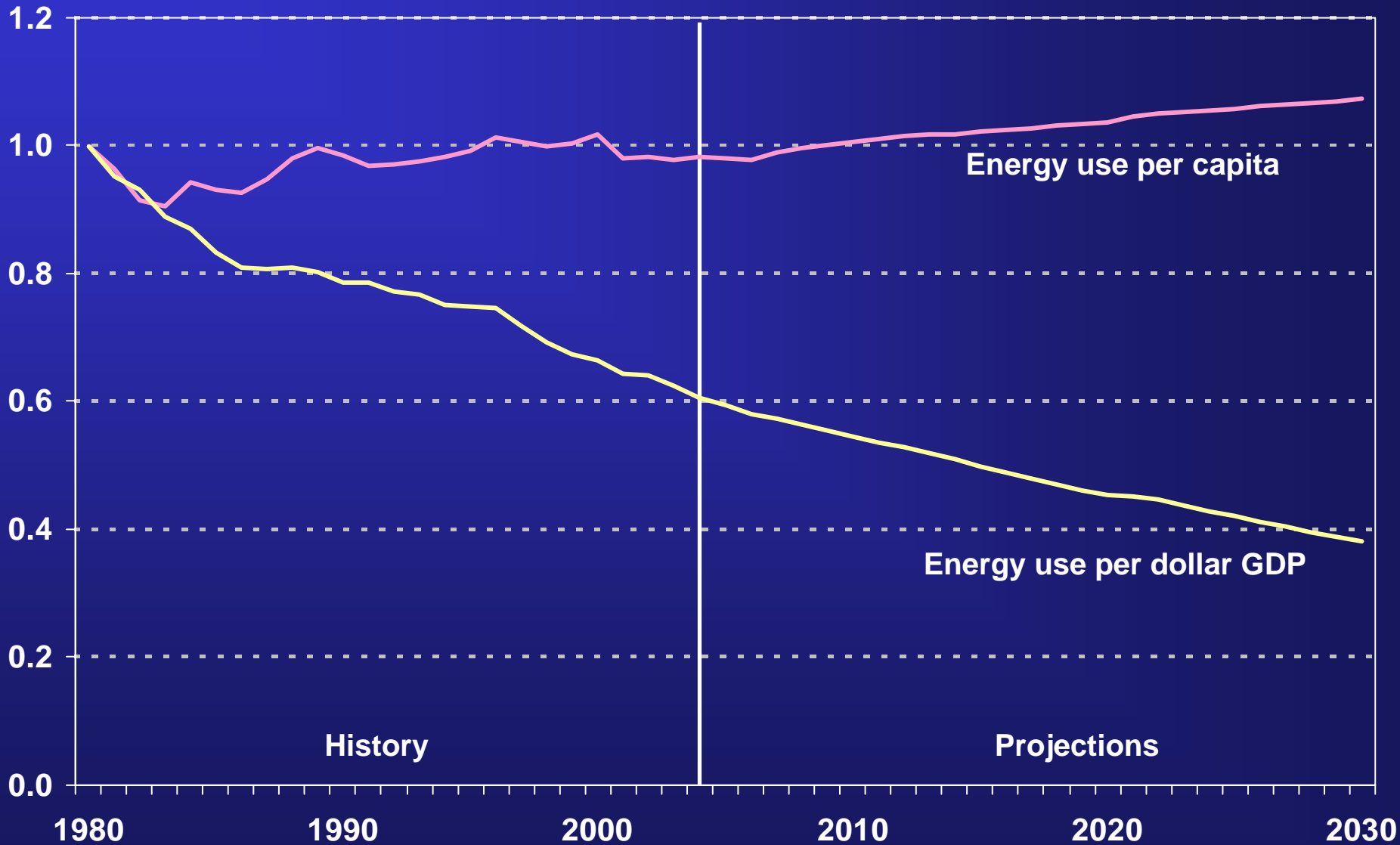
Delivered Energy Consumption by Sector and Fuel (quadrillion Btu)



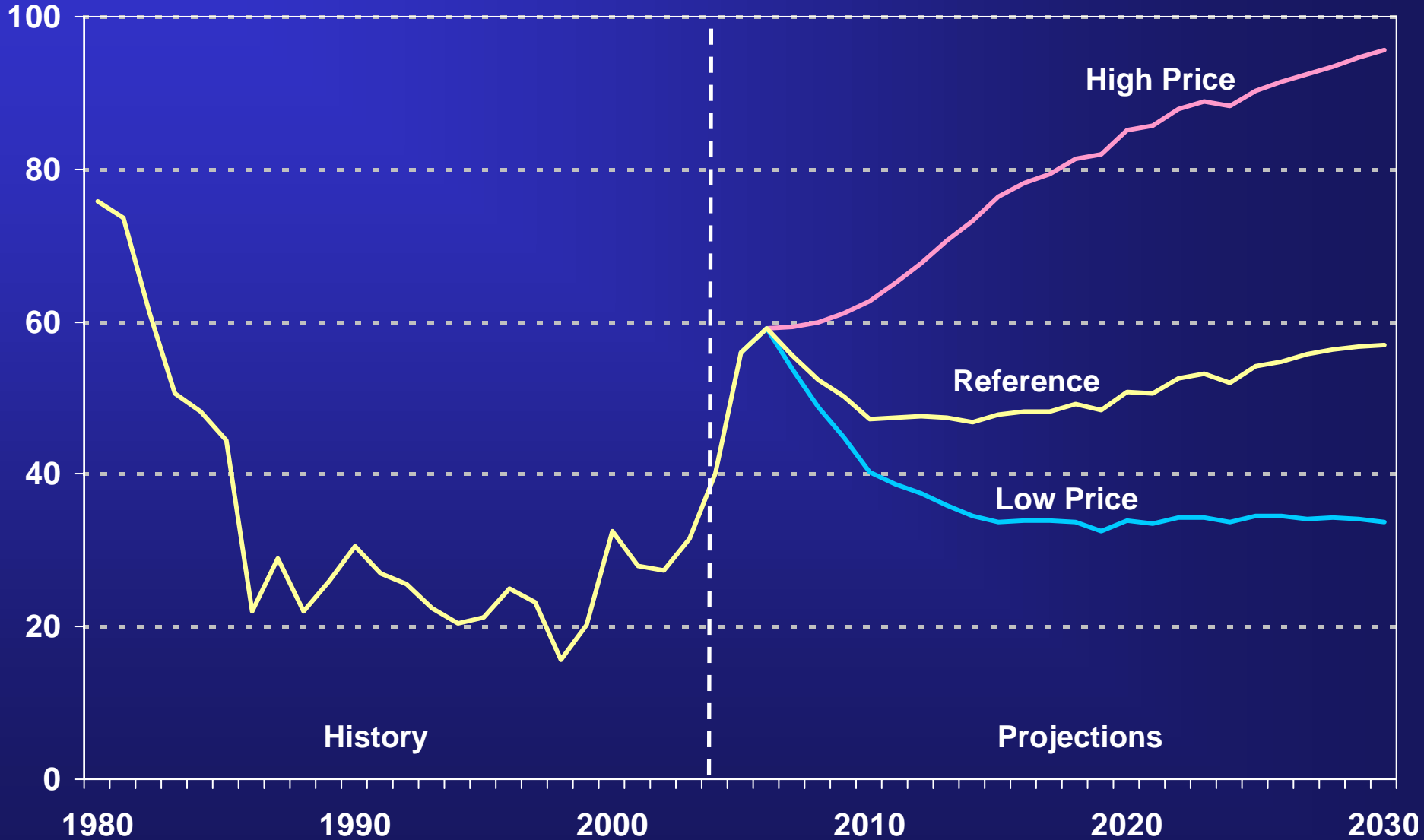
Energy Prices (index, 2004 = 1.0)



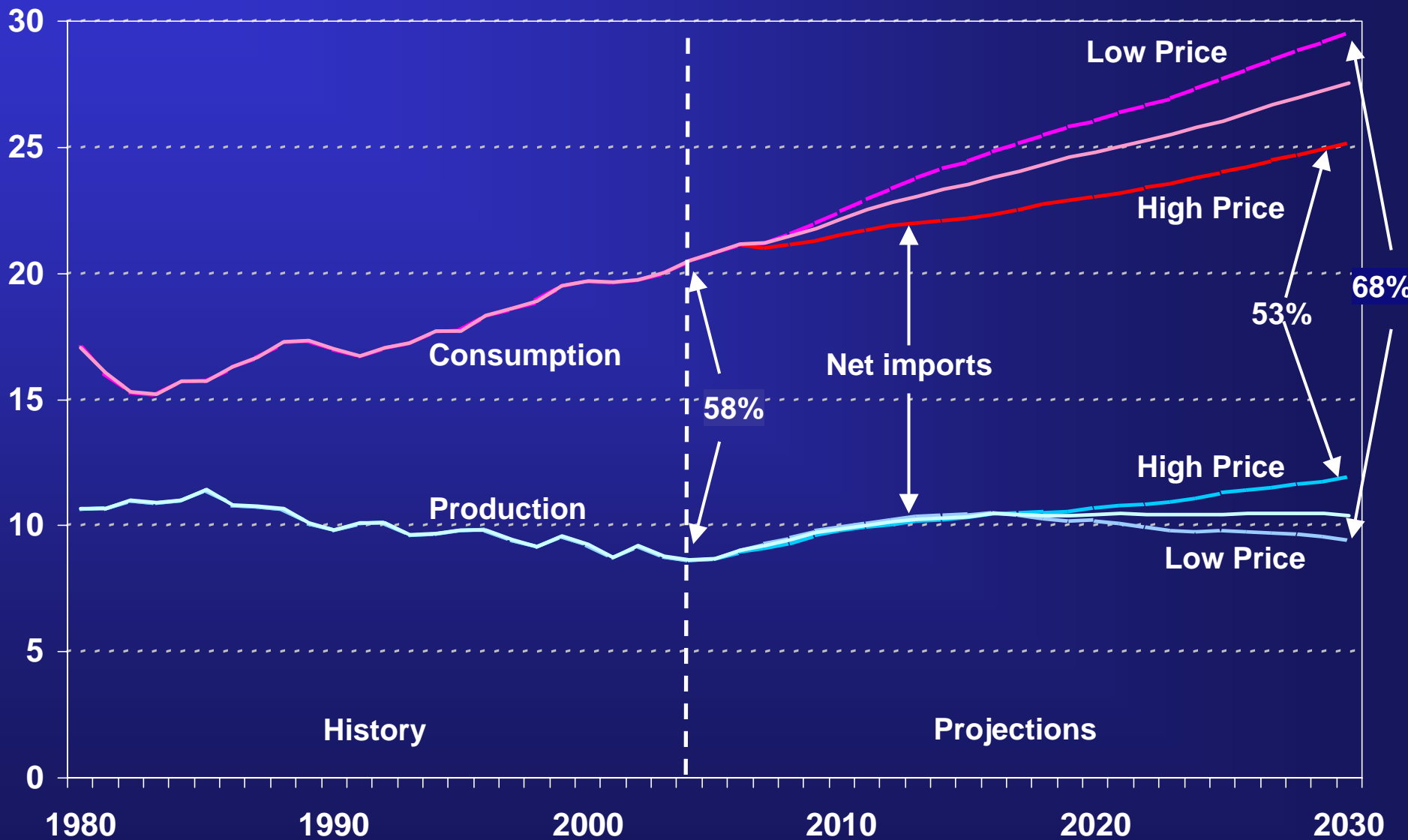
Energy Use per Capita and per Dollar of Real Gross Domestic Product (index, 1980 = 1)



