



U.S. Energy Information
Administration

Electric Power Monthly

Data for July 2017 | Release Date: September 26, 2017 | Next Release: October 24, 2017

Previous Issues

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Table 5.6.A. Average Price of Electricity to Ultimate Customers by End-Use Sector,

by State, July 2017 and 2016 (Cents per Kilowatthour)

Census Division and State	Residential		Commercial		Industrial		Transportation		All Sectors	
	July 2017	July 2016	July 2017	July 2016	July 2017	July 2016	July 2017	July 2016	July 2017	July 2016
New England	19.30	18.30	15.69	15.10	12.62	12.25	7.81	7.71	16.74	16.01
Connecticut	20.23	19.76	16.33	15.53	13.76	13.05	10.52	9.95	17.87	17.16
Maine	15.96	15.87	12.20	11.86	8.95	9.21	--	--	12.95	12.83
Massachusetts	19.88	18.20	16.20	15.74	13.75	13.24	5.42	5.64	17.28	16.35
New Hampshire	18.98	18.00	14.63	13.99	12.19	12.10	--	--	16.03	15.29
Rhode Island	17.19	17.11	15.20	14.19	14.85	13.45	20.08	19.26	16.06	15.42
Vermont	17.74	17.29	14.71	14.60	10.18	10.27	--	--	14.65	14.53
Middle Atlantic	16.46	15.96	13.39	13.31	6.88	6.95	11.97	11.25	13.41	13.25
New Jersey	16.02	16.16	12.97	13.23	10.91	11.03	9.06	9.21	14.17	14.40
New York	18.82	17.94	16.11	15.68	5.90	5.56	13.62	12.55	15.96	15.42
Pennsylvania	14.31	13.76	8.90	9.04	6.65	6.84	6.79	7.44	10.24	10.20
East North Central	13.12	12.87	9.98	9.87	7.04	7.04	7.80	6.58	10.22	10.14
Illinois	12.07	12.06	8.83	8.98	6.29	6.46	7.65	6.37	9.34	9.43
Indiana	11.85	11.27	10.17	9.55	7.43	7.00	10.75	8.90	9.70	9.18
Michigan	15.69	15.37	10.91	10.66	7.38	7.25	11.94	11.63	11.70	11.53
Ohio	12.59	12.25	9.75	9.63	6.56	6.90	7.30	8.14	9.88	9.88
Wisconsin	14.65	14.54	11.20	11.35	8.19	8.17	13.81	13.68	11.33	11.43
West North Central	13.39	12.76	10.78	10.24	8.23	8.02	10.75	10.79	11.06	10.62
Iowa	14.60	14.07	11.57	10.97	8.40	8.04	--	--	11.13	10.77
Kansas	13.61	13.06	10.74	10.42	7.81	7.51	--	--	11.17	10.85
Minnesota	14.02	13.20	11.43	10.10	8.11	7.62	9.97	10.20	11.31	10.44
Missouri	13.16	12.28	10.77	10.38	8.30	8.00	11.57	11.44	11.60	10.98
Nebraska	12.00	12.10	9.57	9.56	8.25	8.90	--	--	9.91	10.21

