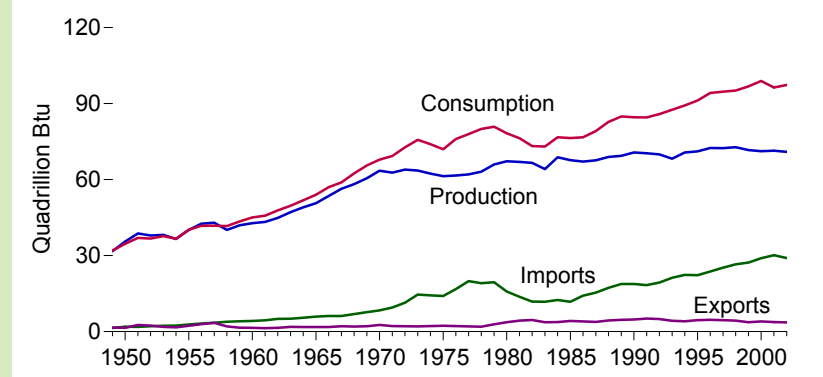


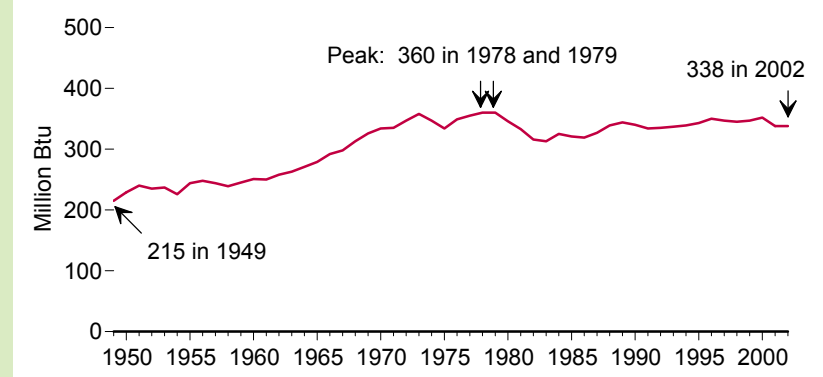
Overview

Figure 1. Energy Overview



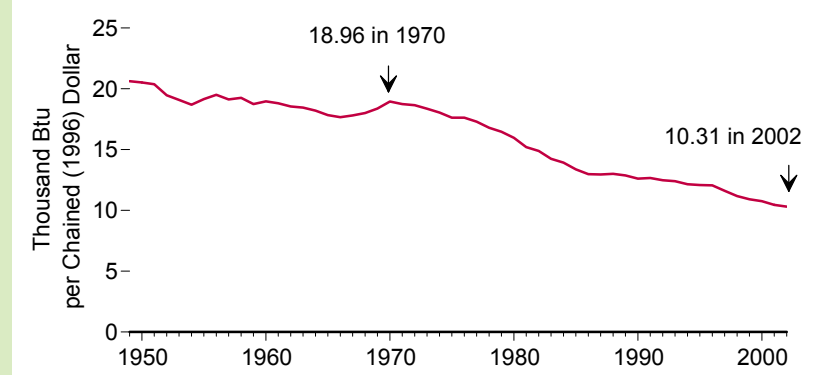
The United States was self-sufficient in energy until the late 1950s when energy consumption began to outpace domestic production. The Nation imported more energy to fill the gap. In 2002, net imported energy accounted for 26 percent of all energy consumed.

Figure 2. Energy Consumption per Person



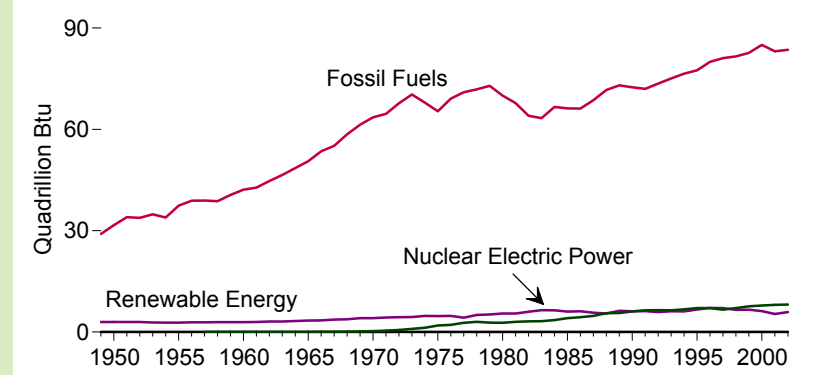
Energy use per person stood at 215 million Btu in 1949. The rate generally increased until the oil price shocks of the mid-1970s and early 1980s caused the pattern to reverse for a few years. Slight increases occurred in the 1990s, but the rate fell in 2001 and remained unchanged in 2002.

Figure 3. Energy Use per Dollar of Gross Domestic Product



Over the second half of the 20th century, the rate at which energy was consumed per dollar of the economy's output of goods and services fell dramatically. By the end of the century, the rate was half of the mid-century level. The rate in 2002 was 46 percent below that in 1970. The decline resulted from efficiency improvements and structural changes in the economy.

Figure 4. Energy Consumption by Source



Most energy consumed in the United States has come from fossil fuels. Renewable energy resources, mostly hydroelectricity and the industrial use of biomass, have supplied a relatively small but steady portion. In the late 1950s, nuclear fuel began to be used to generate electricity. By the late 1980s, nuclear fuel's share of total energy consumption equaled that of renewable energy.

Consumption by Source

Figure 5. Energy Consumption by Source, 1635-2002

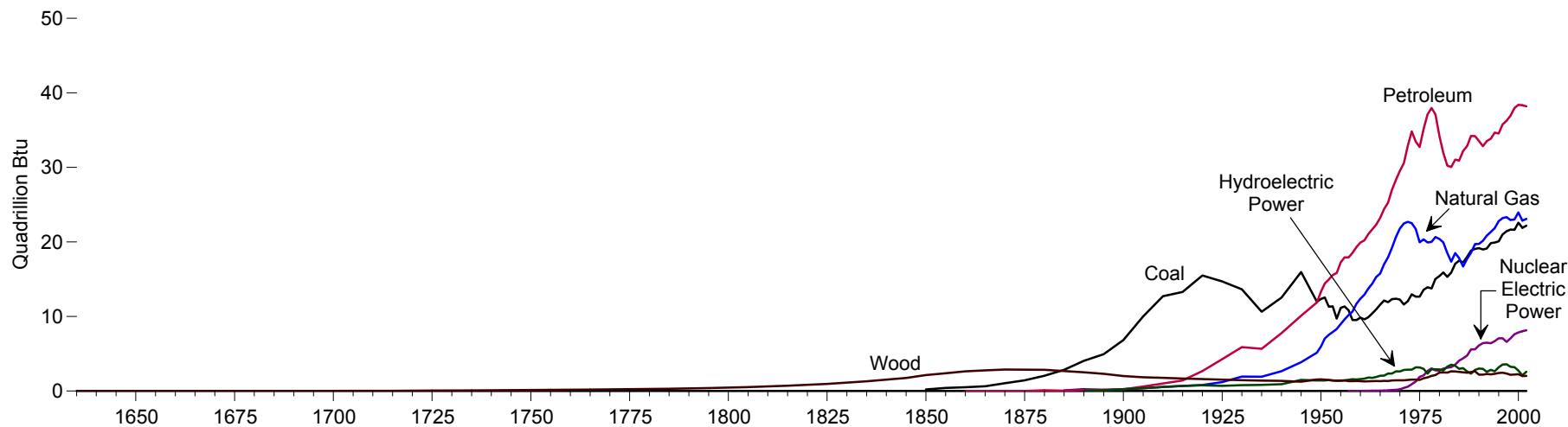
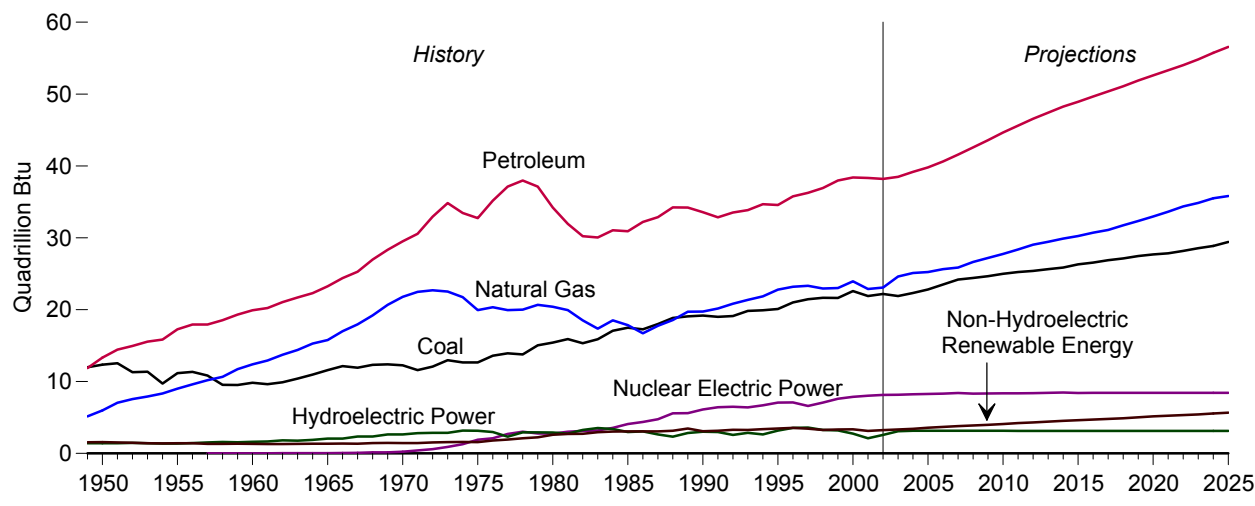


Figure 6. Energy Consumption History and Outlook, 1949-2025

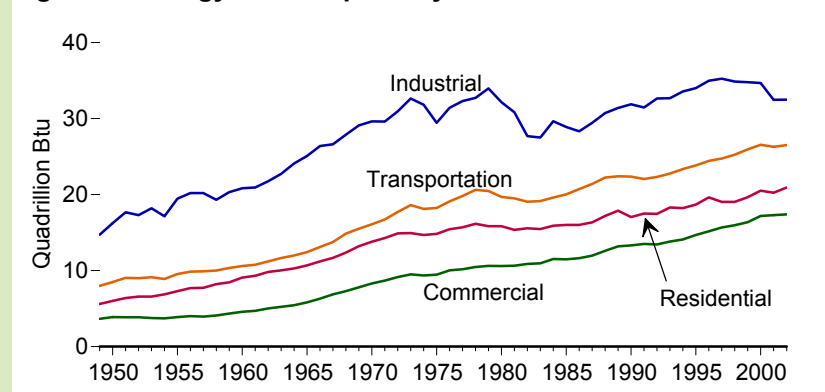


In the long view of American history, wood served as the preeminent form of energy for about half of the Nation's history. Around 1885, coal surpassed wood's usage. Despite its tremendous and rapid expansion, coal was, in turn, overtaken by petroleum in the middle of the 20th century. Natural gas, too, experienced rapid development into the second half of the 20th century, and coal began to expand again. Late in the 20th century still another form of energy, nuclear electric power, was developed and made significant contributions.

While the Nation's energy history is one of large-scale change as new forms of energy were developed, the outlook for the next couple of decades (assuming current laws, regulations, and policies) is for continued growth and reliance on the three major fossil fuels—petroleum, natural gas, and coal—modest expansion in renewable resources, and relatively flat generation from nuclear electric power.