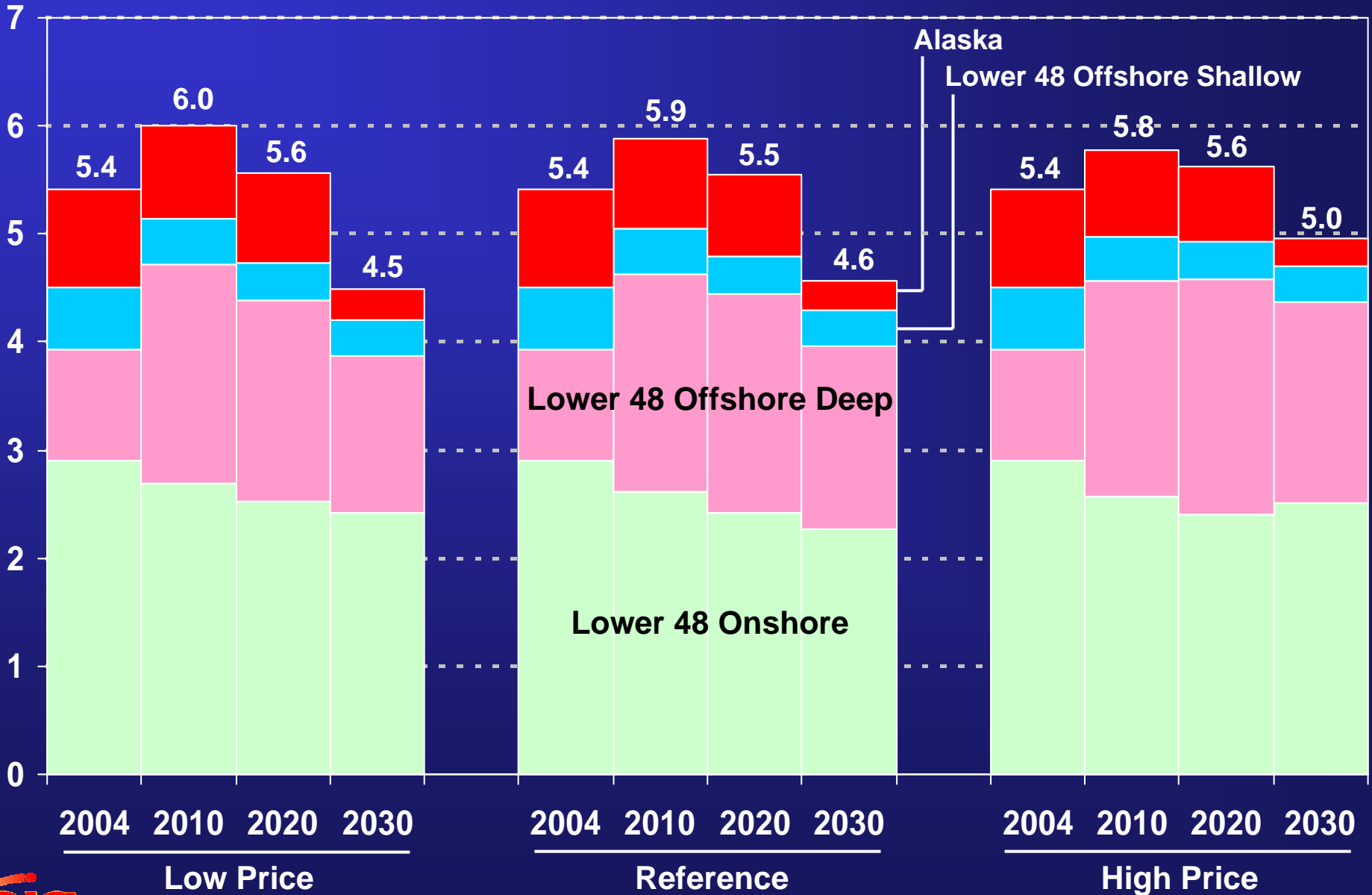
World Oil Prices in Three Cases (2004 dollars per barrel)



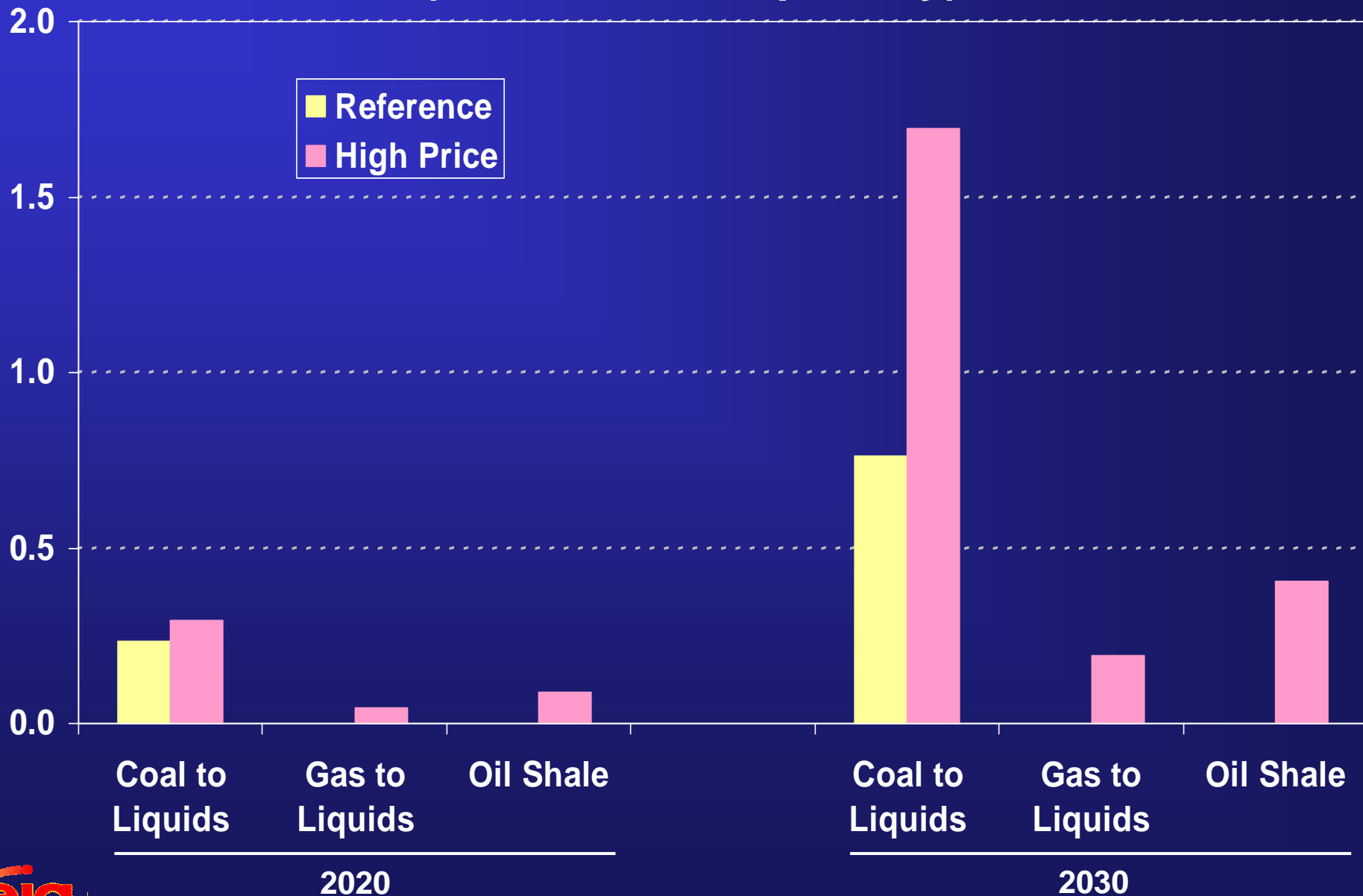
Petroleum Supply, Consumption, and Imports in Three Cases (million barrels per day)