Census Division and State	Residential		Commercial		Industrial		Transportation		All Sectors	
	July 2017	July 2016	July 2017	July 2016	July 2017	July 2016	July 2017	July 2016	July 2017	July 2016
North Dakota	11.70	11.26	9.55	9.36	8.66	8.43	--	--	9.64	9.40
* South Dakota (26)	12.48	12.19	(31) 9.86	9.92	(18) 7.99	7.89	--	--	(24) 10.39	10.30
South Atlantic	12.18	11.80	9.49	9.27	6.91	6.96	8.10	8.00	10.38	10.15
Delaware	12.71	12.99	9.43	9.45	7.42	7.95	--	--	10.56	10.77
District of Columbia	12.23	12.30	11.13	11.30	8.45	8.62	9.12	9.02	11.30	11.38
Florida	11.93	11.18	9.49	8.87	8.05	7.97	8.50	8.03	10.75	10.11
Georgia	12.59	12.29	10.09	10.00	6.68	6.70	6.19	6.30	10.54	10.45
Maryland	13.59	14.05	10.33	10.74	8.08	7.47	8.02	7.79	11.70	12.14
North Carolina	11.20	11.19	8.82	8.98	6.90	7.04	8.46	7.76	9.59	9.65
South Carolina	12.79	12.58	10.71	10.46	6.50	6.65	--	--	10.31	10.30
Virginia	12.41	11.71	8.32	7.86	6.78	6.71	7.65	7.88	9.89	9.35
West Virginia	11.60	11.19	9.21	9.06	6.60	6.69	--	--	8.95	8.93
East South Central	11.31	10.83	10.59	10.11	6.25	6.20	--	--	9.61	9.34
Alabama	12.53	12.08	11.54	11.11	6.60	6.59	--	--	10.26	10.07
Kentucky	10.64	10.28	9.66	9.29	5.73	5.77	--	--	8.68	8.52
Mississippi	11.10	10.21	10.12	9.25	6.32	6.15	--	--	9.36	8.77
Tennessee	10.83	10.45	10.67	10.24	6.31	6.17	--	--	9.83	9.56
West South Central	10.79	10.47	8.43	7.79	5.85	5.38	8.27	5.63	8.73	8.36
Arkansas	10.67	10.28	8.70	8.24	6.55	6.50	13.38	9.46	8.77	8.58
Louisiana	9.99	9.06	9.16	8.14	6.12	4.80	9.66	8.68	8.45	7.44
Oklahoma	10.29	9.99	8.27	8.01	5.58	5.18	--	--	8.51	8.25
Texas	11.04	10.86	8.29	7.65	5.70	5.41	8.16	5.40	8.82	8.55
Mountain	12.29	12.09	10.22	9.98	7.17	7.11	10.00	9.78	10.27	10.04
Arizona	12.74	12.70	11.54	11.24	7.43	6.69	11.24	10.61	11.63	11.32
Colorado	12.45	12.44	10.36	10.01	7.66	7.43	9.70	9.78	10.44	10.28
Idaho	10.58	10.81	8.21	8.12	7.36	7.09	--	--	8.53	8.39
Montana	11.59	11.60	10.25	10.32	5.52	5.55	--	--	9.20	9.19
Nevada	11.64	10.72	7.92	7.70	7.59	8.42	9.19	8.60	9.53	9.20
New Mexico	13.57	12.51	11.24	10.45	6.29	5.97	--	--	10.57	9.87
Utah	11.91	11.72	9.32	9.13	7.03	7.05	10.35	9.89	9.72	9.51
Wyoming	12.15	11.88	9.77	9.49	6.81	6.78	--	--	8.28	8.19
Pacific Contiguous	16.33	15.96	15.18	14.63	10.59	10.50	9.33	9.16	14.61	14.16
California	18.85	18.49	17.69	16.94	14.47	14.05	9.34	9.18	17.53	16.93

Census Division and State	Residential		Commercial		Industrial		Transportation		All Sectors	
	July 2017	July 2016	July 2017	July 2016	July 2017	July 2016	July 2017	July 2016	July 2017	July 2016
Oregon	10.94	10.78	8.90	8.83	6.44	6.50	9.29	9.17	8.98	8.87
Washington	9.87	9.60	8.46	8.33	4.68	4.73	8.69	7.59	7.80	7.67
Pacific Noncontiguous	26.63	25.52	23.40	22.04	21.12	19.87	--	--	23.58	22.30
Alaska	22.30	21.42	19.51	18.61	16.94	16.52	--	--	19.72	18.96
Hawaii	29.25	28.04	26.50	24.80	22.63	21.01	--	--	25.78	24.20
U.S. Total	13.12	12.68	11.00	10.62	7.33	7.23	10.19	9.63	11.02	10.71

See Technical notes for additional information on the Commercial, Industrial, and Transportation sectors.

Notes: - See Glossary for definitions. - Values are preliminary estimates based on a cutoff model sample.

See Technical Notes for a discussion of the sample design for the Form EIA-826.

Utilities and energy service providers may classify commercial and industrial customers based on either NAICS codes or demands or usage falling within specified limits by rate schedule.

Changes from year to year in consumer counts, sales and revenues, particularly involving the commercial and industrial consumer sectors, may result from respondent implementation of changes in the definitions of consumers, and reclassifications.

Totals may not equal sum of components because of independent rounding.

Source: U.S. Energy Information Administration, Form EIA-861M (formerly EIA-826), Monthly Electric Power Industry Report.