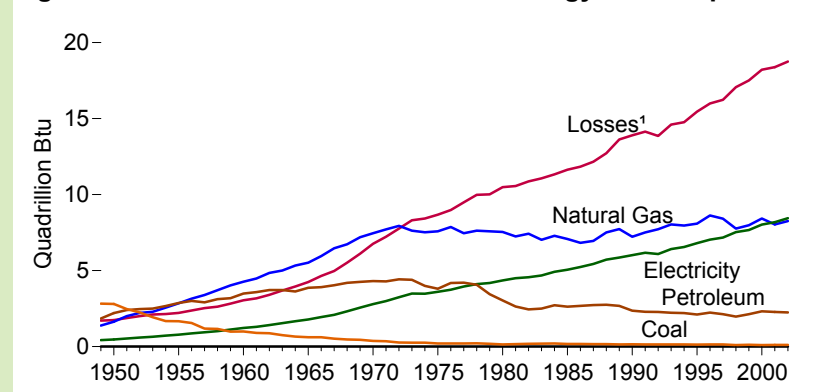
Consumption by Sector

Figure 7. Energy Consumption by End-Use



The industrial sector of the economy used the largest share of energy and showed the greatest volatility. In particular, steep drops occurred in 1975 and 1980-83 in response to high oil prices. Transportation was the next largest energy consuming sector, followed by residential use and commercial use.

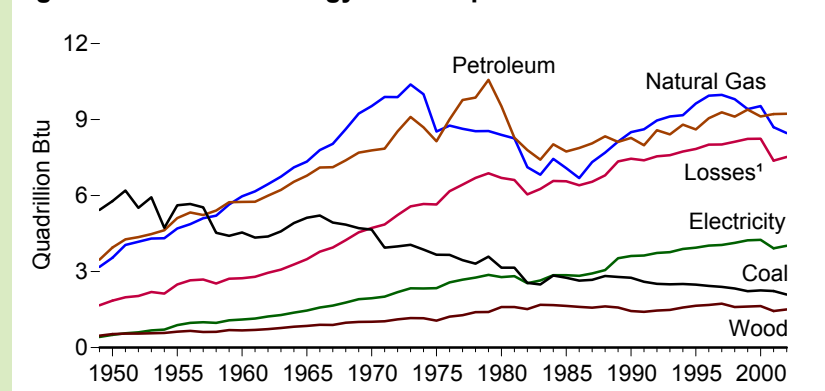
Figure 8. Residential and Commercial Energy Consumption



¹ Energy lost during generation, transmission, and distribution of electricity.

Coal, once important to residential and commercial consumers, was gradually replaced by other forms of energy. Petroleum use peaked in the early 1970s. Natural gas grew fast until the early 1970s and then fluctuated around the 1970 level over the next three decades. Meanwhile, electricity's use (and related losses) expanded dramatically.

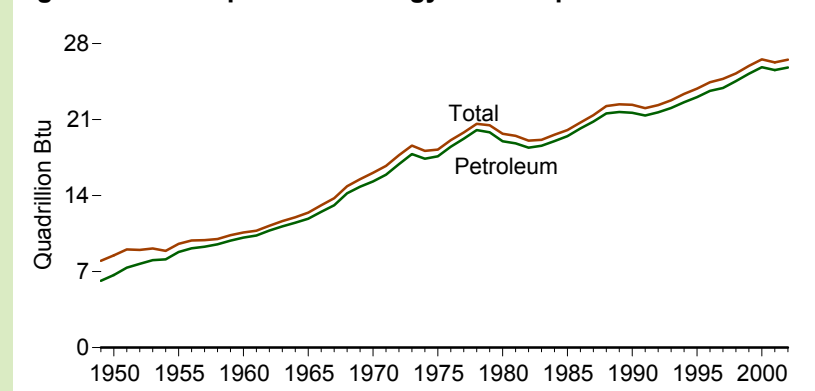
Figure 9. Industrial Energy Consumption



¹ Energy lost during generation, transmission, and distribution of electricity.

Coal, once the prominent form of energy in the industrial sector, gave way to natural gas and petroleum in the late 1950s. Both natural gas and petroleum expanded rapidly until the early 1970s; after that, large swings occurred. Industrial sector usage of electric and wood energy increased in 2002 while other sources declined.

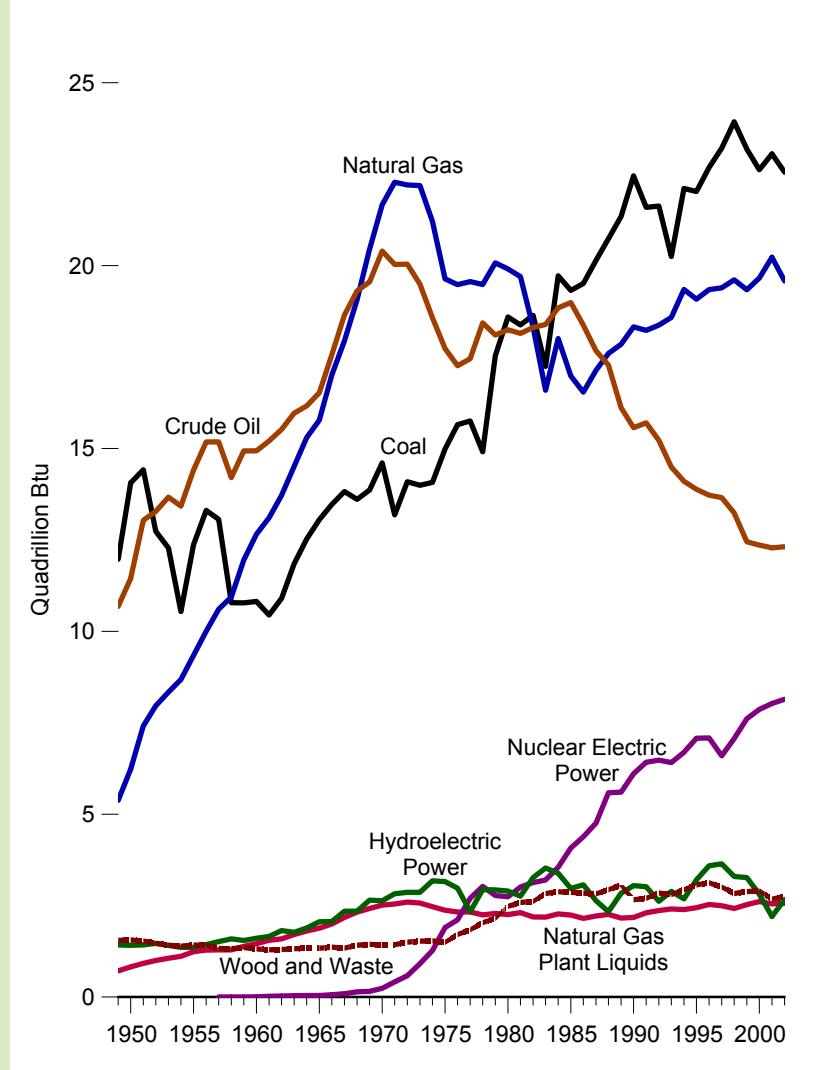
Figure 10. Transportation Energy Consumption



The transportation sector's use of energy, which is overwhelmingly petroleum, more than tripled from 1949 to 2002. Motor gasoline accounts for about two-thirds of the petroleum consumed in the sector. Distillate fuel oil and jet fuel are other important petroleum products used in the sector.

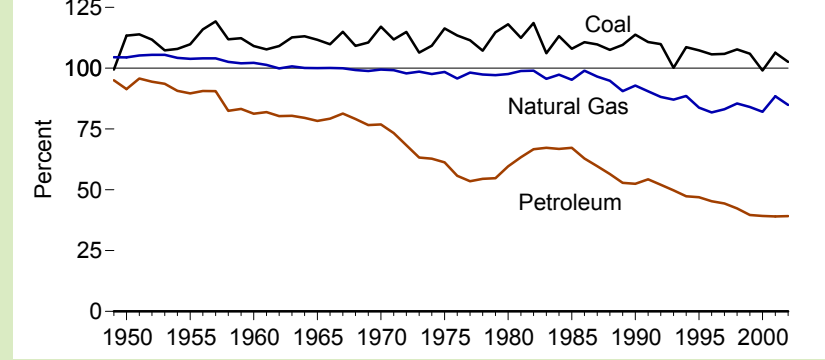
Production and Trade

Figure 11. Energy Production by Major Source, 1949-2002



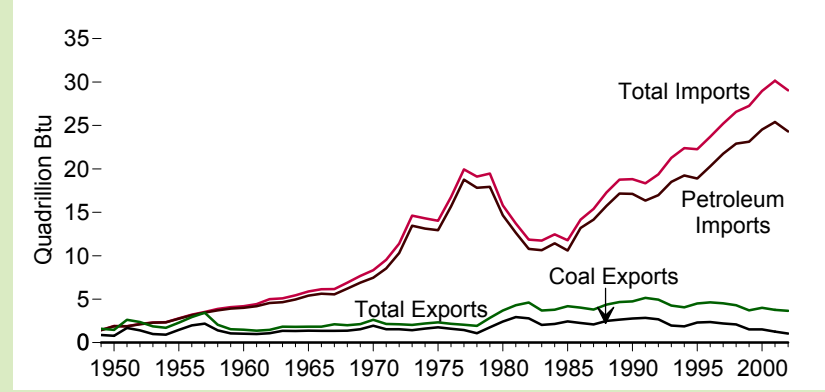
Most energy produced in the United States comes from fossil fuels—coal, natural gas, and crude oil. Coal, the leading source at the middle of the 20th century, was surpassed by crude oil and natural gas for many years, but again became the leading source of energy in the mid-1980s, used primarily for electric generation. Hydroelectric output in 2001 was the lowest level since 1966, but rebounded in 2002.

Figure 12. Production as Share of Consumption for Coal, Natural Gas, and Petroleum



The Nation almost always produced more than enough coal for our own requirements. For many years, we were also self-sufficient in natural gas, but after 1967, we produced less than we consumed each year. Petroleum production fell far short of domestic requirements.

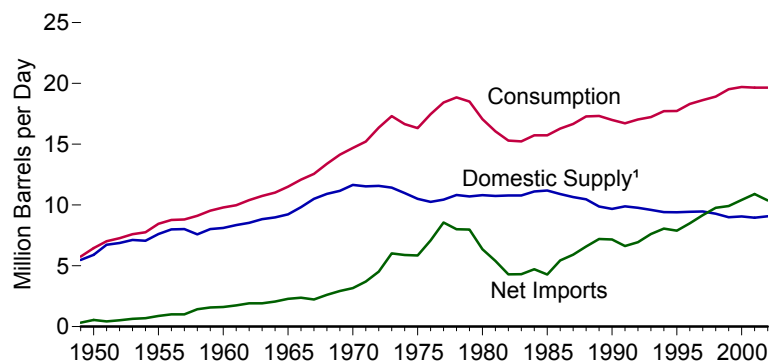
Figure 13. Energy Imports and Exports



Since the mid-1950s, the Nation imported more energy than it exported. In 2002, the United States imported 29 quadrillion Btu of energy and exported 4 quadrillion Btu. Most imported energy was in the form of petroleum; in recent years, natural gas imports grew, primarily from Canada. Exported energy was primarily in the form of coal until the recent decade when petroleum exports expanded, and, in some years, even exceeded coal exports.

Petroleum Overview and Crude Oil Production

Figure 14. Petroleum Overview

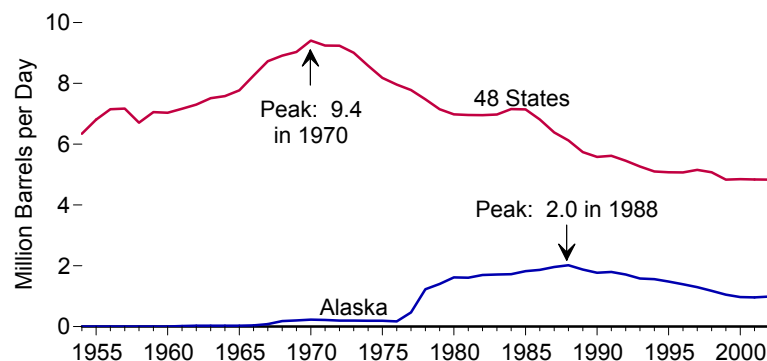


Consumption = Petroleum Products Supplied.

¹ Crude oil and natural gas plant liquids production; refinery gains; and field production of other components.

