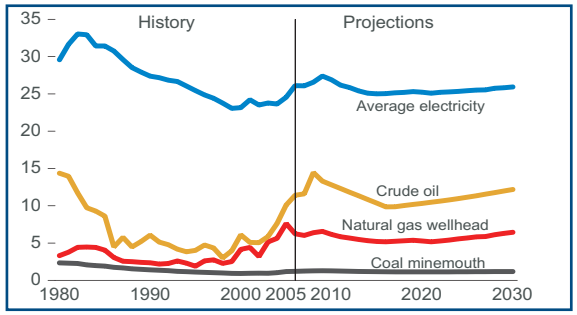
Energy Prices, 1980-2030 (2006 dollars per million Btu)

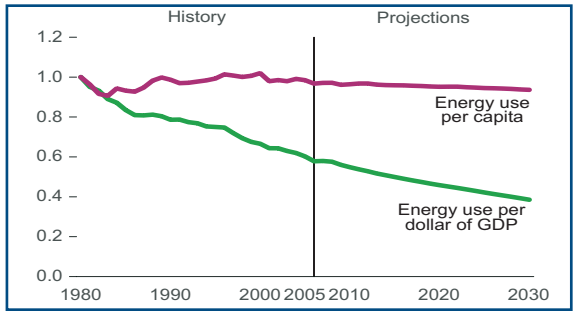


- The reference case summarized in this brochure, one of the cases completed as part of the *Annual Energy Outlook 2008*, projects that world oil prices (2006 dollars), expressed in terms of the average price of imported low-sulfur crude oil to U.S. refiners, will decline gradually from current levels through 2016 as new supplies enter the market and then rise to over $70 per barrel in 2030 (about $113 per barrel in nominal terms).

- Average natural gas wellhead prices (2006 dollars) are projected to fall from today's levels to just over $5.30 per thousand cubic feet in 2016 as the initial availability of new import sources, such as liquefied natural gas (LNG), and increased drilling, expand available supply. After 2016, wellhead prices rise gradually to just over $6.60 per thousand cubic feet in 2030 ($10.65 per thousand cubic feet in nominal dollars).

- Projected electricity prices reach a peak of 9.3 cents per kilowatthour (2006 dollars) in 2009 and then decline to a low of 8.5 cents per kilowatthour in 2015 before increasing to 8.8 cents per kilowatthour in 2030. Without adjustment for inflation, average delivered electricity prices in the *AEO2008* reference case are projected to reach 14 cents per kilowatthour in 2030.

Energy Use per Capita and per Dollar of Gross Domestic Product, 1980-2030 (index, 1980=1)



- Through 2030, projected energy use per 2000 dollar of gross domestic product (GDP) declines 1.7 percent per year and per capita energy consumption decreases by 0.1 percent per year. Efficiency gains and structural shifts in the economy to less energy-intensive industries partially offset growth in the demand for energy services, which results from population growth of 0.8 percent per year and projected economic growth of 2.4 percent per year.