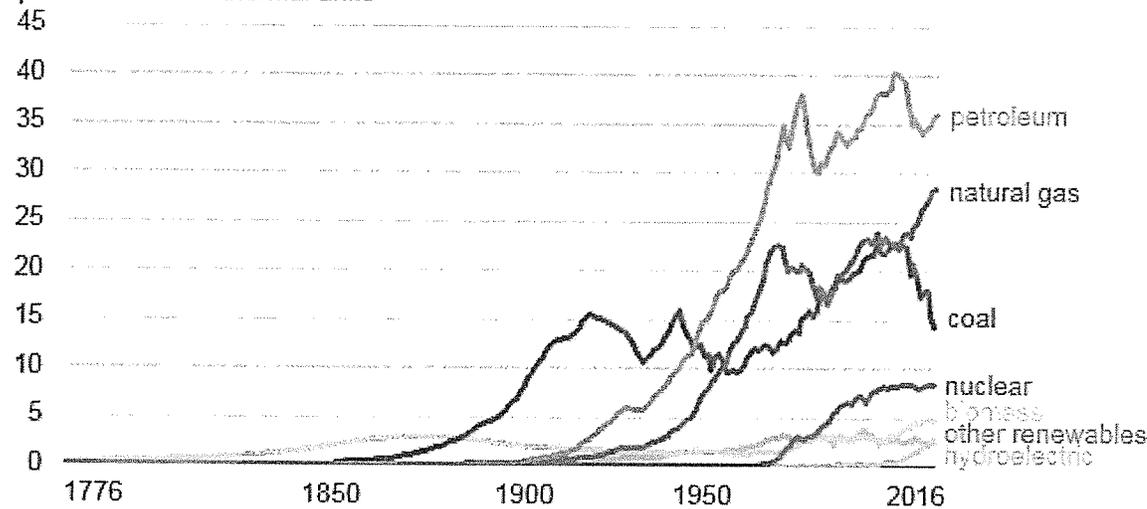
U.S. Energy Information
Administration

Today in Energy

July 3, 2017

Even as renewables increase, fossil fuels continue to dominate U.S. energy mix

Energy consumption in the United States (1776-2016)
quadrillion British thermal units



Source: U.S. Energy Information Administration, *Monthly Energy Review*

Fossil fuels have provided more than 80% of total U.S. energy consumption for more than 100 years. Since 1928, when consumption of natural gas surpassed that of biomass, the three fossil fuels—petroleum, natural gas, and coal—have been the most consumed fuels in the United States. In 2016, fossil fuels accounted for 81% of total U.S. energy consumption, the lowest fossil fuel share in the past century.

In 2016, the renewable share of energy consumption in the United States was 10.5%. This was the largest renewable share since the 1930s, when overall energy consumption was lower and the amount of biomass consumption (mainly wood) was relatively high. The greatest growth in renewables over the past decade has been in solar and wind electricity generation. Liquid biofuel consumption—more than half of which is ethanol blended into motor gasoline—has also increased in recent years, contributing to the growing renewable share of total energy consumption.

In addition to the increasing share of renewables, the decline in the fossil fuel share of consumption is attributable mainly to declines in coal consumption. U.S. coal consumption fell nearly 9% in 2016, following a 14% drop in 2015. Overall, U.S. coal consumption has declined almost 38% since 2005. In each of the past 20 years, the power sector has accounted for more than 90% of total U.S. coal consumption.

Petroleum, which encompasses nearly all transportation fuels and several petroleum-based fuels used in homes, businesses, and industries, continues to be the largest source of energy consumption in the United States. Petroleum consumption has increased in each of the past four years.

Consumption of natural gas has risen in 9 of the past 10 years. As recently as 2006, the United States consumed more coal than natural gas (in energy-equivalent terms), but as natural gas consumption has increased—particularly in the electric power sector—natural gas use in 2016 was about twice that of coal.

Principal contributor: Michael Mobilia



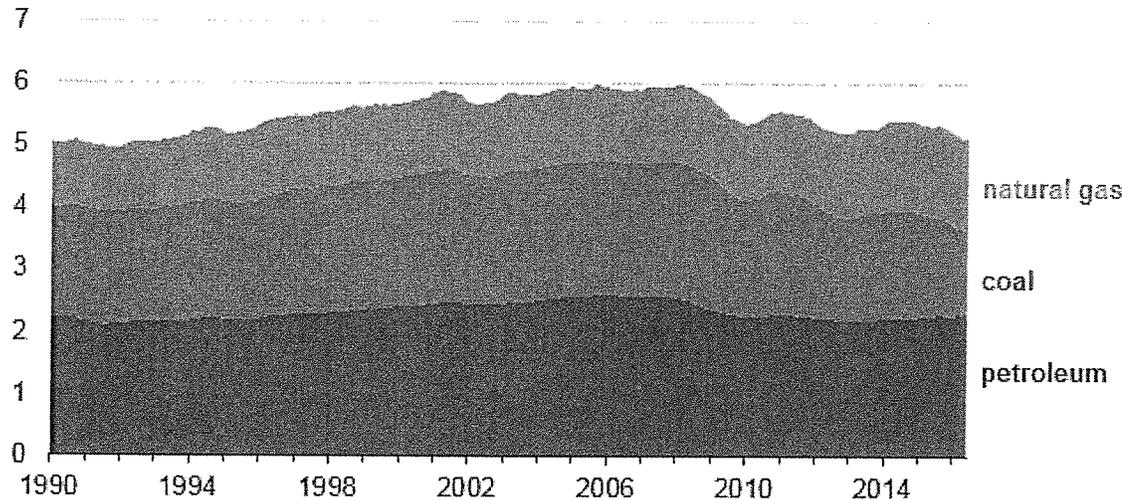
U.S. Energy Information
Administration

Today in Energy

October 12, 2016

Energy-related CO2 emissions for first six months of 2016 are lowest since 1991

Energy-related carbon dioxide emissions by source (Jan 1990 - Jun 2016)
12-month moving total, billion metric tons