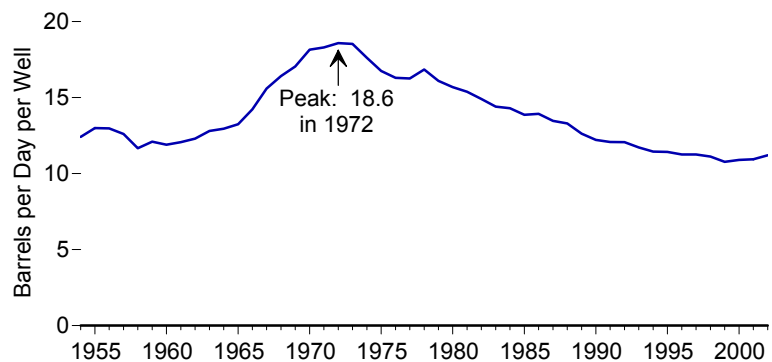
When U.S. domestic supply of petroleum peaked at 11.7 million barrels per day in 1970, net imports stood at 3.2 million barrels per day. As domestic supply declined, consumption grew. In 1998, for the first time, net imports surpassed domestic supply. In 2002, domestic supply was 9.1 million barrels per day and net imports were 10.4 million barrels per day.

Figure 15. 48 States and Alaskan Crude Oil Production



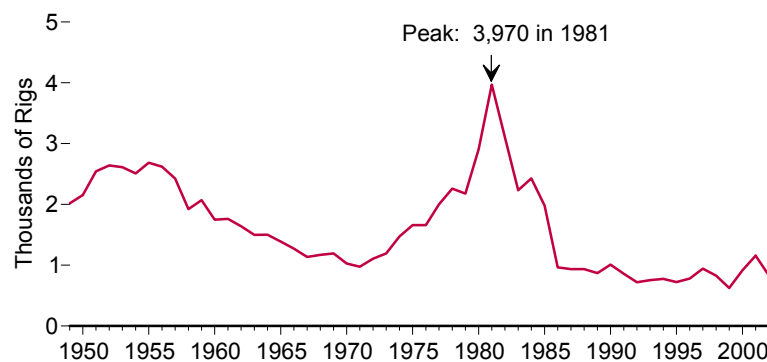
Crude oil production peaked in the U.S. 48 States at 9.4 million barrels per day in 1970. As production fell in the 48 States, Alaska's production came on line and helped supply U.S. needs. Alaskan production peaked at 2.0 million barrels per day in 1988, then fell to less than half the peak rate by 2001, before recovering modestly in 2002.

Figure 16. Crude Oil Well Productivity



The amount of crude oil produced per day per well rose sharply in the 1960s, reached a peak of 18.6 barrels per day per well in 1972, and, except for a brief recovery in 1978, fell through 1999. In 2002, productivity measured 11.2 barrels per day per well, 40 percent below the peak but up slightly from the year before.

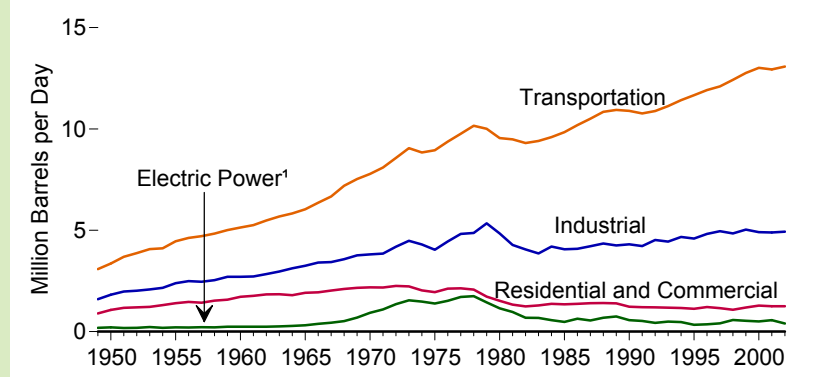
Figure 17. Crude Oil and Natural Gas Rotary Rigs in Operation



Rotary rig activity declined sharply in the period from 1955 to 1971. After 1971, the number of rigs in operation began to climb again, and a peak of nearly 4 thousand rigs in operation was registered in 1981. A sharp decline followed, and the number of rigs in operation in 2002 stood at 79 percent below the peak level in 1981.

Petroleum Consumption and Prices

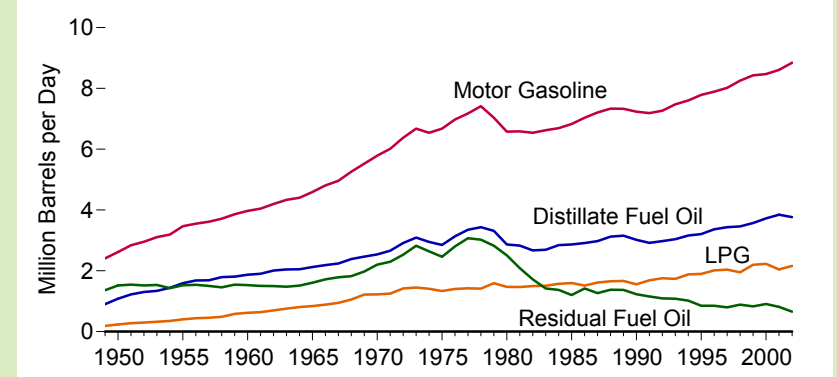
Figure 18. Petroleum Consumption by Sector



¹ Through 1988, electric utilities only; after 1988, includes independent power producers.

Transportation was the largest consuming sector of petroleum and the one showing the greatest expansion over the second half of the 20th century. In 2002, 13 million barrels per day of petroleum products were consumed for transportation purposes, accounting for 67 percent of all petroleum used.

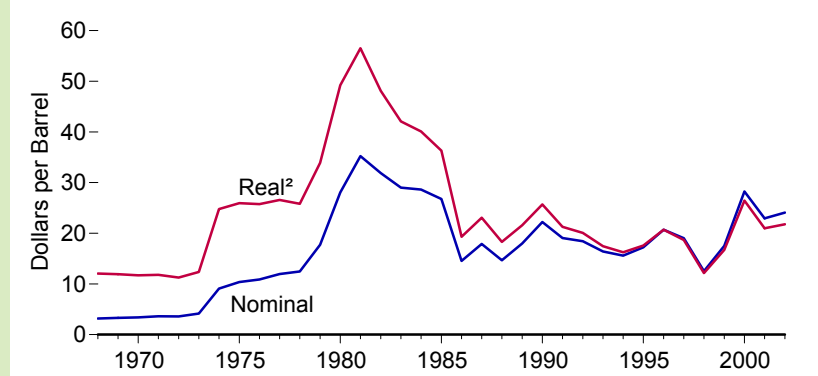
Figure 19. Petroleum Consumption by Selected Product



LPG = Liquefied petroleum gases.

Motor gasoline is the single largest petroleum product consumed in the United States. Its consumption stood at 8.8 million barrels per day in 2002, 45 percent of all petroleum consumption. Distillate fuel oil and liquefied petroleum gases (LPG) are other important products. The use of residual fuel oil fell off sharply after 1977.

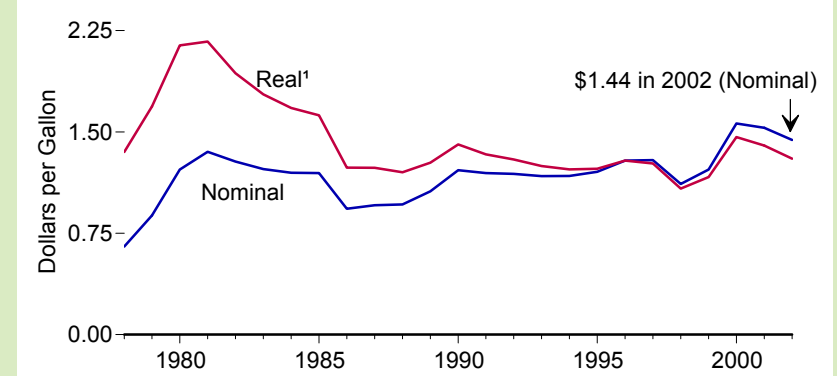
Figure 20. Crude Oil Refiner Acquisition Cost¹



¹ Composite of domestic and imported crude oil. ² In chained (1996) dollars, calculated by using gross domestic product implicit price deflator.

The refiner acquisition composite (domestic and foreign) cost of crude oil in nominal (unadjusted for inflation) dollars peaked at \$35 per barrel in 1981. The price fell dramatically over the years that followed, dropping below \$13 per barrel in 1998. It jumped to \$28 per barrel in 2000, declined to \$23 per barrel in 2001, and then rose again to \$24 per barrel in 2002.

Figure 21. Price of Motor Gasoline

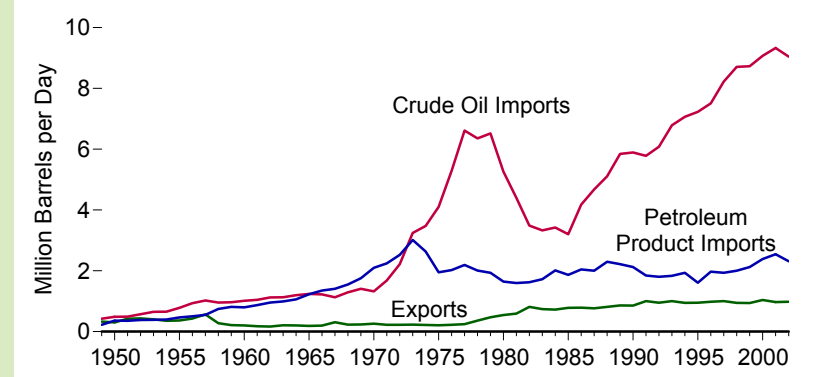


¹ In chained (1996) dollars, calculated by using gross domestic product implicit price deflator.

In nominal (unadjusted for inflation) dollars, Americans paid an average of 65¢ per gallon for motor gasoline in 1978. The 2002 average price of \$1.44 was 122 percent higher than the 1978 rate but, adjusted for inflation, it was 4 percent lower.

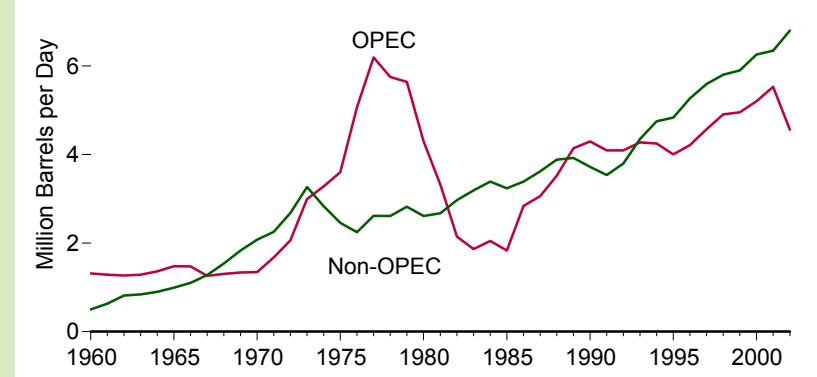
Petroleum Trade

Figure 22. Petroleum Trade



U.S. crude oil imports grew rapidly from mid-century until the late 1970s. From 1979 to 1985, imports fell sharply due to improved efficiency and conservation efforts. After 1985, the upward trend resumed. In 2001, crude oil imports reached a record-high level of 9.3 million barrels per day, but declined to 9.0 million barrels per day in 2002. Petroleum product imports were 2.3 million barrels per day in 2002.