AEO 2008 Reference Case Highlights	2006	2010	2015	2020	2025	2030	Annual Growth Rate 2006-2030
Primary Energy Production (quadrillion Btu)							
Crude Oil and Lease Condensate	13.16	15.03	15.54	15.71	15.16	14.15	0.3%
Dry Natural Gas	19.04	19.85	20.08	20.24	20.17	20.00	0.2%
Coal	23.79	23.97	24.48	25.20	26.85	28.63	0.8%
Nuclear Power	8.21	8.31	8.41	9.05	9.50	9.57	0.6%
Hydropower	2.89	2.92	2.99	3.00	3.00	3.00	0.2%
Biomass	2.94	4.05	5.12	6.42	8.00	8.12	4.3%
Other Renewable Energy	0.88	1.51	1.75	2.00	2.25	2.45	4.4%
Other	0.50	0.54	0.58	0.58	0.61	0.64	1.1%
Total	71.41	76.17	78.96	82.21	85.53	86.56	0.8%
Net Imports (quadrillion Btu)							
Petroleum	26.70	23.93	24.23	24.03	24.49	26.52	0.0%
Natural Gas	3.56	3.96	4.15	3.66	3.38	3.28	-0.3%
Coal/other	-0.28	-0.84	-0.09	1.06	1.34	1.86	- -
Total	29.99	27.04	28.29	28.75	29.20	31.66	0.2%
Consumption (quadrillion Btu)							
Liquids	40.06	40.46	41.80	42.24	42.78	43.99	0.4%
Natural Gas	22.30	23.93	24.35	24.01	23.66	23.39	0.2%
Coal	22.50	23.03	24.19	25.87	27.75	29.90	1.2%
Nuclear Power	8.21	8.31	8.41	9.05	9.50	9.57	0.6%
Hydropower	2.89	2.92	2.99	3.00	3.00	3.00	0.2%
Biomass	2.50	3.01	3.60	4.50	5.42	5.51	3.3%
Other Renewable Energy	0.88	1.51	1.75	2.00	2.25	2.45	4.4%
Other	0.19	0.18	0.17	0.17	0.18	0.20	0.3%
Total	99.52	103.34	107.26	110.85	114.54	118.01	0.7%
Liquids (million barrels per day)							
Domestic Crude Production	5.10	5.93	6.16	6.23	6.04	5.59	0.4%
Other Domestic Production	3.19	3.70	4.11	4.45	4.77	4.85	1.8%
Net Imports	12.45	11.39	11.47	11.36	11.53	12.41	0.0%
Consumption	20.65	20.99	21.68	21.96	22.25	22.80	0.4%
Natural Gas (trillion cubic feet)							
Production	18.57	19.36	19.58	19.73	19.67	19.50	0.2%
Net Imports	3.46	3.85	4.03	3.55	3.28	3.18	-0.4%
Consumption	21.66	23.25	23.66	23.33	22.99	22.72	0.2%
Coal (million short tons)							
Production and Waste Coal	1176	1179	1229	1281	1373	1467	0.9%
Net Imports	-15	-34	-3	46	57	78	- -
Consumption	1114	1145	1225	1327	1431	1545	1.4%
Prices (2006 dollars)							
World Oil Price (dollars per barrel)	66.02	74.03	59.85	59.70	64.49	70.45	0.3%
Imported Price of Crude Oil (dollars per barrel)	59.05	65.18	52.03	51.55	55.68	58.66	0.0%
Gas Wellhead Price (dollars per thousand cubic feet)	6.42	6.33	5.36	5.44	5.86	6.63	0.1%
Coal Minemouth Price (dollars per ton)	24.63	26.16	23.38	22.51	22.75	23.32	-0.2%
Electricity (cents per kilowatthour)	8.9	9.2	8.5	8.6	8.7	8.8	0.0%
Economic Indicators							
Real Gross Domestic Product (billion 2000 dollars)	11319	12453	14199	15984	17951	20219	2.4%
GDP Chain-Type Price Index (index, 2000=1.000)	1.166	1.260	1.375	1.520	1.686	1.871	2.0%
Real Disposable Personal Income (billion 2000 dollars)	8397	9472	11055	12654	14349	16246	2.8%
Value of Industrial Shipments (billion 2000 dollars)	5821	5997	6659	7113	7546	7997	1.3%
Energy Intensity, Primary (thousand Btu per 2000 dollar of GDP)	8.79	8.30	7.55	6.93	6.38	5.84	-1.7%
Carbon Dioxide Emissions (million metric tons)	5,890	6,011	6,226	6,384	6,571	6,851	0.6%

Notes: Quantities are derived from historical volumes and assumed thermal conversion factors. "Other" production includes liquid hydrogen, methanol, supplemental natural gas, and some inputs to refineries. Net imports of petroleum include oil, petroleum products, unfinished oils, alcohol, ethers, and blending components. "Other" net imports include coal coke and electricity. "Other" consumption includes net electricity imports, and nonbiogenic municipal solid waste.

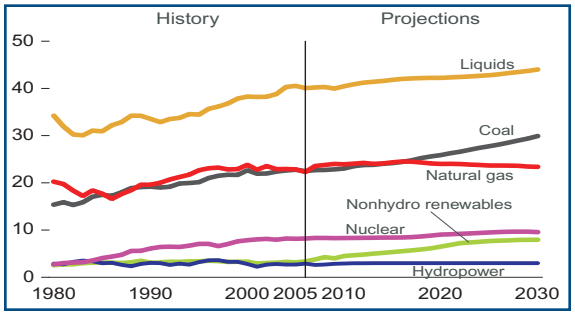
Sources: Tables A1, A11, A13, A15, A18, and A19 from the *Annual Energy Outlook 2008, May 2008.*

Visit the Energy Forecasts & Analyses Web Site at:
www.eia.doe.gov/oiaf/forecasting.html

EIA Web Site:
www.eia.doe.gov

For further information, contact:
National Energy Information Center
Washington, DC
(202)586-8800 infoctr@eia.doe.gov

Energy Consumption by Fuel, 1980-2030 (quadrillion Btu)

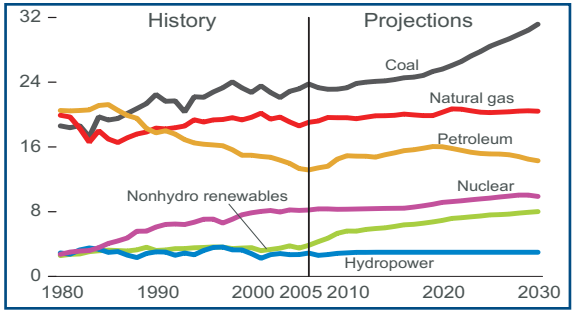


- Primary energy demand grows at a rate of 0.7 percent per year, to 118.0 quadrillion Btu in 2030. Improved equipment and building efficiency and continued structural shifts in the industrial sector moderate energy demand growth.