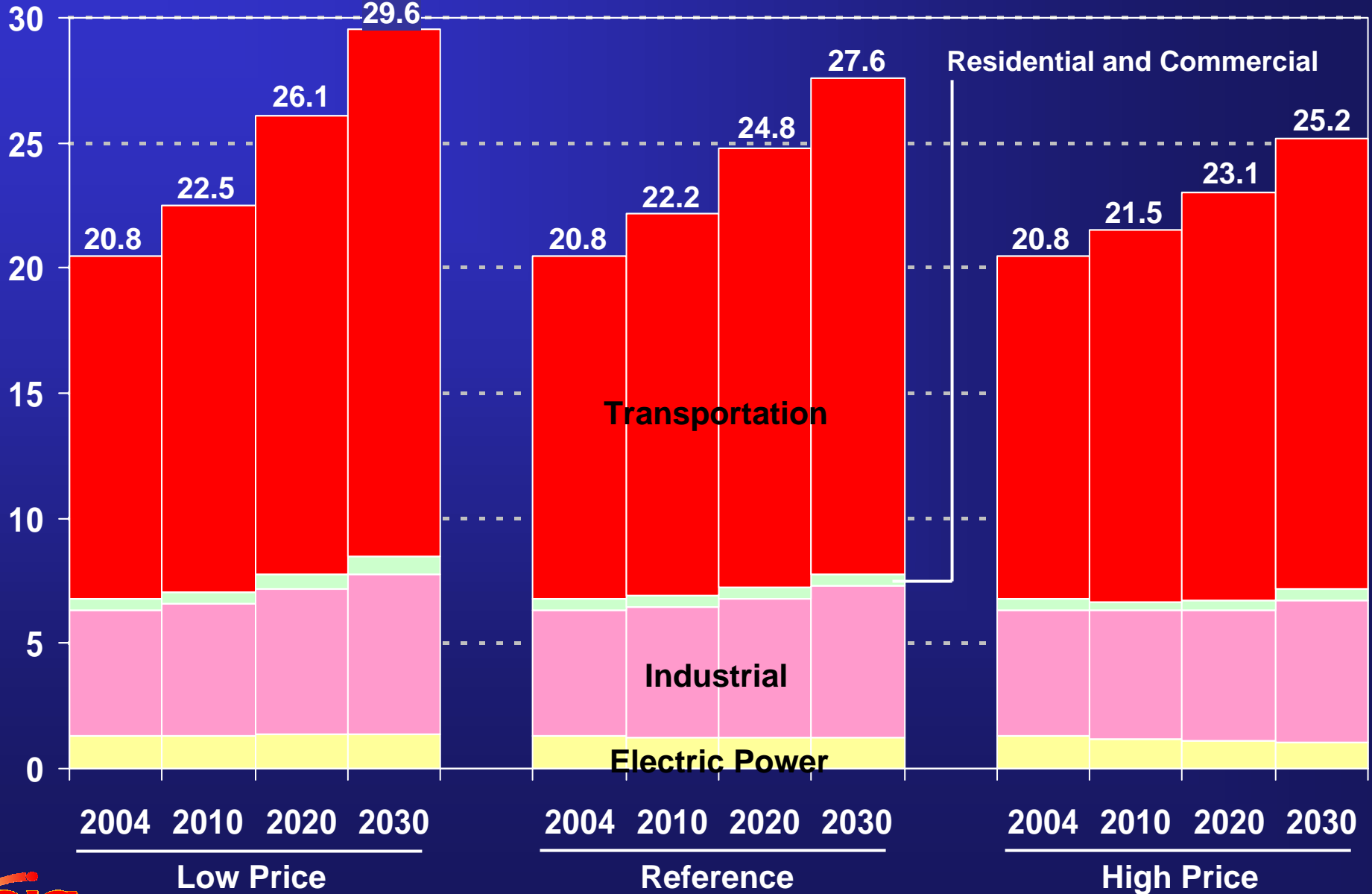
Domestic Crude Oil Production by Source (million barrels per day)



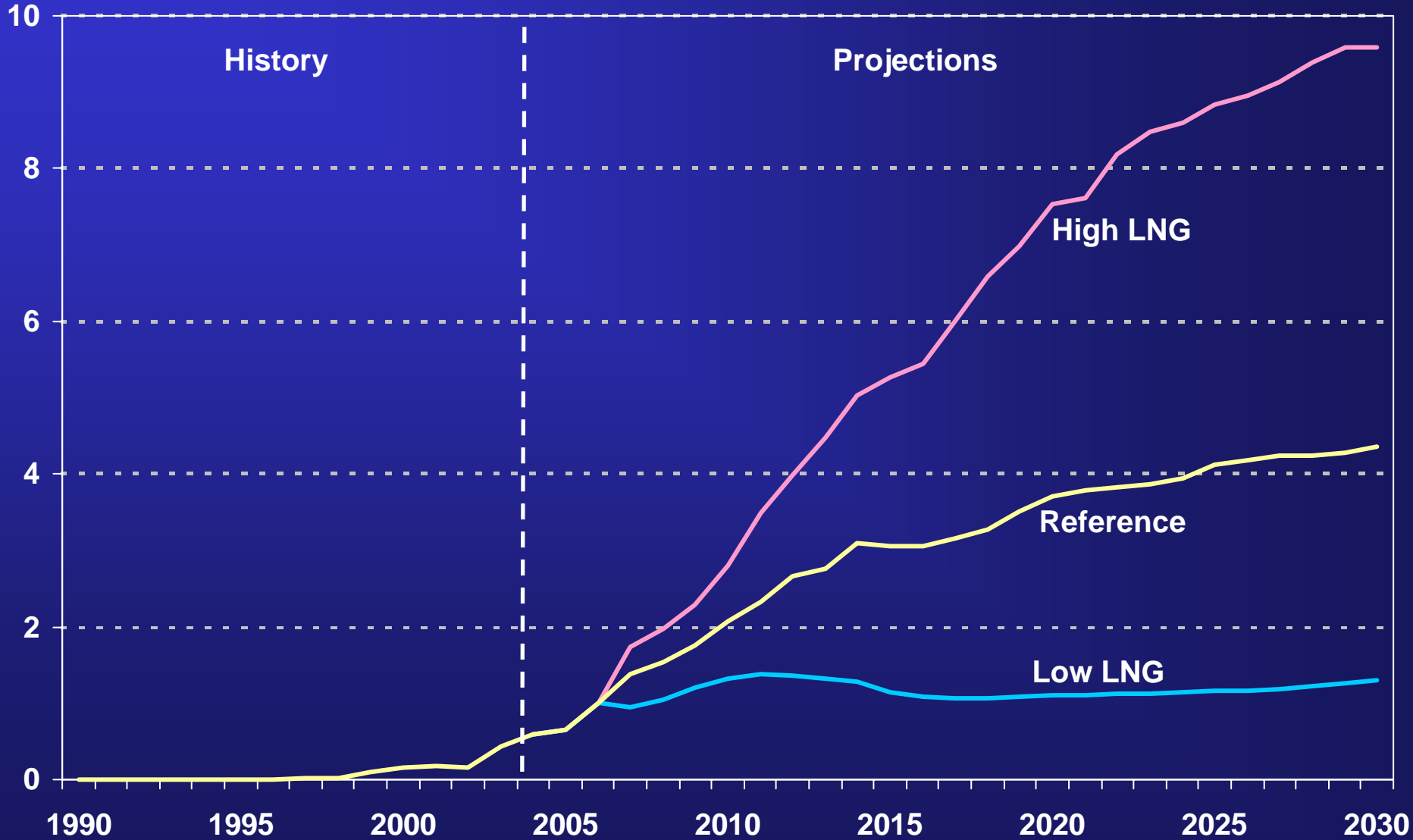
Petroleum Liquids from Coal, Natural Gas, and Shale (million barrels per day)



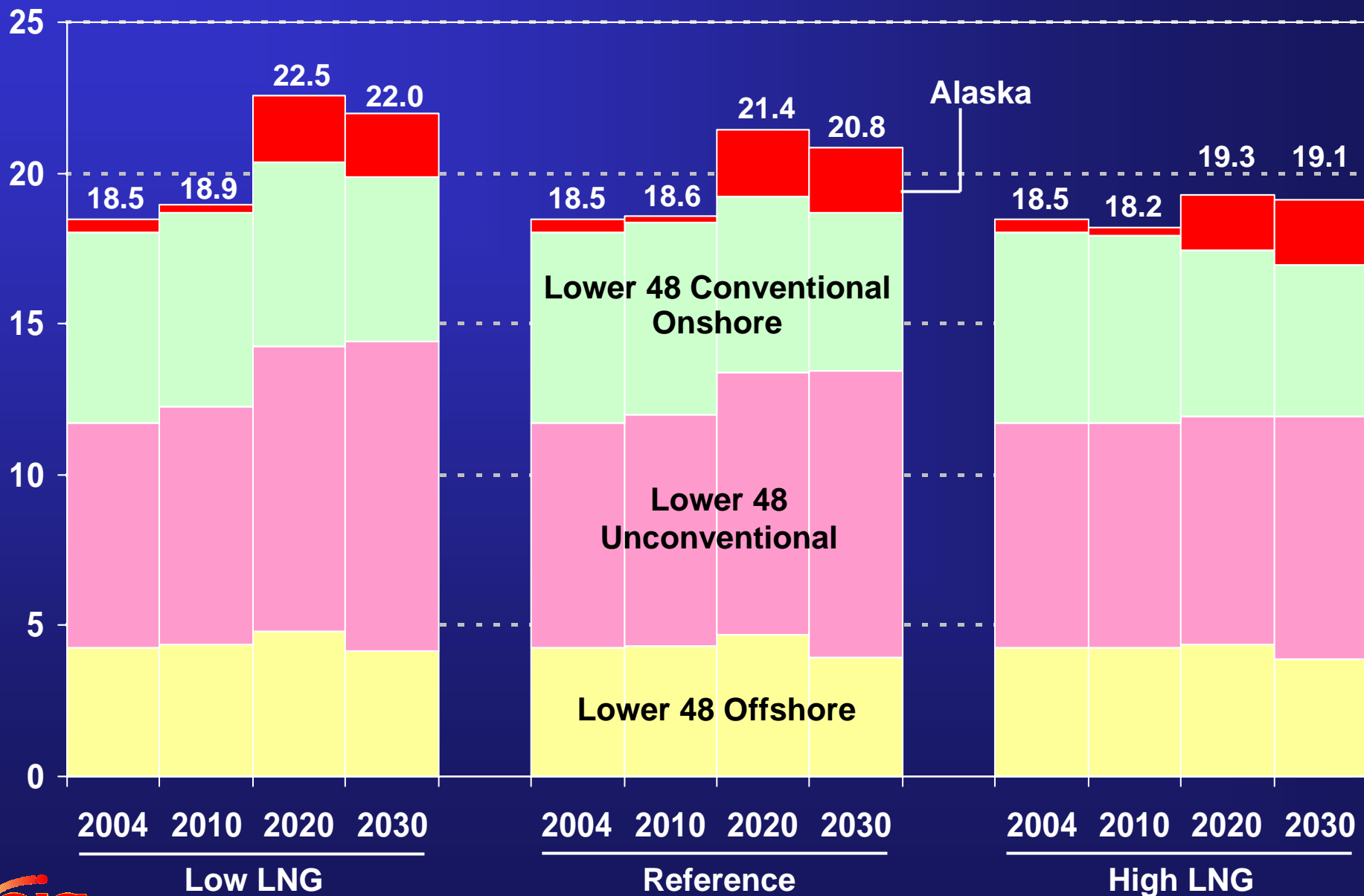
Petroleum Consumption by Sector (million barrels per day)