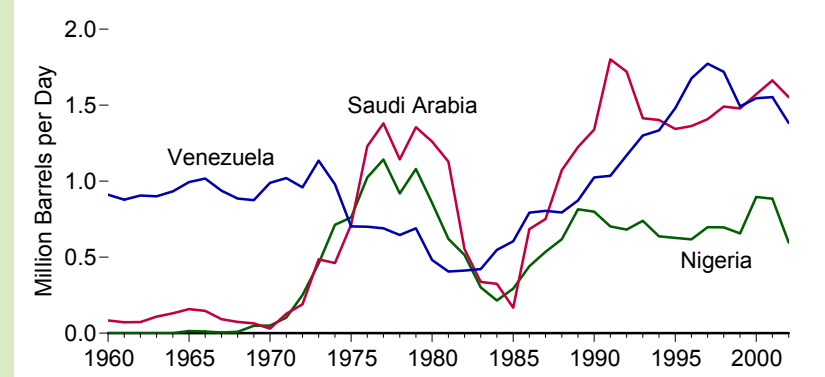
Figure 23. Imports From OPEC and Non-OPEC Countries



OPEC = Organization of Petroleum Exporting Countries.

As U.S. petroleum imports rose sharply in the late 1970s, the Nation's reliance on petroleum from the Organization of Petroleum Exporting Countries (OPEC) grew. In 1977, 70 percent of U.S. petroleum imports came from OPEC countries. Since 1993, more petroleum imports have come from non-OPEC countries than OPEC countries.

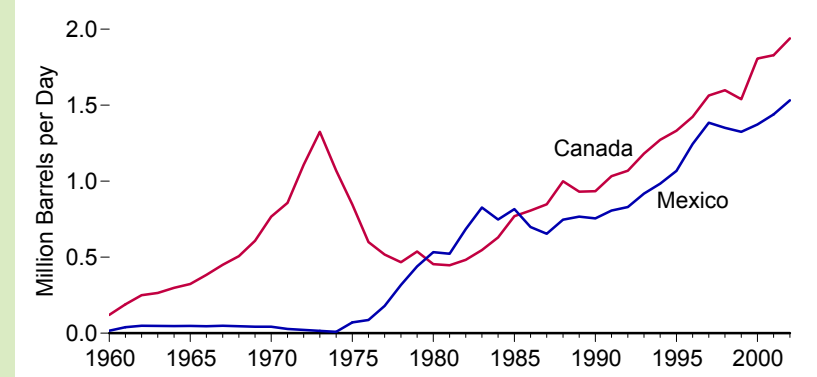
Figure 24. Imports From Selected OPEC Countries



OPEC = Organization of Petroleum Exporting Countries.

Among OPEC countries, Saudi Arabia, Venezuela, and Nigeria—nations from three different continents—were key suppliers of petroleum to the American market. Each experienced wide fluctuation in the amount of petroleum it sold to the United States over the decades. In 2002, the three together accounted for more than three-fourths of U.S. imports from OPEC countries.

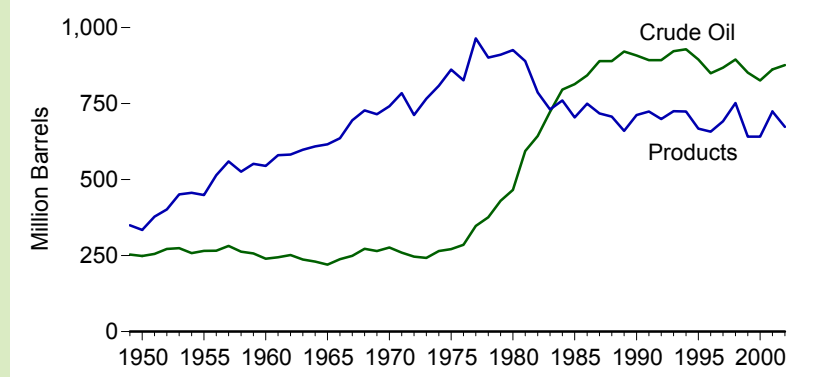
Figure 25. Imports From Canada and Mexico



Canada and Mexico, our national neighbors, supplied the largest quantities of petroleum from non-OPEC countries. Out of both OPEC and non-OPEC countries, Canada is now the leading supplier of petroleum imports to the United States. Imports from Mexico were insignificant until the mid-1970s when they began to play a key role in U.S. supplies. In 2002, Canada and Mexico together provided 31 percent of all U.S. petroleum imports.

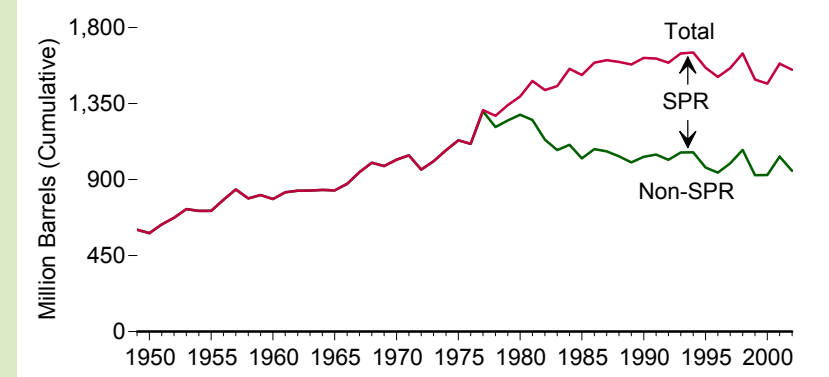
Petroleum Stocks

Figure 26. Stocks of Crude Oil and Products



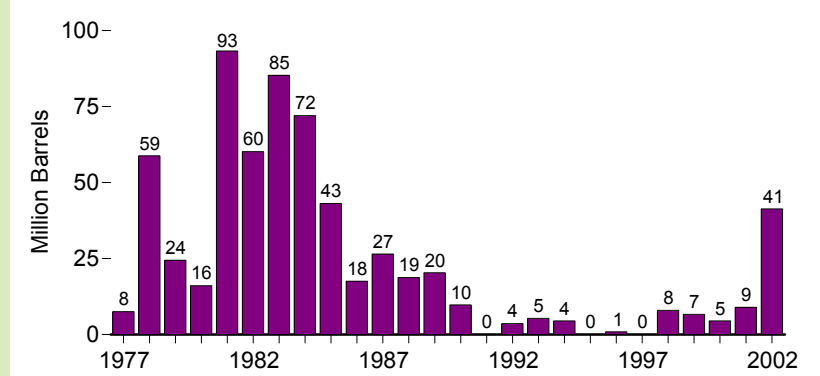
Through 1983, the Nation held most of its petroleum storage in the form of products, which are ready for the market. After that, most petroleum in storage was in the form of crude oil. At the end of 2002, petroleum stocks totaled 1.6 billion barrels, 57 percent crude oil and 43 percent products.

Figure 27. Total Stocks and the Strategic Petroleum Reserve



In 1977, the United States began building the Strategic Petroleum Reserve (SPR), a national reserve of petroleum stocks in case of emergency. U.S. total petroleum stocks declined 2 percent in 2002, but the amount of crude oil held in the reserve reached a new peak of 599 million barrels.

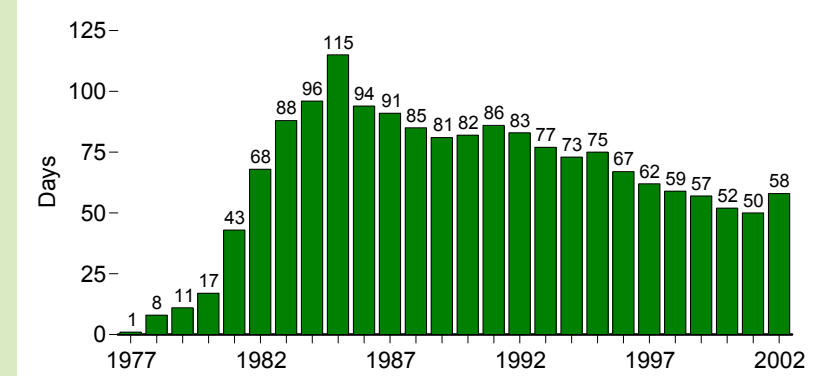
Figure 28. Crude Oil Imports for SPR¹



¹ Imported by SPR and imported by others for SPR.

Most of the crude oil in SPR is imported oil, and most of it came in during the early 1980s. In fact, from 1991 through 1997, only 14 million barrels were imported for the reserve, and in 3 of those years, no oil at all was imported for the reserve. In 2002, 41 million barrels of crude oil were imported for SPR.

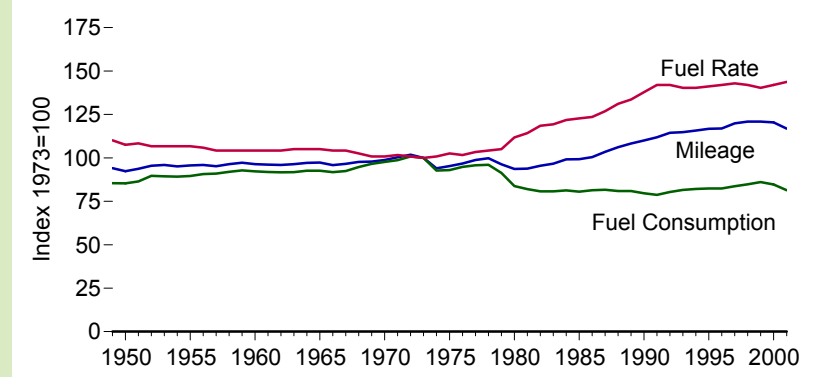
Figure 29. SPR Stocks as Days' Worth of Net Imports



An important SPR measure is the number of days' worth of total net imports of petroleum that could be met by the reserve in an emergency. The peak level occurred in 1985 when the reserve could have supplied 115 days of petroleum net imports, at the 1985 level. The rate trended down through 2001, but rose substantially during 2002, reaching 58 days at year-end.

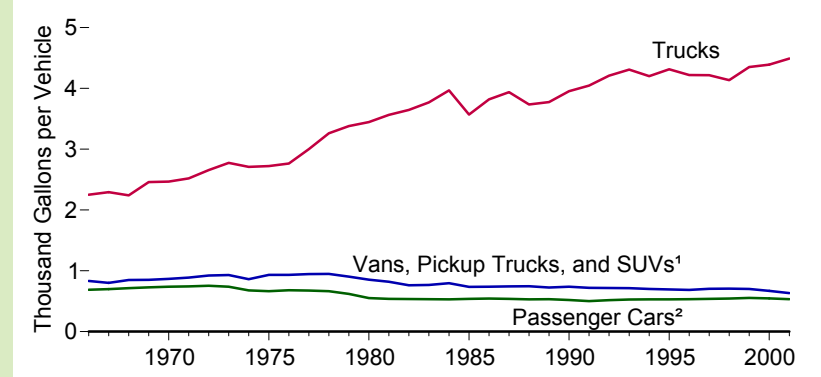
Motor Vehicles

Figure 30. Motor Vehicle Indicators



The composite motor vehicle fuel rate (miles per gallon) soared 42 percent from 1973 to 1991. Efficiency gains slowed over succeeding years but reached a new high in 2001. Mileage (miles driven per vehicle) grew steadily from 1980 to 1998, but declined from 1999 through 2001. Fuel consumption per vehicle, which began to grow again in 1992 after a 21-percent decline from 1973 to 1991, reversed course in 2001 and 2002.

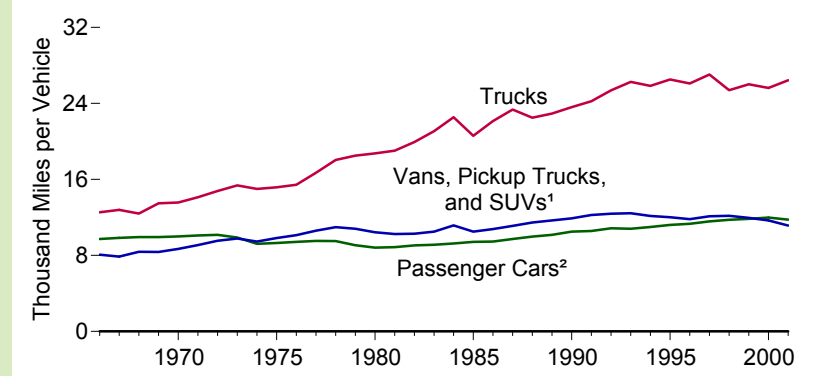
Figure 31. Motor Vehicle Fuel Consumption



¹ Sport utility vehicle. ² Motorcycles are included through 1989.