- Electricity demand grows at a rate of 1.1 percent per year, reaching 4,972 billion kilowatthours in 2030. Rapid growth in the use of computers, office equipment, and electrical appliances is only partially offset by improved efficiency.

- Natural gas demand grows at a rate of 0.2 percent per year, with the most rapid growth rates for electricity generation. Projected coal demand grows by 1.4 percent annually, with over 90 percent used for electricity generation.

Energy Production by Fuel, 1980-2030 (quadrillion Btu)

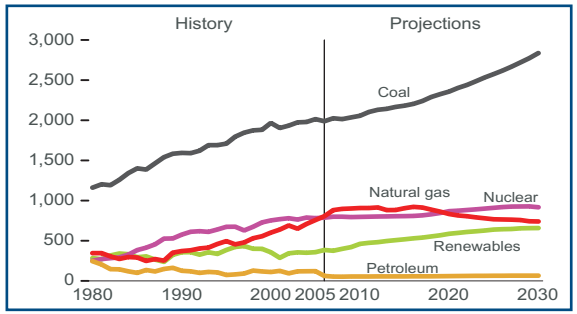


- Projected U.S. domestic crude oil production increases to a peak of 6.3 million barrels per day in 2018 as a result of increased offshore production, predominantly from the deep waters of the Gulf of Mexico, which offsets a decline in Alaskan production. Production subsequently falls to 5.6 million barrels per day in 2030. The net petroleum import share declines as domestic production increases and then falls. Imports account for 54 percent of demand by 2030, down from 60 percent in 2006.

- Total natural gas supply is projected to increase to 22.7 trillion cubic feet in 2030, with major contributions from LNG imports, the completion of an Alaskan natural gas pipeline in 2020, and domestic unconventional production. In 2030, net LNG imports are 2.8 trillion cubic feet, production from Alaska is 2.0 trillion cubic feet, and unconventional production is 9.5 trillion cubic feet.

- Domestic coal production (excluding waste coal) grows at a rate of 0.9 percent per year, from 1,163 million tons in 2006 to 1,455 million tons in 2030. This is driven by the increased use of existing electric generation plants and the addition of new coal plants. Production from mines west of the Mississippi River is expected to provide the largest share of the incremental coal production.

Electricity Generation by Fuel, 1980-2030 (billion kilowatthours)



- Electricity generation from coal, nuclear, and renewable fuels is projected to increase through 2030. Coal remains the primary fuel for generation with its share of generation increasing from 49 percent in 2006 to 54 percent in 2030. The natural gas share of generation remains between 20 and 21 percent through 2017, before falling to 14 percent in 2030. Over the period from 2006 to 2030, 100 gigawatts of net new coal-fired generating capacity are projected to be added in the *AEO2008* reference case, including 4 gigawatts at coal-to-liquids plants and 29 gigawatts at Integrated Gasification Combined Cycle plants.

- Nuclear generating capacity increases to 114.9 gigawatts in 2030, including 2.7 gigawatts from uprates of existing plants and 16.6 gigawatts of capacity at newly constructed power plants, partially stimulated by the provisions in the Energy Policy Act of 2005.

- Nonhydroelectric renewable technologies, mostly biomass and wind, are projected to grow relatively rapidly, but their contribution is expected to remain small. Fossil technologies, particularly coal and natural gas, are expected to dominate new electricity capacity additions.

- Carbon dioxide emissions from energy use grow by 0.6 percent per year from 5,890 million metric tons in 2006 to 6,851 million metric tons in 2030 due to growth in fossil fuel consumption and slow penetration by renewables and only a modest increase in nuclear generation.

- The carbon dioxide emissions intensity of the U.S. economy is projected to fall from 520 metric tons per million dollars of GDP in 2006 to 339 metric tons per million dollars of GDP in 2030, an average decline of 1.8 percent per year.

DOE/EIA-X064
April 2008

Annual Energy Outlook 2008

With Projections for 2030

Energy Information Administration