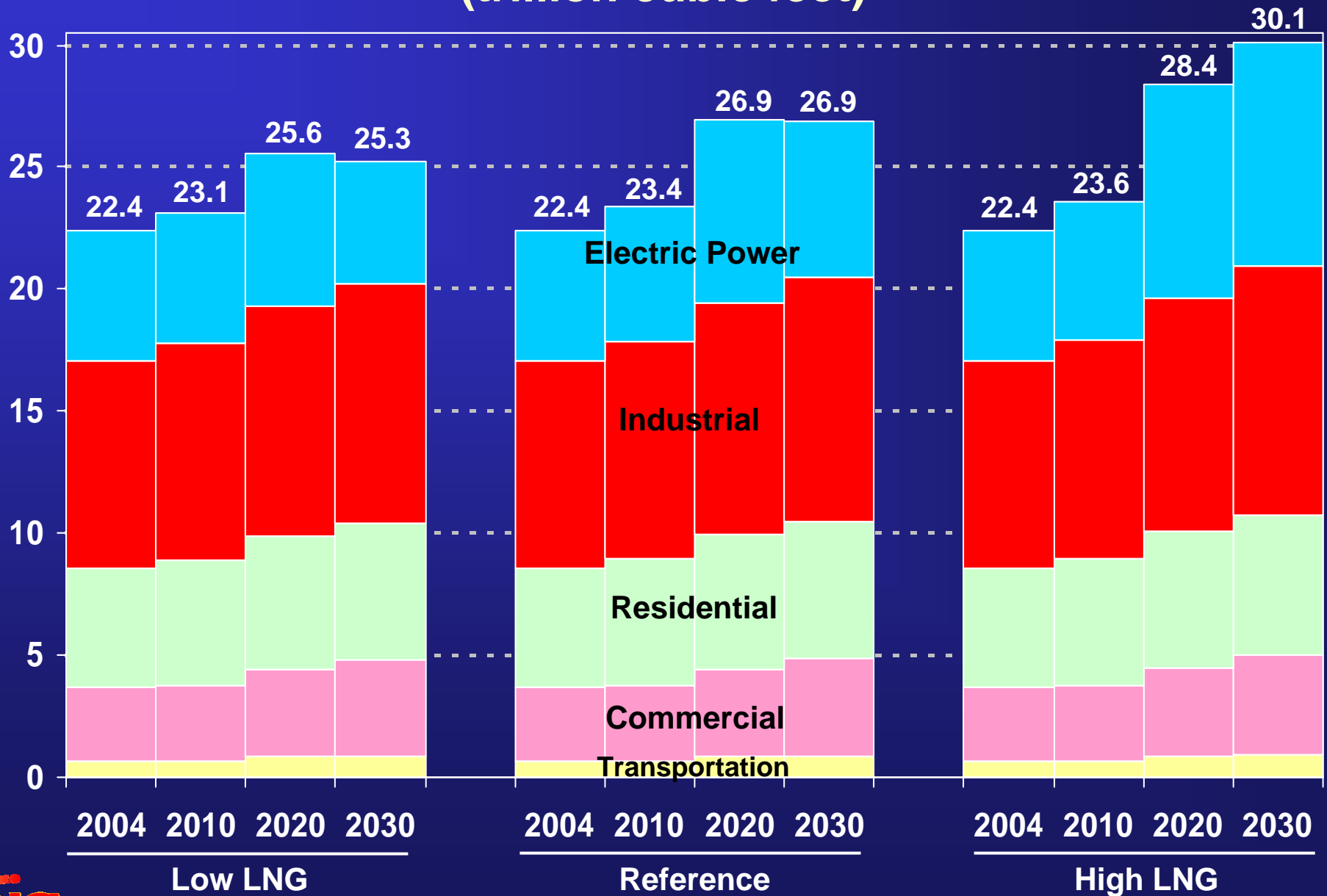
Net Imports of Liquefied Natural Gas in Three Cases (trillion cubic feet)



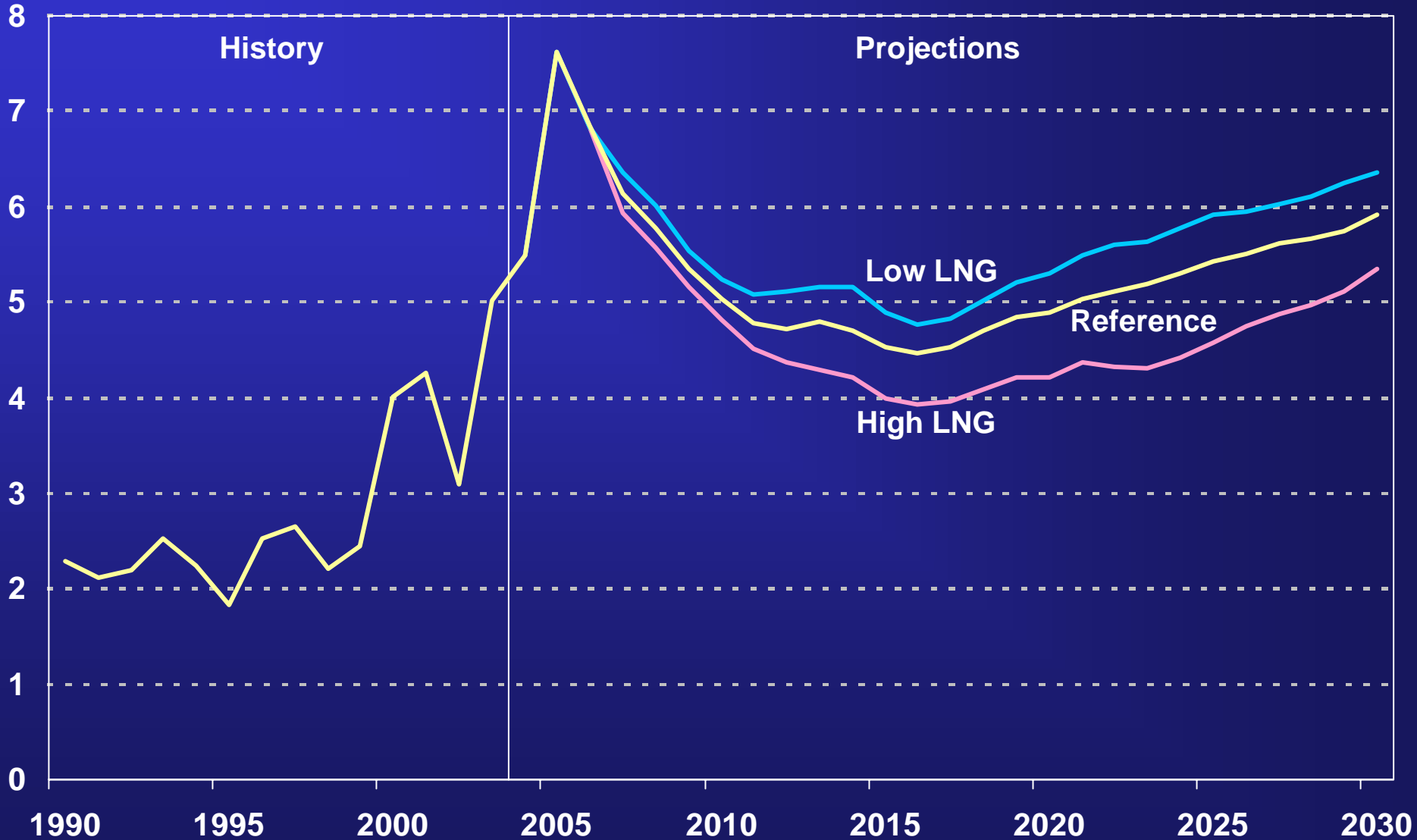
Natural Gas Production by Source (trillion cubic feet)



Natural Gas Consumption by Sector (trillion cubic feet)

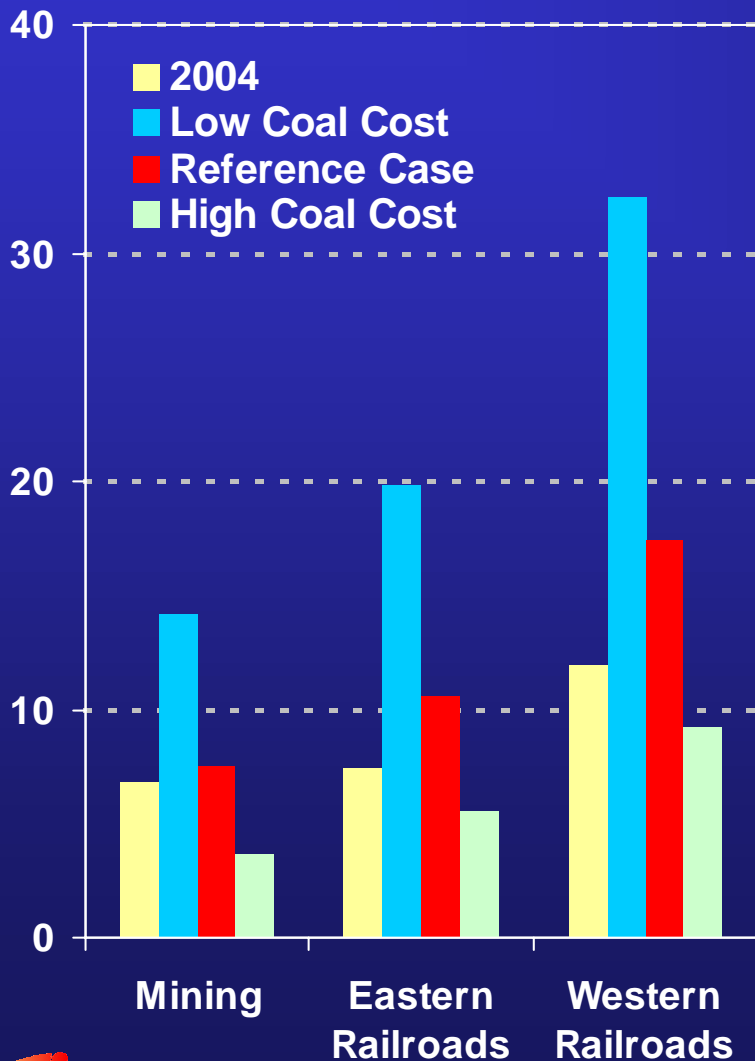


Lower 48 Natural Gas Wellhead Prices (2004 dollars per thousand cubic feet)