From 1966 to 2001, fuel consumption rates for trucks doubled, growing from 2.3 thousand gallons per truck to 4.5 thousand gallons per truck. Meanwhile, fuel consumption rates of other vehicle types fell, passenger cars down 23 percent and other vehicles down 24 percent.

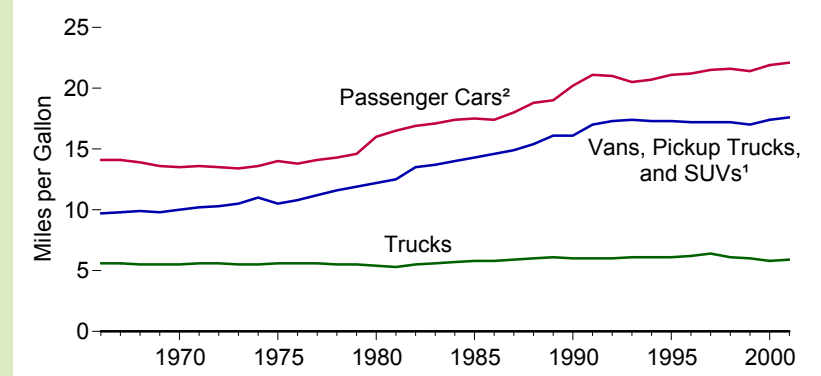
Figure 32. Motor Vehicle Mileage



¹ Sport utility vehicle. ² Motorcycles are included through 1989.

Truck miles traveled per year greatly exceeded that of other vehicle types and grew sharply from 1966 to 2001, up 111 percent. In 2001, trucks averaged 26.4 thousand miles per vehicle per year, while passenger cars averaged 11.8 thousand miles per year, and vans, pickup trucks, and sport utility vehicles averaged 11.1 thousand miles per year.

Figure 33. Motor Vehicle Fuel Rates



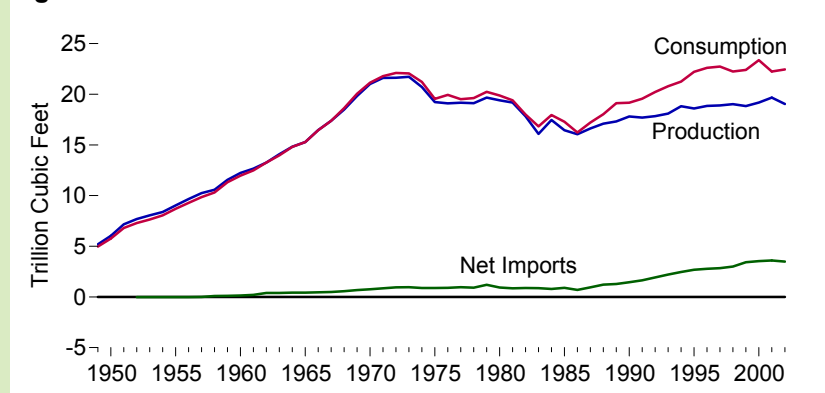
¹ Sport utility vehicle. ² Motorcycles are included through 1989.

Fuel rates (miles per gallon) for passenger cars and vans, pickup trucks, and sport utility vehicles rose from the late 1970s through the early 1990s and again in 2000 and 2001. Truck fuel rates were generally flat throughout the entire period.

Note: Motor vehicles include passenger cars, motorcycles, vans, pickup trucks, sport utility vehicles, trucks, and buses.

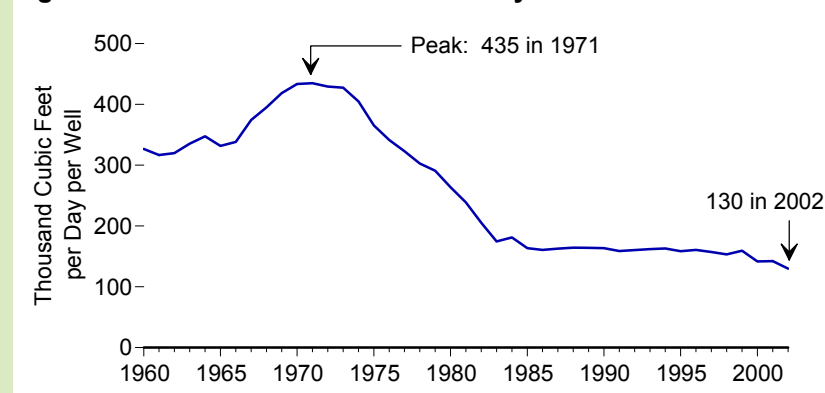
Natural Gas

Figure 34. Natural Gas Overview



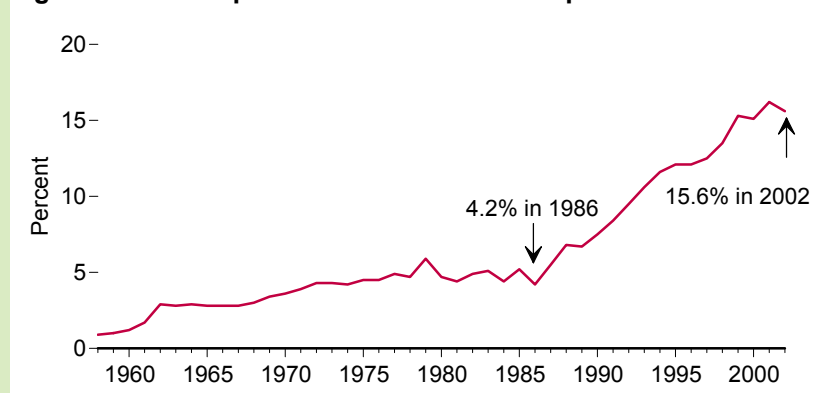
U.S. natural gas production and consumption were nearly in balance through 1986. When consumption began to outpace production, imports of natural gas rose to meet U.S. requirements for the fuel. In 2002, consumption stood at 22.5 trillion cubic feet (Tcf), production at 19.0 Tcf, and net imports at 3.5 Tcf.

Figure 35. Natural Gas Well Productivity



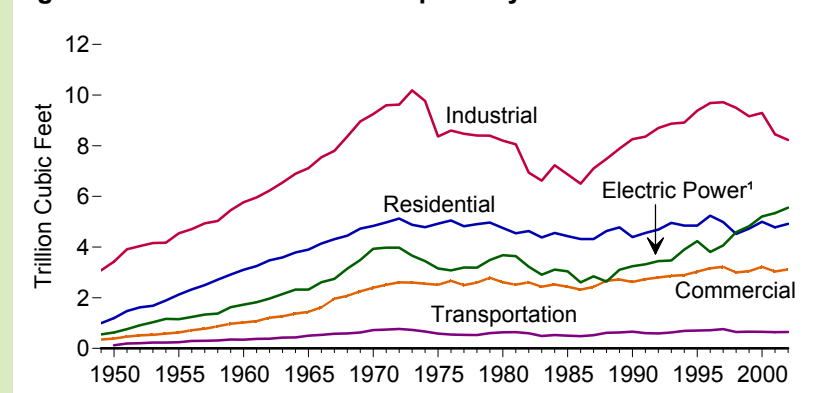
Gas well productivity, measured as gross withdrawals per day per well, grew rapidly in the late 1960s, peaked in 1971, and then fell sharply until the mid-1980s. Productivity remained nearly steady from 1985 through 1999, but then declined. The 2002 rate was 70 percent below the 1971 peak level.

Figure 36. Net Imports as Share of Consumption



From 1970 through 1987, net imports as a share of consumption registered in the 4-to-6 percent range. Net imports measured 4.2 percent of consumption in 1986, which was followed by consumption increases that outpaced production growth. Net imports expanded, and in 2002 accounted for 15.6 percent of consumption.

Figure 37. Natural Gas Consumption by Sector

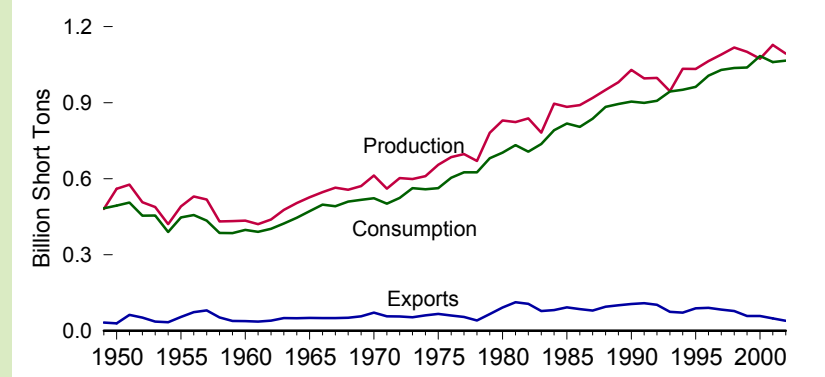


¹ Through 1988, electric utilities only; after 1988, includes independent power producers.

The industrial sector was both the largest consuming sector of natural gas and the sector with the greatest volatility over the years due to variability in industrial output. The electric power sector accounted for one-fourth of all natural gas consumption in 2002.

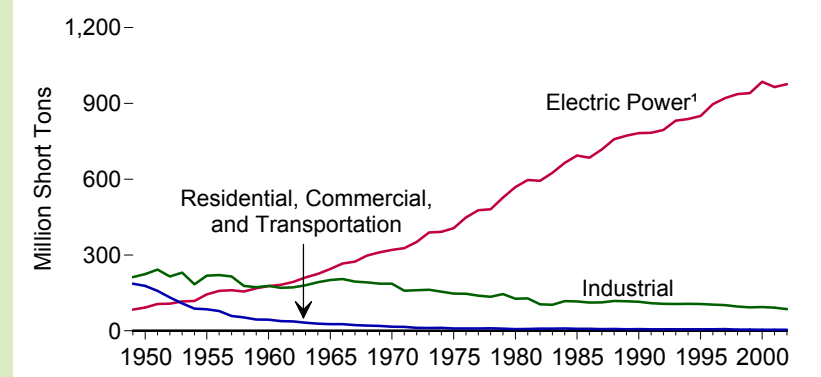
Coal

Figure 38. Coal Overview



Unlike petroleum or natural gas, domestic supplies of coal nearly always outpaced U.S. consumption of the resource. Coal exports peaked at 113 million short tons in 1981. In 2002, the United States exported 40 million short tons, 42 percent of it to Canada.

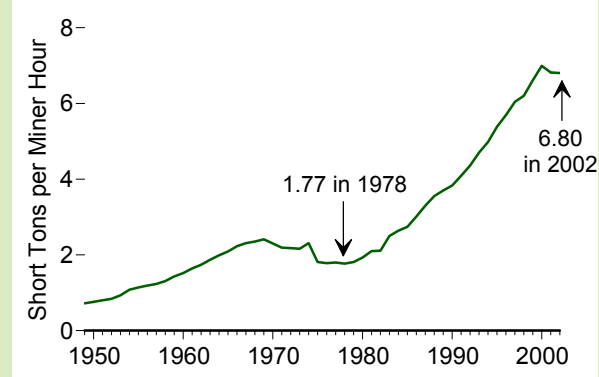
Figure 39. Coal Consumption by Sector



¹ Through 1988, electric utilities only; after 1988, includes independent power producers.

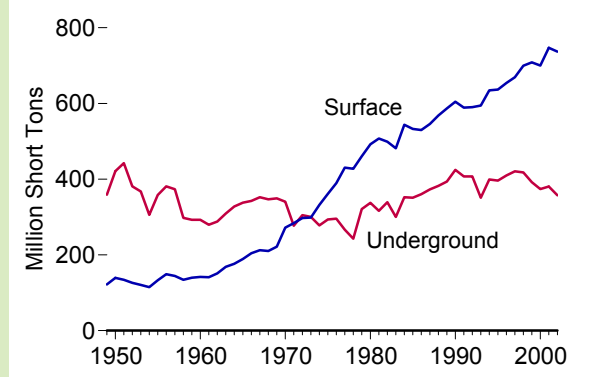
In the 1950s, most coal was consumed in the industrial sector, many homes were still heated by coal, and the transportation sector consumed coal in steam-driven trains and ships. By the 1960s, most coal was used for generating electricity and by 2002 the electric power sector's share stood at 92 percent of all coal consumption.