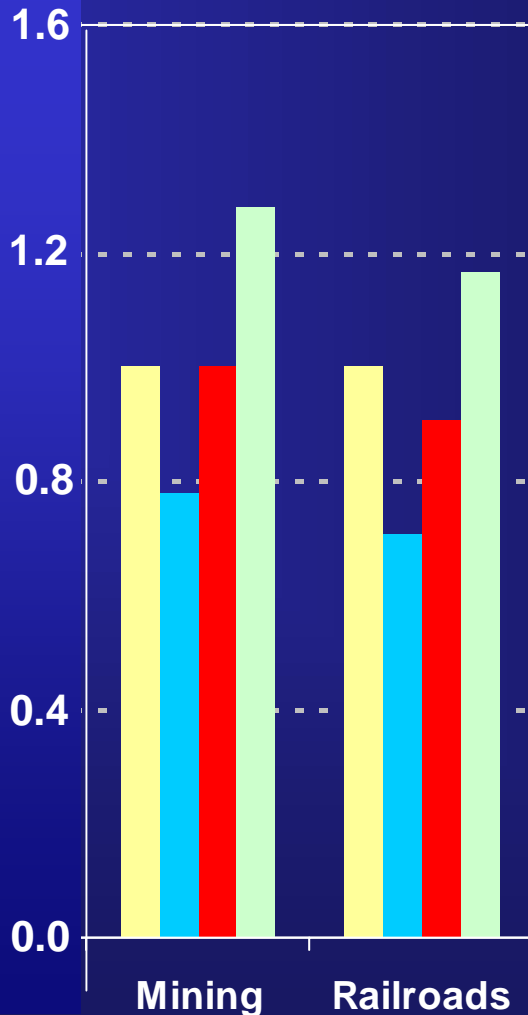


Labor Productivity, Cost Indices, and Miner Wages

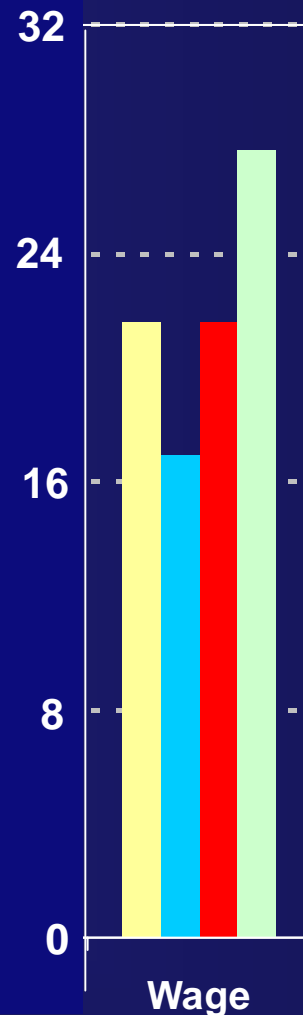
Labor Productivity



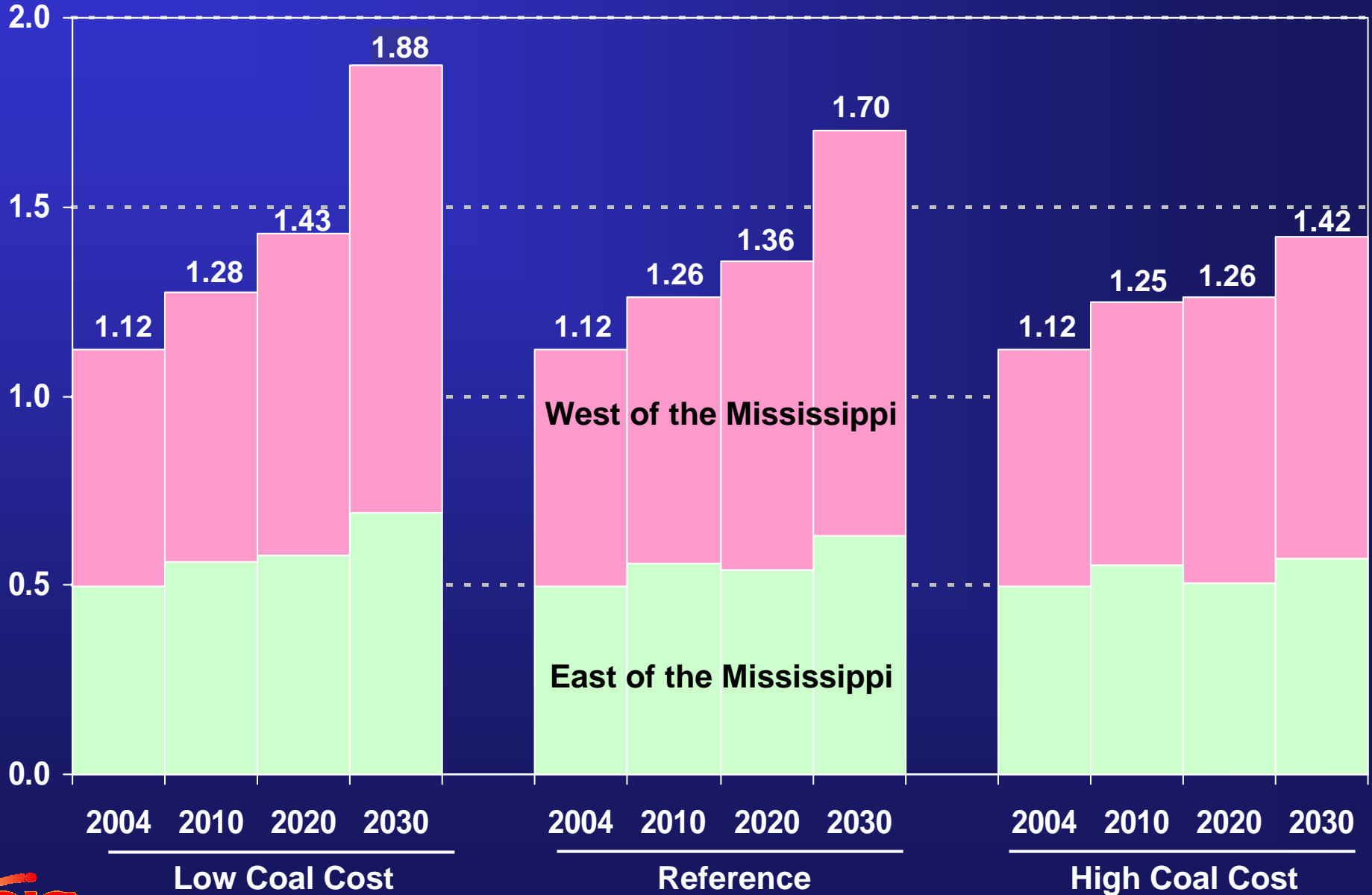
Equipment Cost Indices (constant dollar index, 2004=1.000)



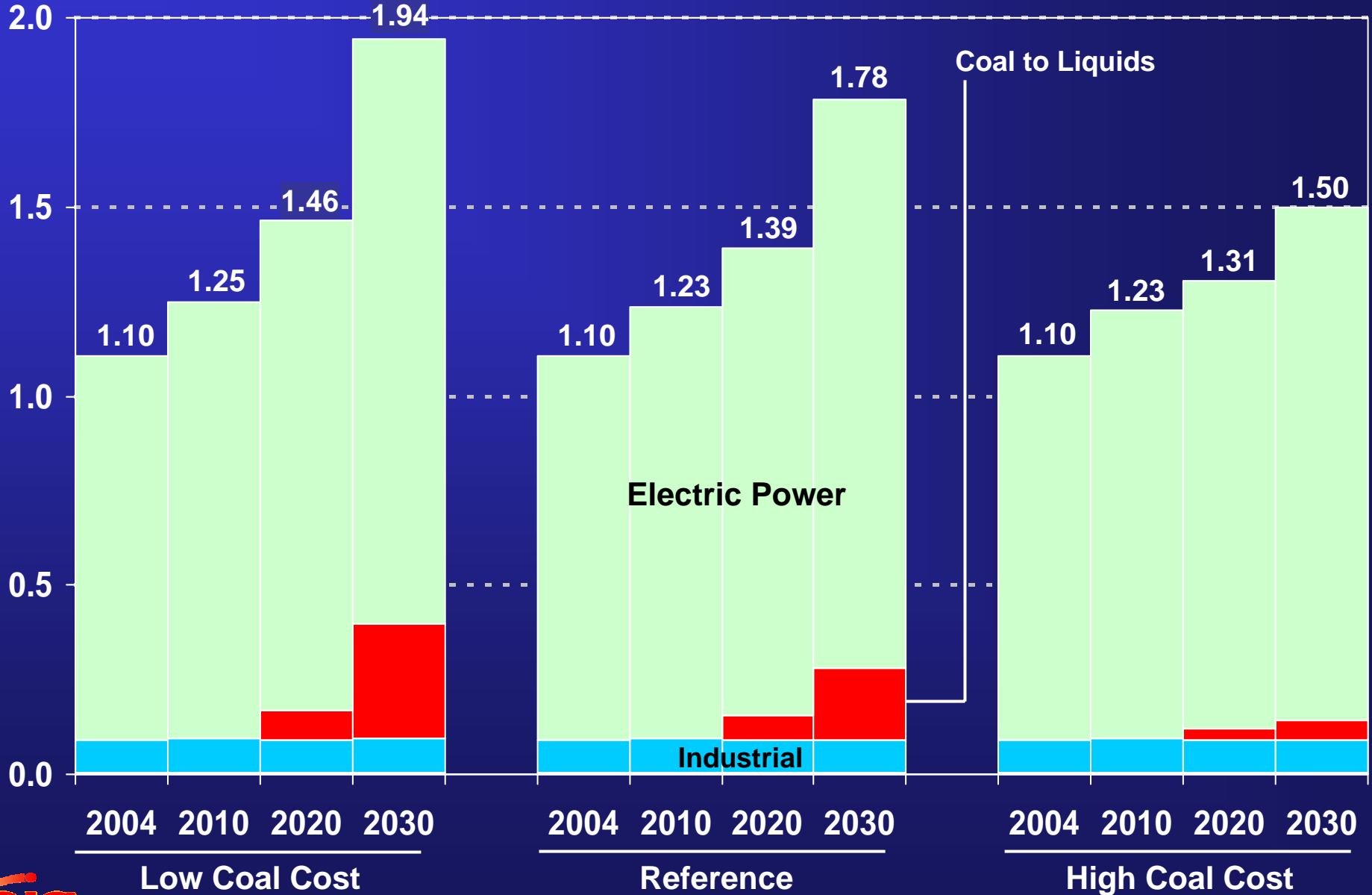
Average Coal Miner Wage (2004 \$/hr)