Figure 40. Coal Mining Productivity



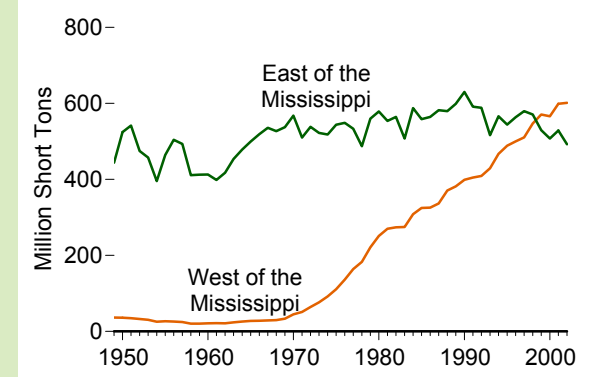
Improved mining technology and the shift toward more surface-mined coal promoted increased productivity from the Nation's mines after 1978.

Figure 41. Production by Mining Method



Most growth of coal production came from surface mines, which surpassed underground production after 1973.

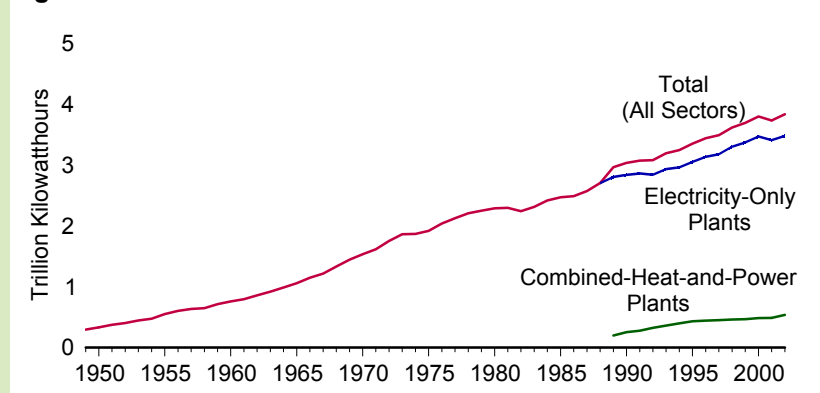
Figure 42. Production by Location



Western coal production expanded tremendously after 1969 and exceeded production from the East beginning in 1999.

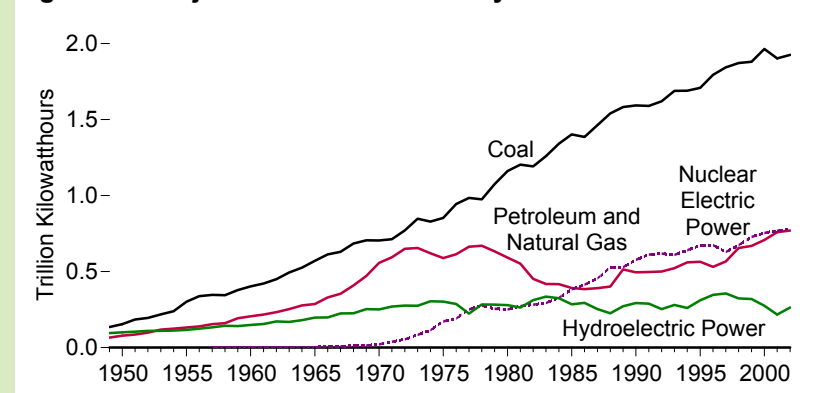
Electricity Generation and Useful Thermal Output

Figure 43. Electric Power Net Generation



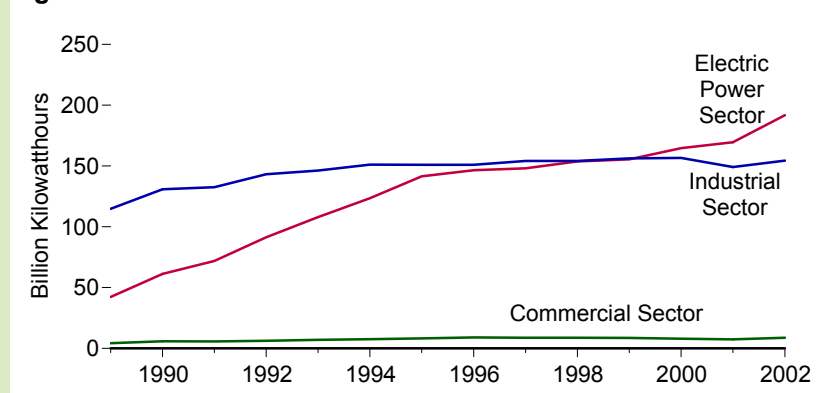
Electric power generation grew from 0.3 trillion kilowatthours in 1949 to 3.8 trillion kilowatthours in 2002. Over the entire span, electricity net generation failed to increase in only two recession-affected years, 1982 and 2001, when 2-percent decreases were recorded.

Figure 44. Major Sources of Electricity Net Generation



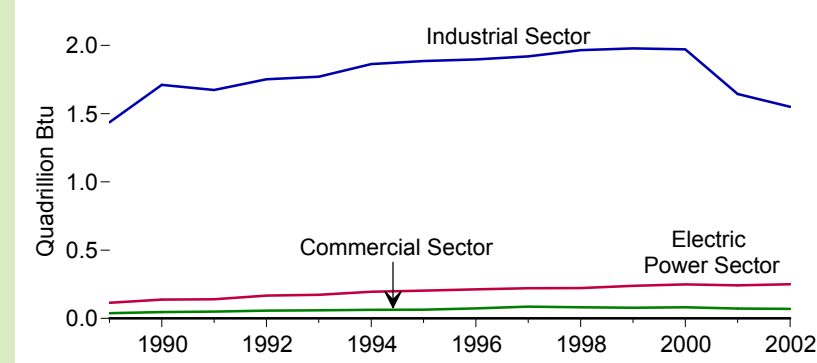
Most net generation of electricity came from coal. In fact, in 2002, fossil fuels (coal, petroleum, and natural gas) accounted for 71 percent of all net generation, while nuclear electric power contributed 20 percent, and renewable energy resources 9 percent. Over three-fourths of the net generation from renewable energy resources was derived from hydroelectric power.

Figure 45. Net Generation at Combined-Heat-and-Power Plants



Some facilities exist to produce only electricity; others function as combined-heat-and-power (CHP) plants that produce both electricity and heat from a single heat source. Some paper mills and refineries, which are part of the industrial sector, operate as CHP plants, and some commercial sector facilities, such as hospitals and college campuses, are CHP facilities.

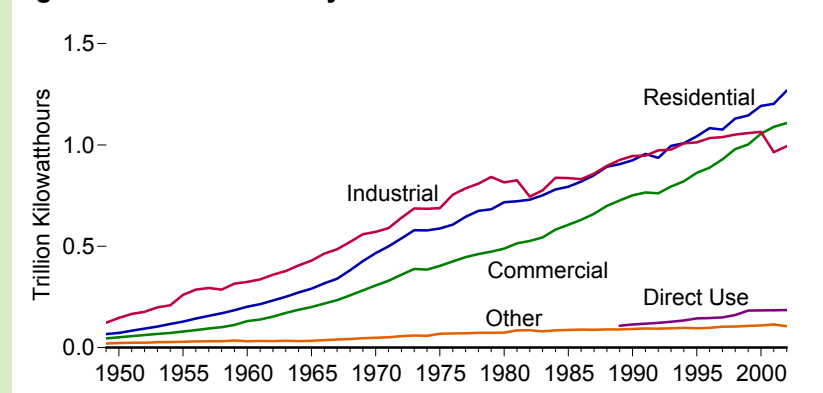
Figure 46. Useful Thermal Output at Combined-Heat-and-Power Plants



The non-electrical output at a combined-heat-and-power (CHP) plant is called useful thermal output. Useful thermal output is thermal energy that is available from the plant for use in industrial or commercial processes or heating or cooling applications. In 2002, 1.6 quadrillion Btu of useful thermal output was created by the industrial sector.

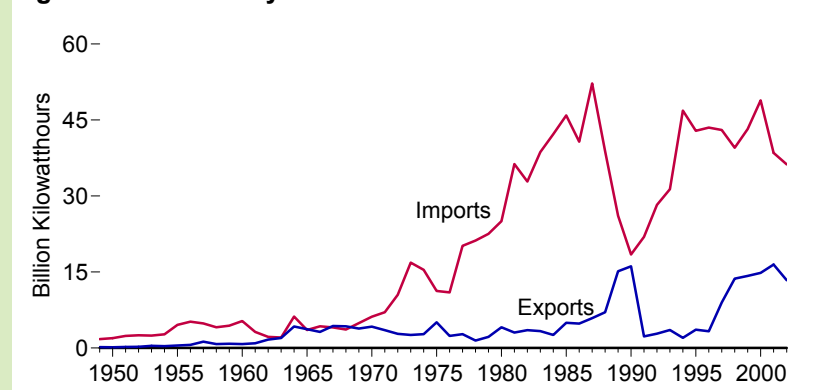
Electricity Sales, Prices, and Trade

Figure 47. Retail Sales by Sector



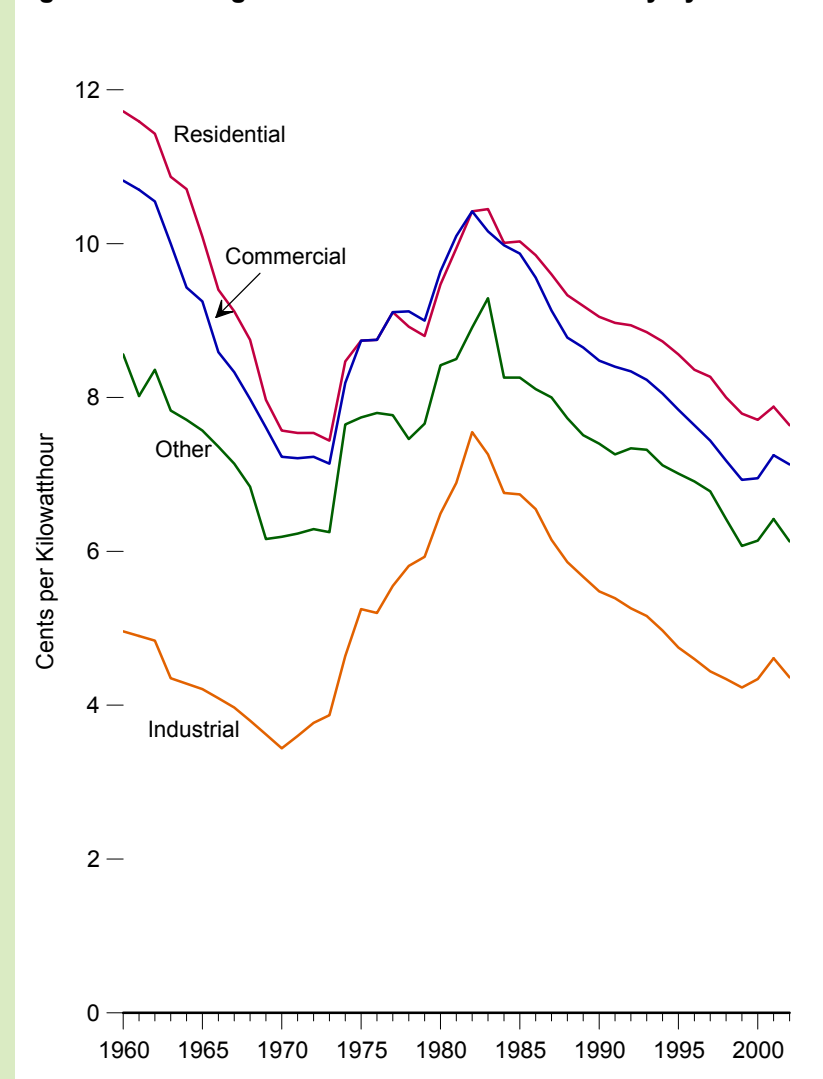
After mid-century, enormous growth occurred in electricity sales in all three major sectors—residential, industrial, and commercial. Beginning in 1993, residential sales surpassed industrial sales. The industrial sector's use of electricity showed the greatest volatility, especially from the late 1970s through the mid 1980s.