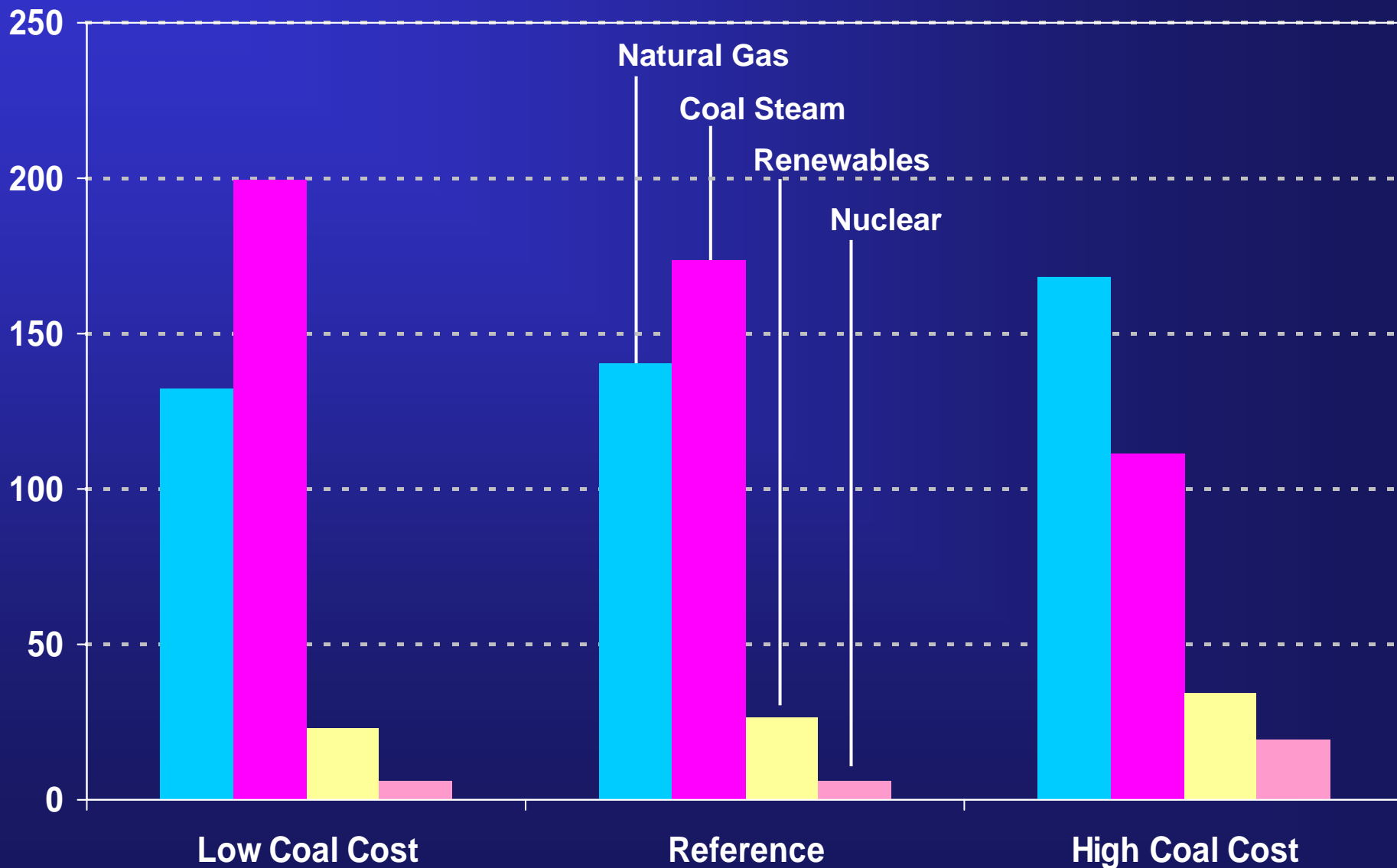
Coal Production by Region (billion short tons)



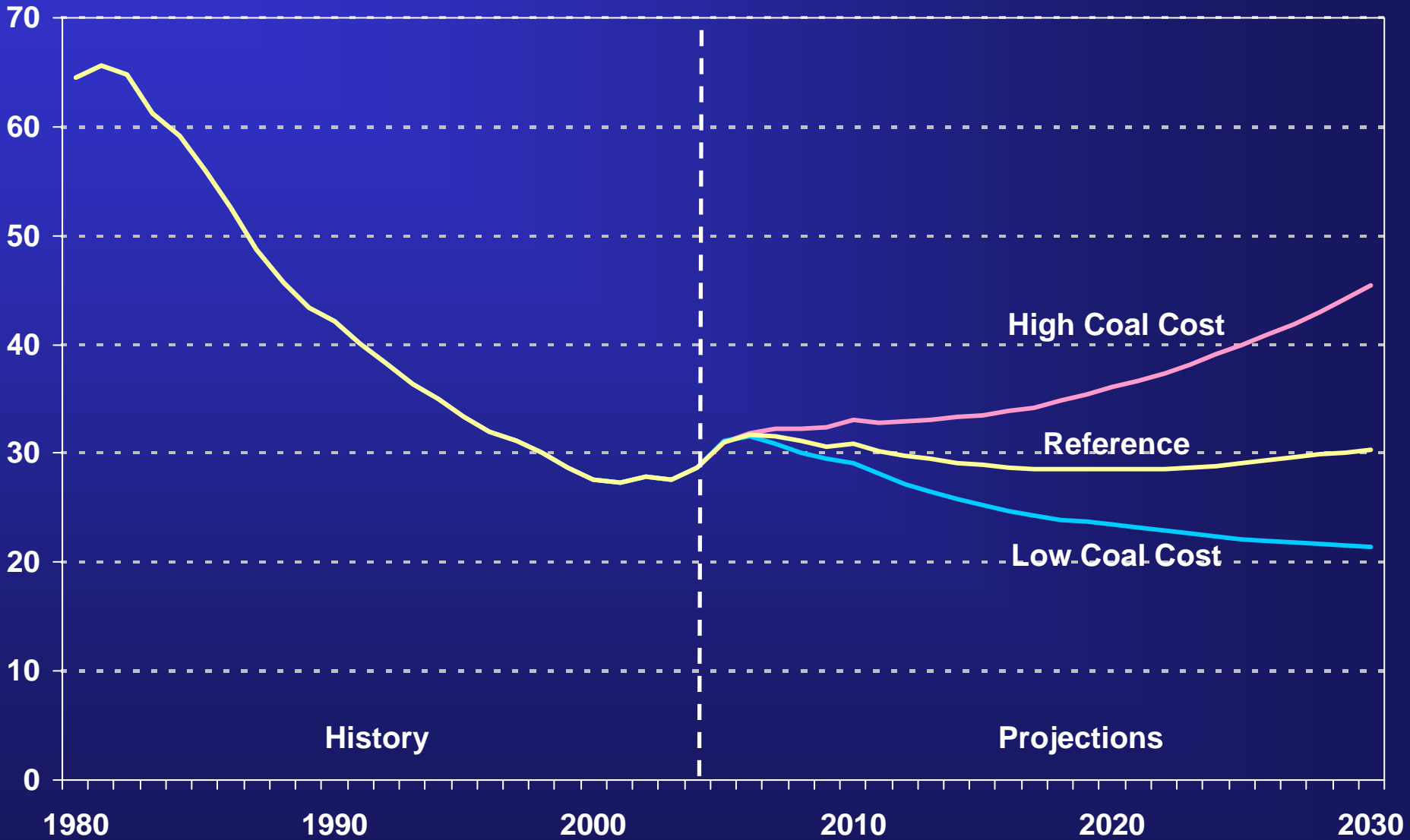
Coal Consumption by Sector (billion short tons)