Figure 49. Electricity Trade



Except for a few years in the 1960s when imported and exported electricity were nearly equal, the United States imported more electricity than it exported. Most electricity trade occurred with Canada, with smaller exchanges between the United States and Mexico. In 2002, net imported electricity was less than 1 percent of all electricity used in the United States.

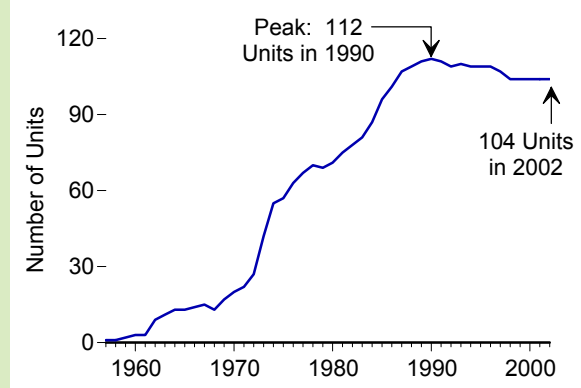
Figure 48. Average Real Retail Prices of Electricity by Sector



In inflation-adjusted terms, most electricity sector prices fell steeply in the 1960s, reversed course around 1970 to rise sharply through the early 1980s, and then recorded a pattern of steady decline through 2002 with only a brief upturn in 2001. Over the decades, industrial consumers paid the lowest rates for electricity; residential customers usually paid the highest prices. In 2002, all sectors paid lower rates than they had in 1960, when adjusted for inflation.

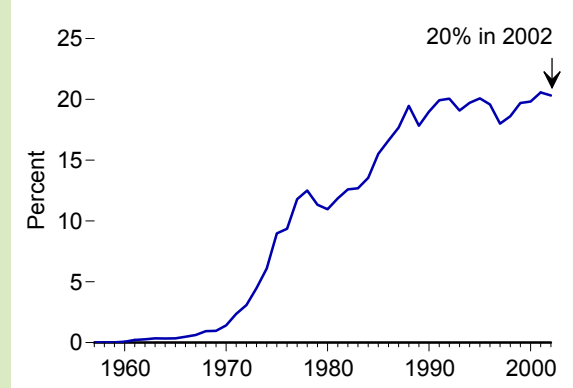
Nuclear Electric Power

Figure 50. Number of Operable Units



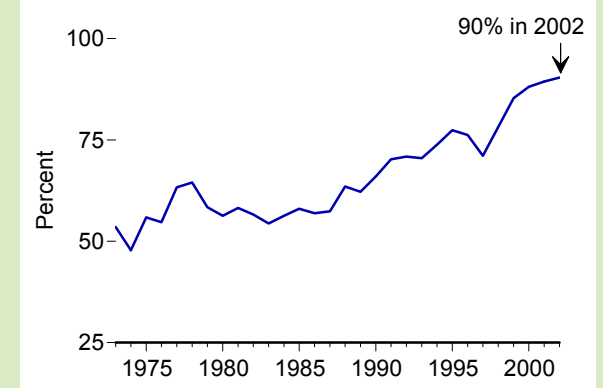
In 1957, a new plant in Shippingport, Pennsylvania, became the first operable nuclear electric plant in the United States. Many new units became operable in the 1970s and 1980s.

Figure 51. Nuclear Share of Electricity



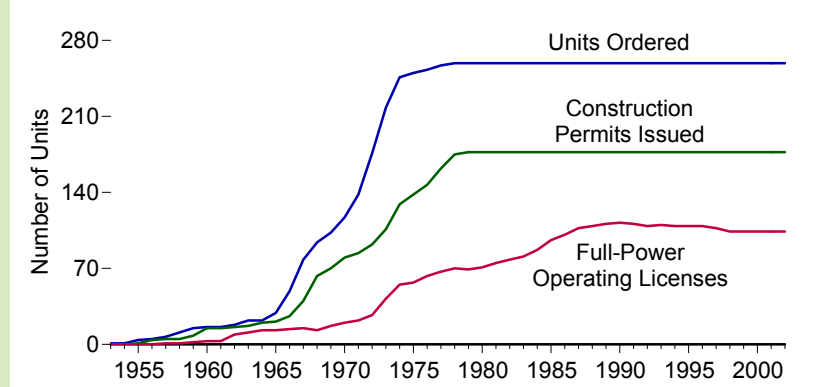
Over the latter part of the last century, nuclear electric power played a key role in meeting the Nation's rapidly growing electricity requirement. In 2002, 20 percent of all U.S. electricity generation came from nuclear electric power.

Figure 52. Capacity Factors



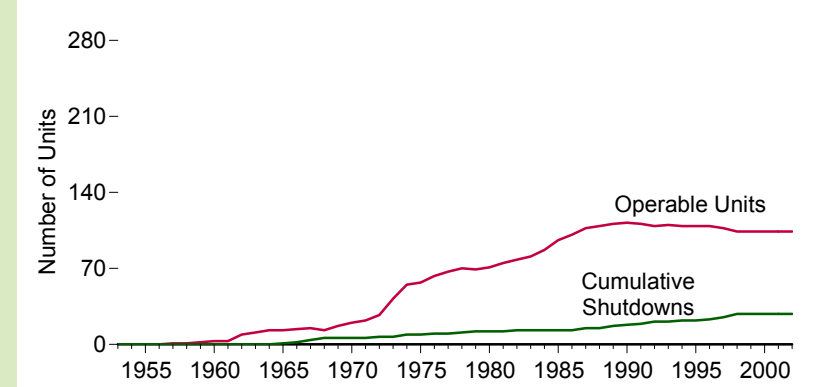
Capacity factors measure actual power generation as a share of maximum possible output. Factors for the industry were in the 50-to-60 percent range through the 1980s, but improved to 90 percent by 2002.

Figure 53. Cumulative Unit Orders, Permits, and Licenses



A total of 259 nuclear electric power units have been ordered over the history of the industry in the United States. The last new orders were placed in 1978. Of the 259 orders, 177 advanced to the issuance of construction permits and, of those, 132 gained full-power operating licenses.

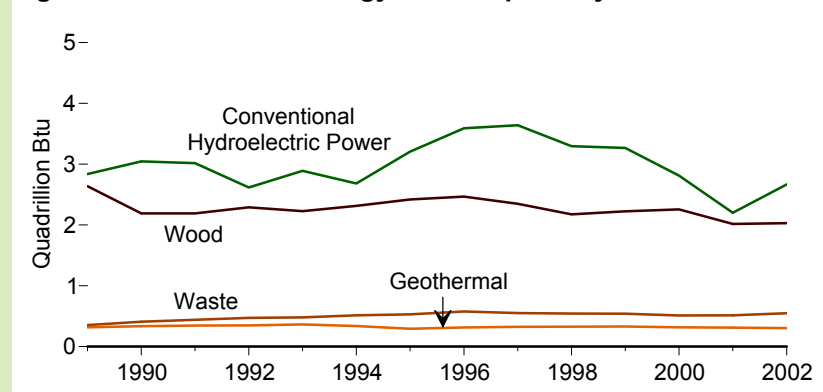
Figure 54. Operable Units and Cumulative Shutdowns



Out of the 132 units that were granted full-power operating licenses, over time, 28 were permanently shut down. The largest number of units ever operable in the United States was 112 in 1990. From 1998 through 2002, 104 units were operable.

Renewable Energy

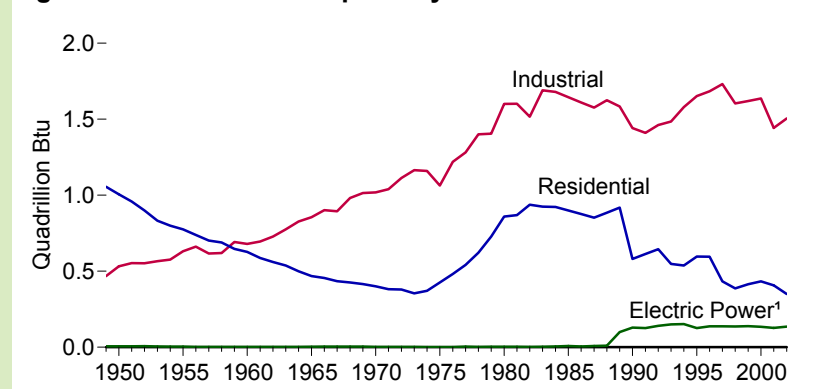
Figure 55. Renewable Energy Consumption by Source



Note: Wood includes wood, black liquor, and other wood waste.

Consumption of renewable energy in the United States recovered sharply in 2002 after two successive years of decline, but remained 17 percent below the 1996 peak of 7.1 trillion Btu. Conventional hydroelectric power, which accounted for 45 percent of the total in 2002, led the upturn. Wood was the next largest source of renewable energy, followed by waste and geothermal. Smaller quantities came from alcohol fuels, solar, and wind.

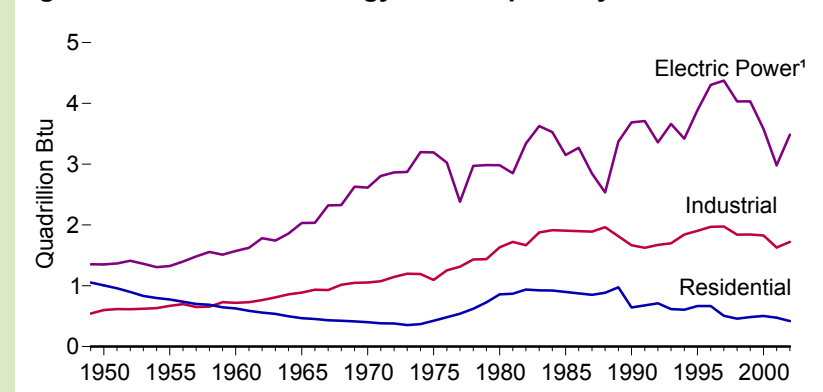
Figure 57. Wood Consumption by Selected Sector



¹ Through 1988, electric utilities only; after 1988, includes independent power producers.

Except for the period from 1974 through 1982, residential use of wood generally declined over the second half of the 20th century, while the industrial sector's use of wood, mainly black liquor, expanded. Twenty-seven percent of all wood consumed in 2002 was used to generate electricity. Commercial use of wood was very small.

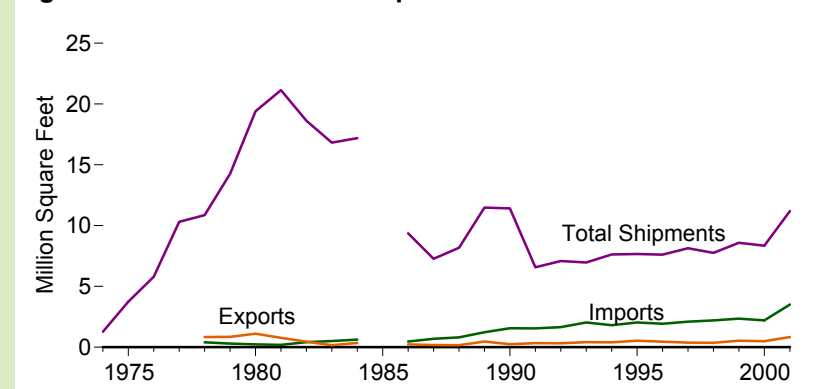
Figure 56. Renewable Energy Consumption by Sector



¹ Through 1988, electric utilities only; after 1988, includes independent power producers.

Most renewable energy was consumed by the electric power sector to generate electricity. After 1958, the industrial sector was the second largest consuming sector of renewable energy, mostly black liquor, a by-product of paper production. Residential sector usage of renewable energy (mostly wood) was the third largest consuming sector.