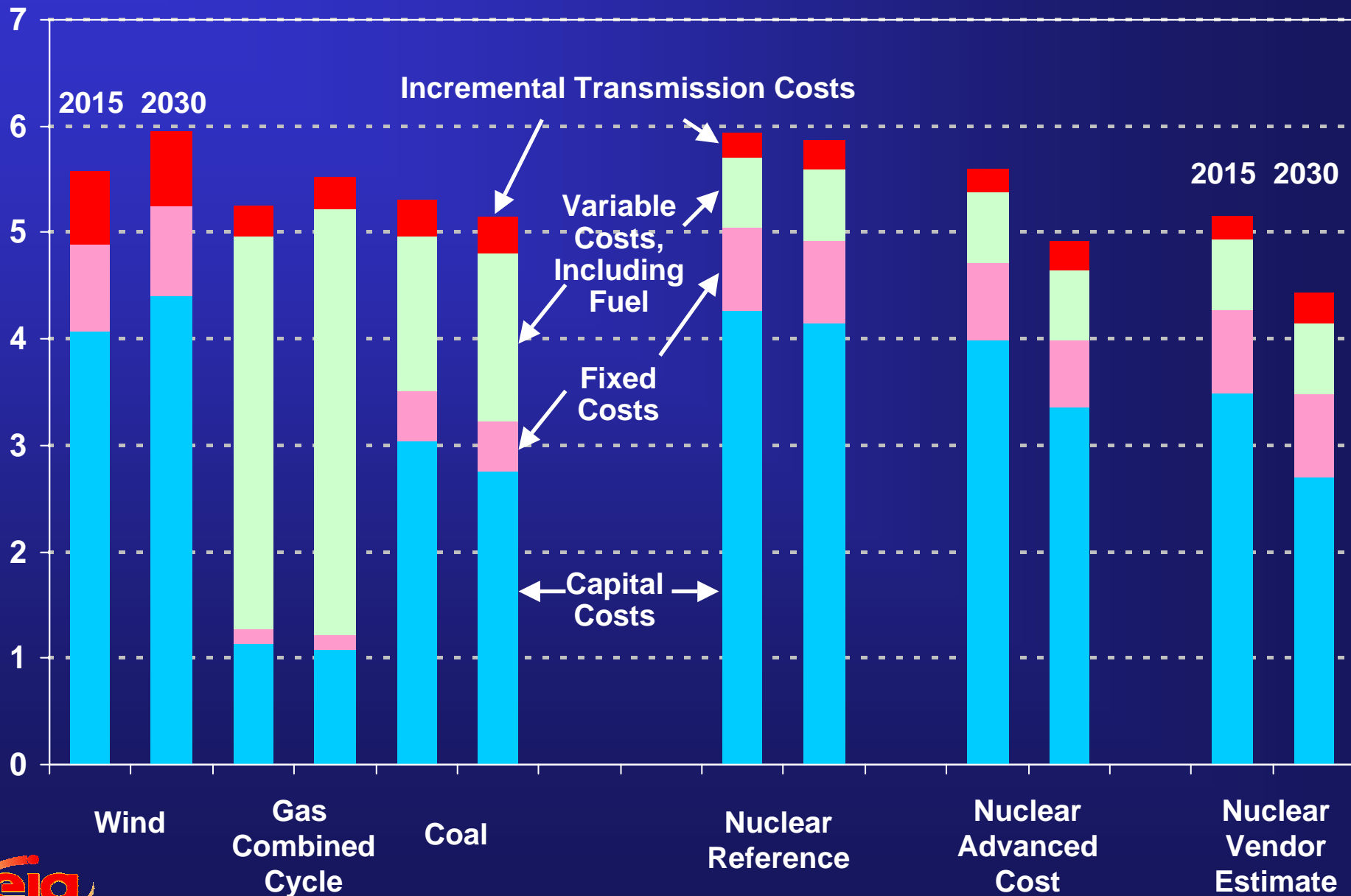
Cumulative New Generating Capacity in Three Coal Cost Cases, 2004-2030 (gigawatts)



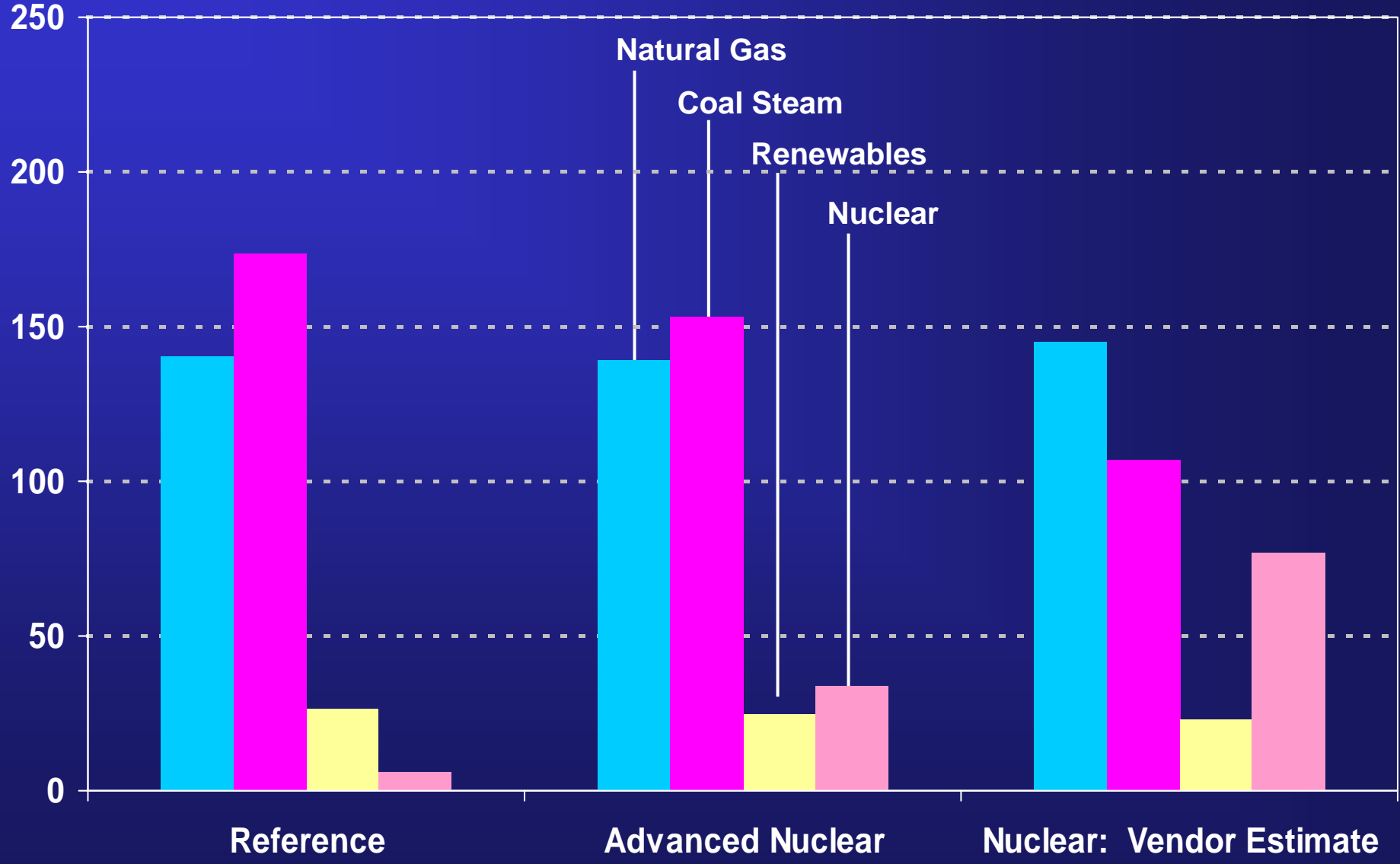
Average Delivered Coal Price (2004 dollars per ton)



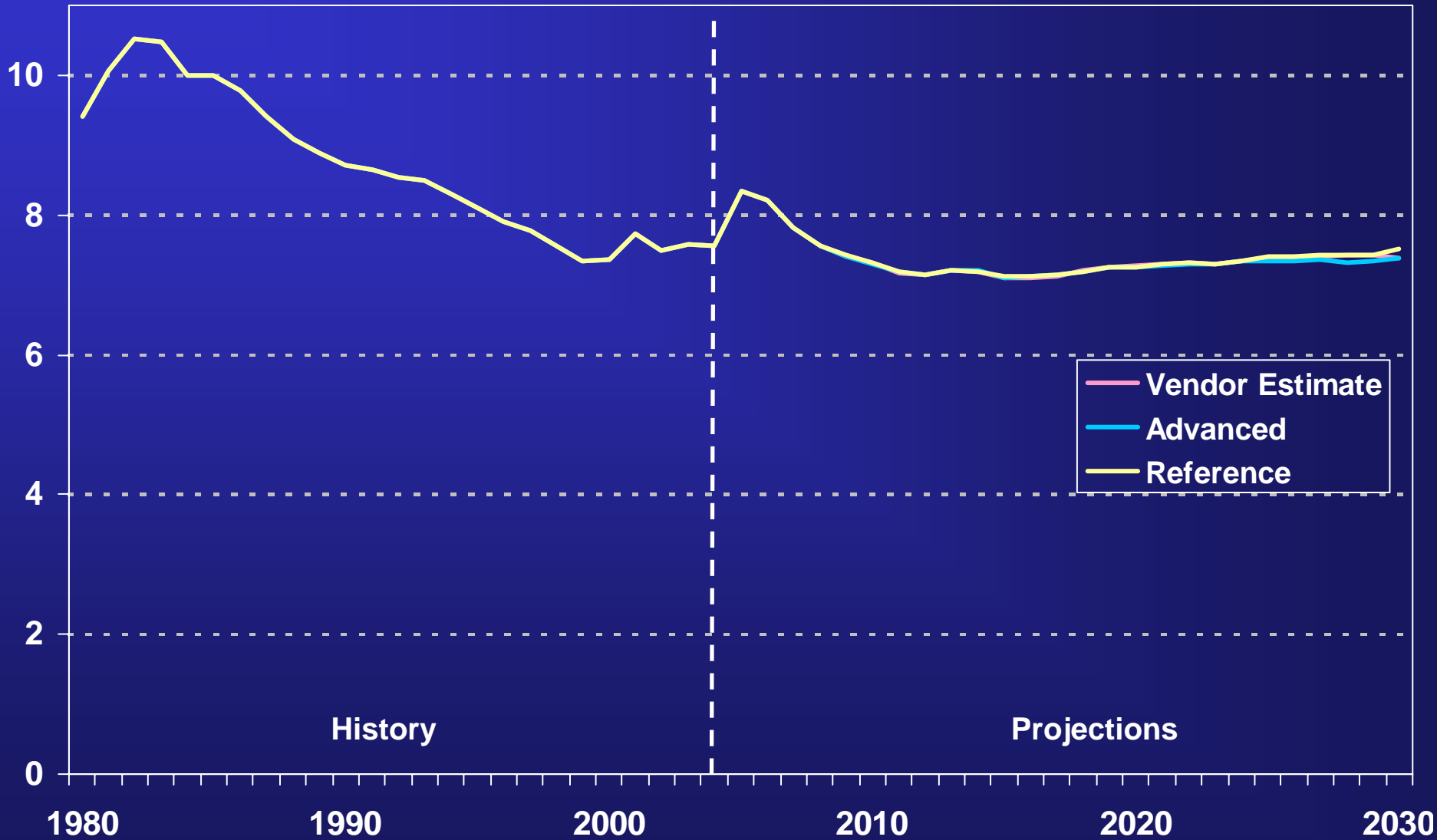
Levelized Electricity Costs for Capacity Additions in Three Cases, 2015 and 2030 (2004 cents per kilowatthour)



U.S. Electricity Generation Capacity Additions in Three Cases, 2004-2030 (gigawatts)



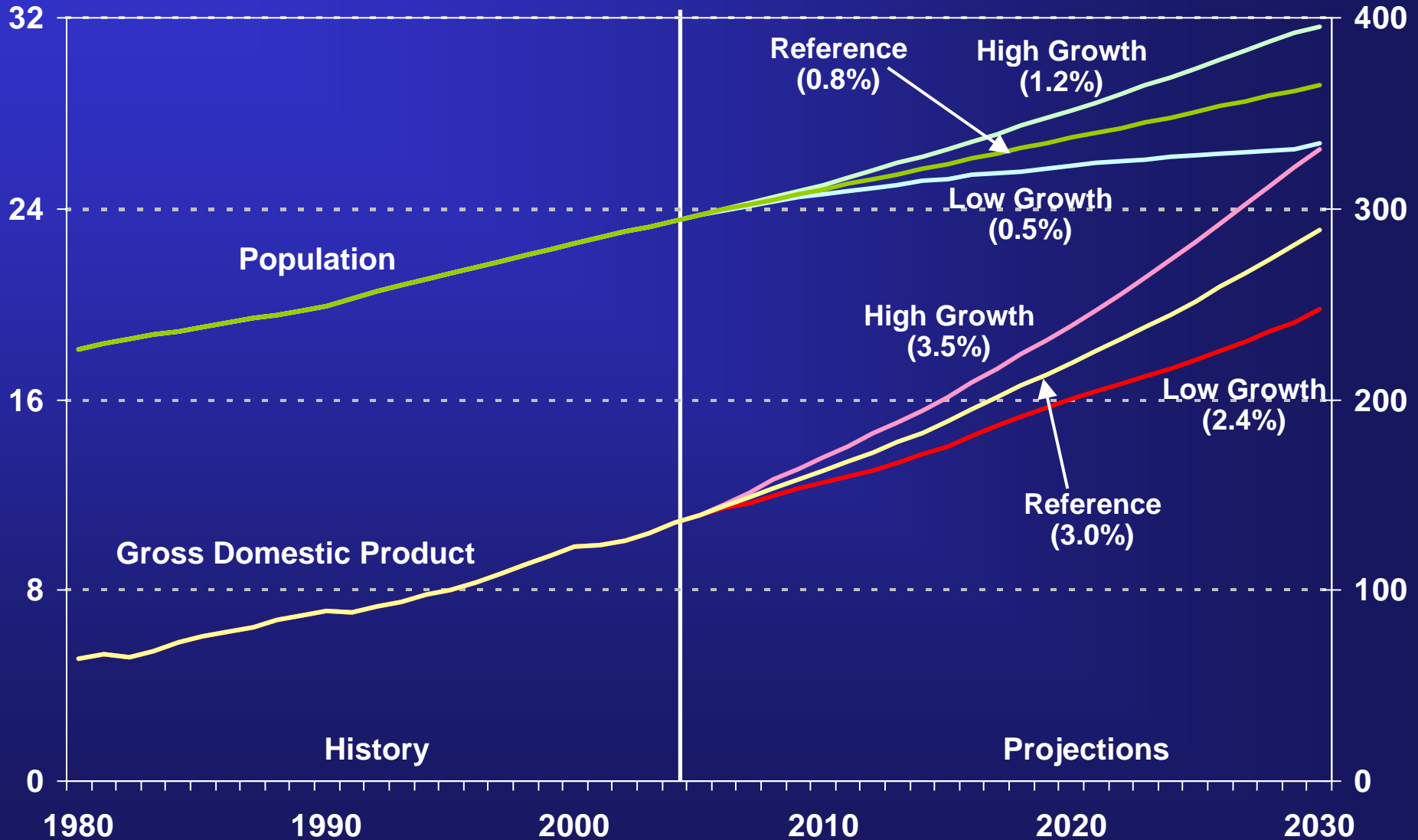
Average Delivered Electricity Price (2004 cents per kilowatthour)



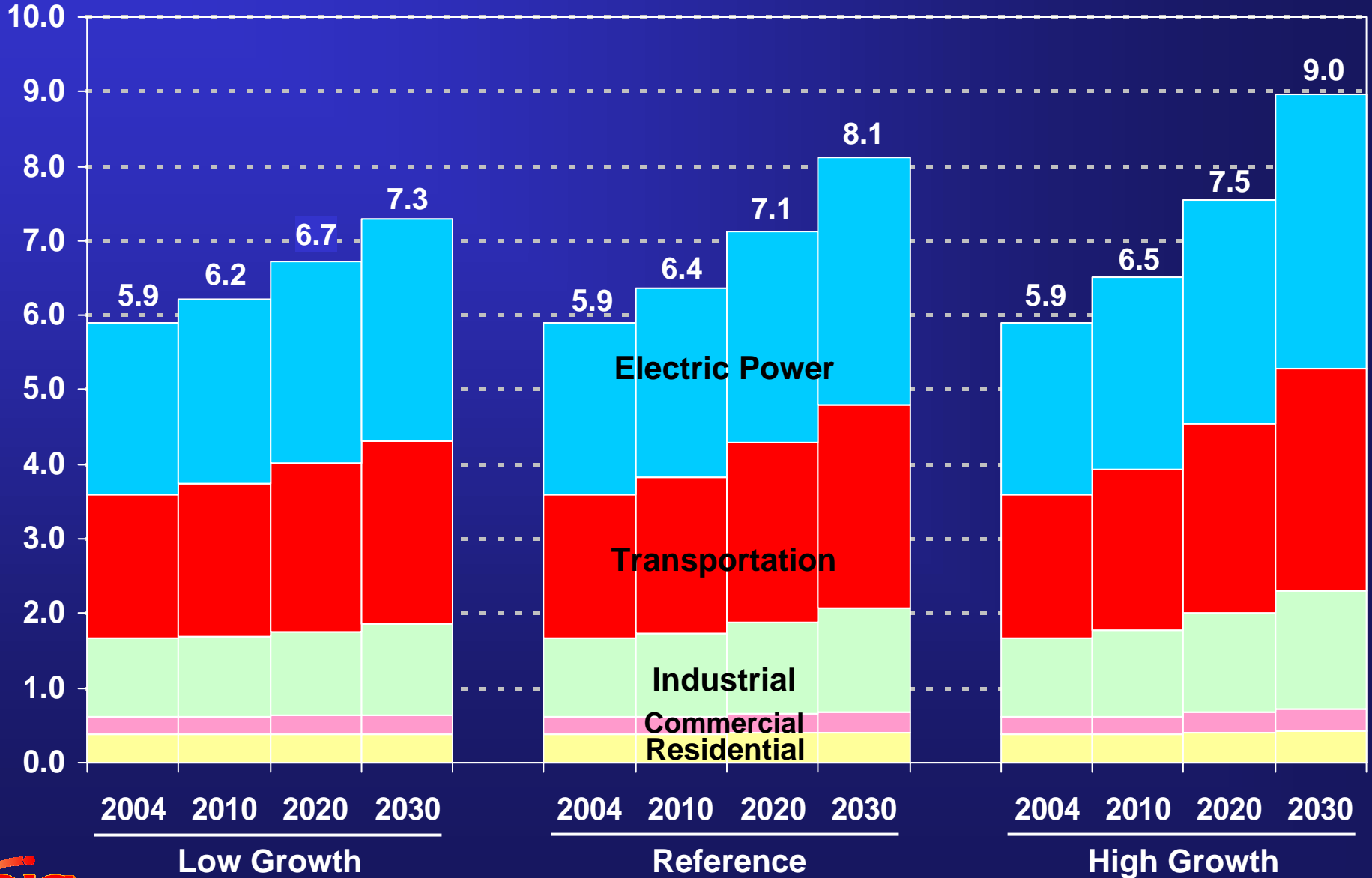
Real Gross Domestic Product and Population

Real GDP in trillion chained 2000 dollars

Population in millions



Carbon Dioxide Emissions in Three Economic Growth Cases (billion metric tons)



Annual Energy Outlook 2006 indicates that...

- U.S. energy demand is projected to grow at an average annual rate of 1.1 percent.
- The energy efficiency of the economy is projected to increase at an average annual rate of 1.8 percent as economic growth outpaces growth in energy demand.
- U.S. oil import reliance is projected to grow from 58 percent to 62 percent. Import reliance shrinks to 53 percent in the high price case and grows to 68 percent in the low price case.
- Future growth in U.S. natural gas supplies depend on unconventional domestic production, natural gas from Alaska, and liquefied natural gas imports.
- U.S. natural gas use is projected to peak soon after 2020 before leveling off.
- Wellhead gas prices are projected to decline from current levels through 2016 before beginning to increase again. Over the longer term, changes in the LNG import levels only moderately impact natural gas wellhead prices.
- Coal use is projected to grow faster than other fuels; however, higher coal prices could induce switching to other fuels in the electric power sector and curtail its use as a feedstock in synthetic fuels production.
- Nuclear power is projected to grow relatively slowly in the AEO2006 reference case; however, if nuclear power plants costs decrease, significant quantities of capacity additions could result.
- Carbon dioxide emissions are projected to grow at an average annual rate of 1.2 percent