Figure 58. Solar Collector Shipments and Trade

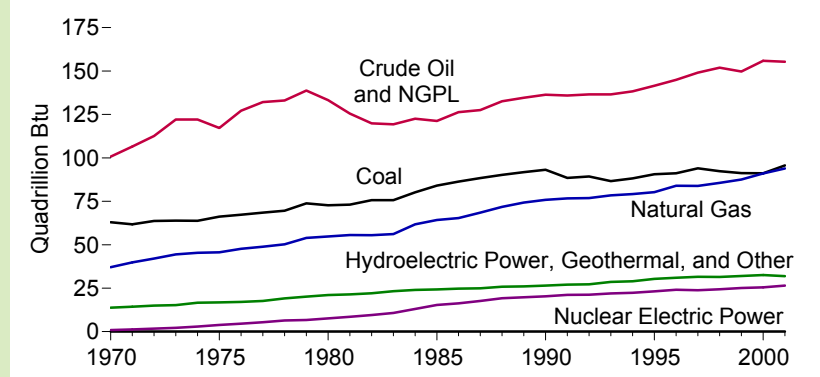


Note: Data were not collected for 1985. Shipments include all domestically manufactured collectors plus imports.

Solar collector total shipments peaked in 1981 at 21 million square feet. From a low of 6.6 million square feet in 1991, shipments generally rose through the 1990s and then registered a strong uptick in 2001, reaching 11.2 million square feet. Since 1983, growth in imports has generally outpaced growth in exports.

International Energy

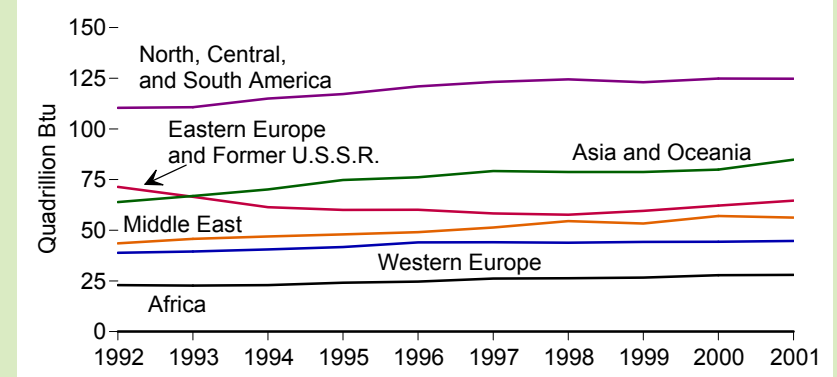
Figure 59. World Primary Energy Production By Source



NGPL = Natural gas plant liquids.

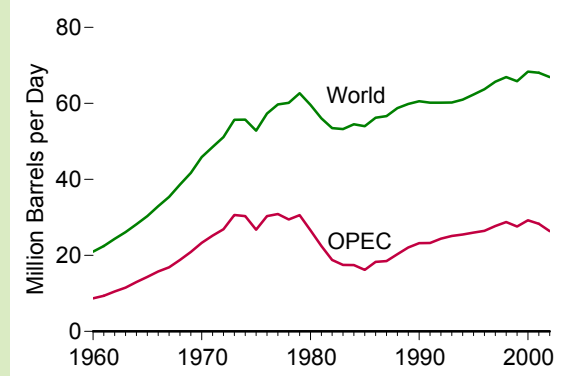
From 1970 to 2001, world primary energy production grew by 87 percent. Growth occurred in all types of energy. In 2001, fossil fuels accounted for 86 percent of all energy produced worldwide, renewable energy 8 percent, and nuclear power 7 percent.

Figure 60. World Primary Energy Production by Region



Thirty-one percent of the 403 quadrillion Btu of energy produced worldwide in 2001 came from North, Central, and South America. Between 1992 and 2001, total primary energy production grew in all major regions of the world except Eastern Europe and the Former U.S.S.R., where 2001 production was still 9 percent below the 1992 level despite growth each year 1999-2001.

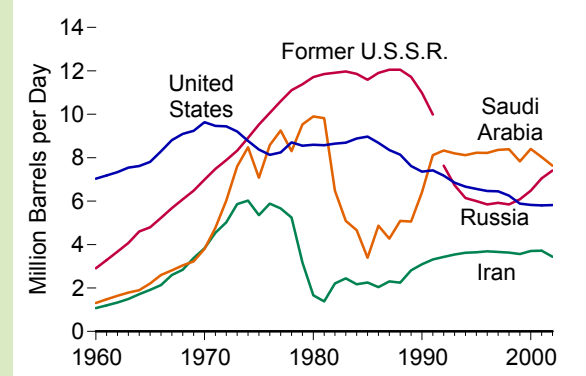
Figure 61. World Crude Oil Production



OPEC = Organization of Petroleum Exporting Countries.

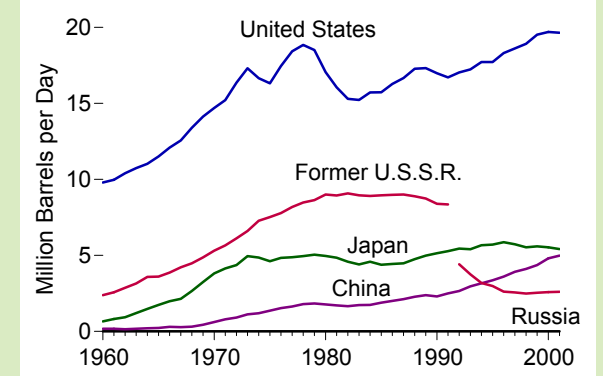
World crude oil production was 67 million barrels per day in 2002, off slightly from the year before. OPEC's share fell from 55 percent in 1973 to 39 percent in 2002.

Figure 62. Leading Crude Oil Producers



After 1991, Saudi Arabia was the largest producer. U.S. production peaked in 1970. After 1998, Russia's production surpassed U.S. output.

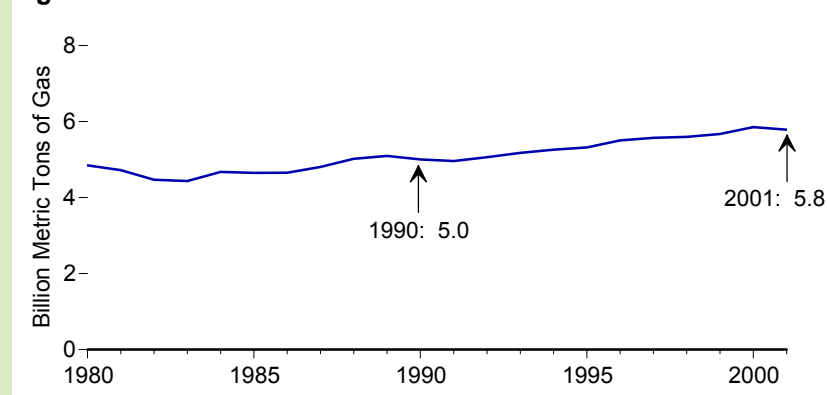
Figure 63. Leading Petroleum Consumers



The United States accounted for 25 percent of world consumption of petroleum in 2001. Japan and China accounted for 7 and 6 percent, respectively.

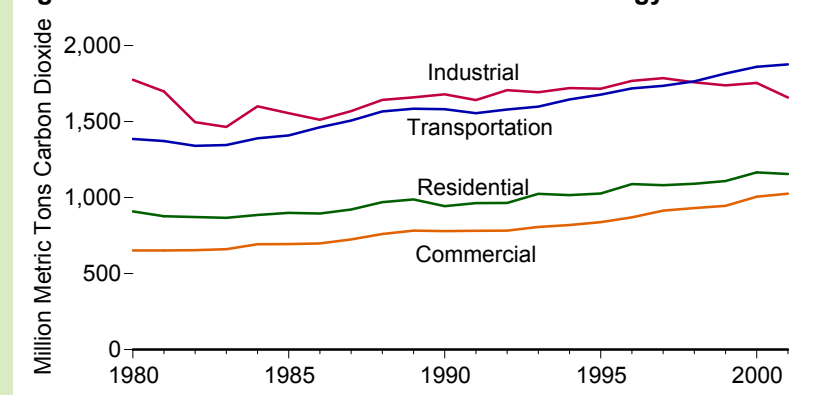
Carbon Dioxide Emissions

Figure 64. Carbon Dioxide Emissions



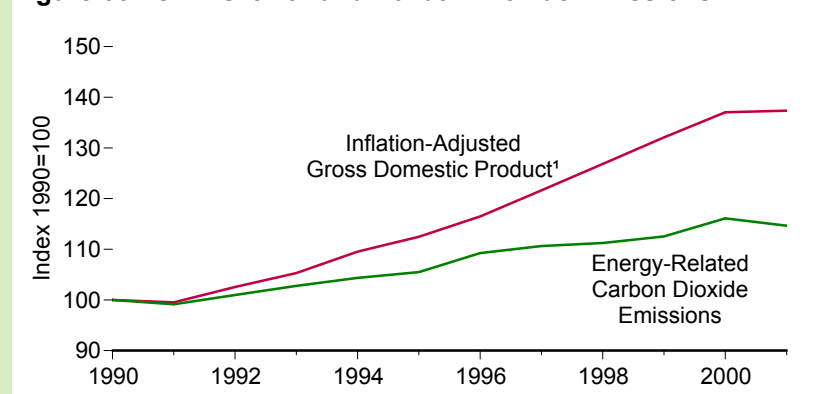
In the United States, fossil fuel combustion is responsible for 99 percent of all emissions from carbon dioxide, which is the most significant greenhouse gas. Total carbon dioxide emissions reached 5.8 billion metric tons of gas in 2001, 16 percent higher than the 1990 level.

Figure 65. Carbon Dioxide Emissions From Energy Use



The level of carbon dioxide emissions generated by the industrial sector exceeded other sector levels until 1998 when it was surpassed by transportation emissions. Commercial sector emissions, the smallest of the four sectors, registered the largest percentage gain from 1990 to 2000, 32 percent.

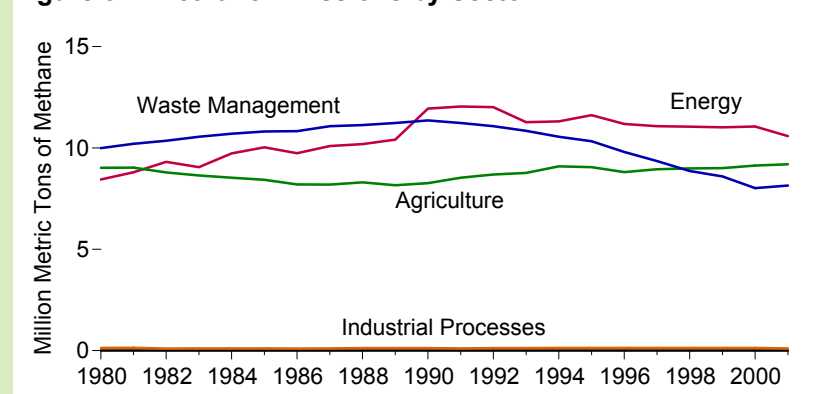
Figure 66. GDP Growth and Carbon Dioxide Emissions



¹ Based on chained (1996) dollars.

While gross domestic product (GDP) grew by 37 percent from 1990 to 2001, energy-related carbon dioxide emissions grew by 15 percent, and actually declined in 2001 from the year before. It was primarily the use of less energy per unit of economic output, rather than the use of low-carbon fuels, that held the rate of carbon dioxide emissions growth to about half the growth rate of the inflation-adjusted gross domestic product.

Figure 67. Methane Emissions by Sector



In 2001, methane emissions accounted for 9 percent of total U.S. greenhouse gas emissions, weighted by global warming potential. Most methane emissions come from energy, agricultural activities, and waste management. The production, processing, and distribution of natural gas accounted for more than half of all energy-related methane emissions in 2001.

Figure Sources

Data for “Energy Perspectives” figures and text are derived from the following *Annual Energy Review 2002* tables and other sources as cited.

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