Source: U.S. Energy Information Administration, *Monthly Energy Review*

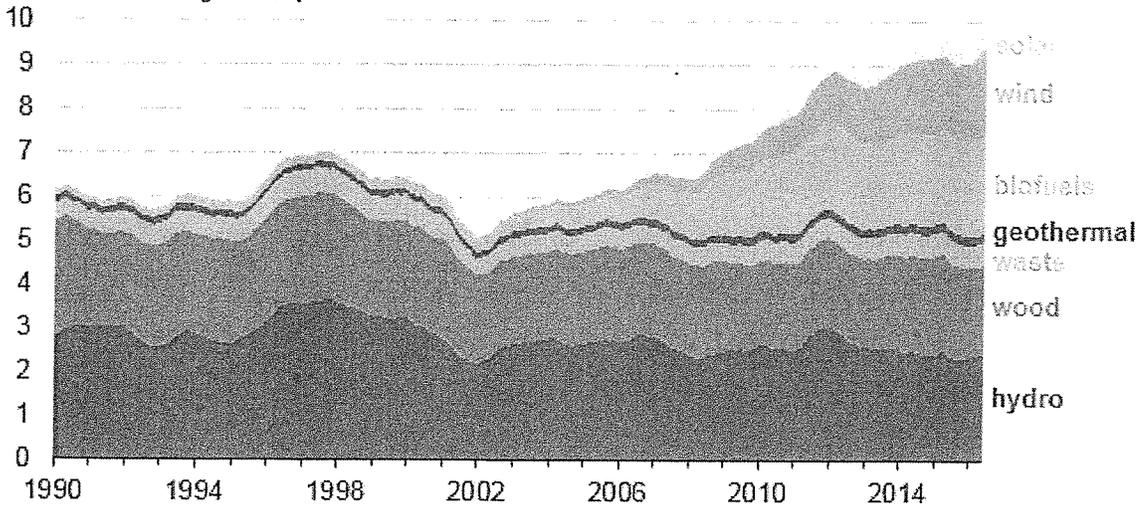
U.S. energy-related carbon dioxide (CO₂) emissions totaled 2,530 million metric tons in the first six months of 2016. This was the lowest emissions level for the first six months of the year since 1991, as mild weather and changes in the fuels used to generate electricity contributed to the decline in energy-related emissions. EIA's *Short-Term Energy Outlook* projects that energy-associated CO₂ emissions will fall to 5,179 million metric tons in 2016, the lowest annual level since 1992.

Mild weather. In the first six months of 2016, the United States had the fewest heating degree days (an indicator of heating demand) since at least 1949, the earliest year for which EIA has monthly data for all 50 states. Warmer weather during winter months reduces demand for heating fuels such as natural gas, distillate heating oil, and electricity. Overall, total primary energy consumption was 2% lower compared with the first six months of 2015. The decrease was most notable in the residential and electric power sectors, where primary energy consumption decreased 9% and 3%, respectively.

Changing fossil fuel consumption mix. Coal and natural gas consumption each decreased compared to the first six months of 2015. However, the decrease was greater for coal, which generates more carbon emissions when burned than natural gas. Coal consumption fell 18%, while natural gas consumption fell 1%. These declines more than offset a 1% increase in total petroleum consumption, which rose during that period as a result of low gasoline prices.

Increasing renewable energy consumption. Consumption of renewable fuels that do not produce carbon dioxide increased 9% during the first six months of 2016 compared with the same period in 2015. Wind energy, which saw the largest electricity generating capacity additions of any fuel in 2015, accounted for nearly half the increase. Hydroelectric power, which has increased with the easing of drought conditions on the West Coast, accounted for 35% of the increase in consumption of renewable energy. Solar energy accounted for 13% of the increase and is expected to see the largest capacity additions of any fuel in 2016.

Renewable energy consumption (Jan 1990 - Jun 2016)
12-month moving total, quadrillion British thermal units



Source: U.S. Energy Information Administration, *Monthly Energy Review*

Principal contributor: Allen McFarland



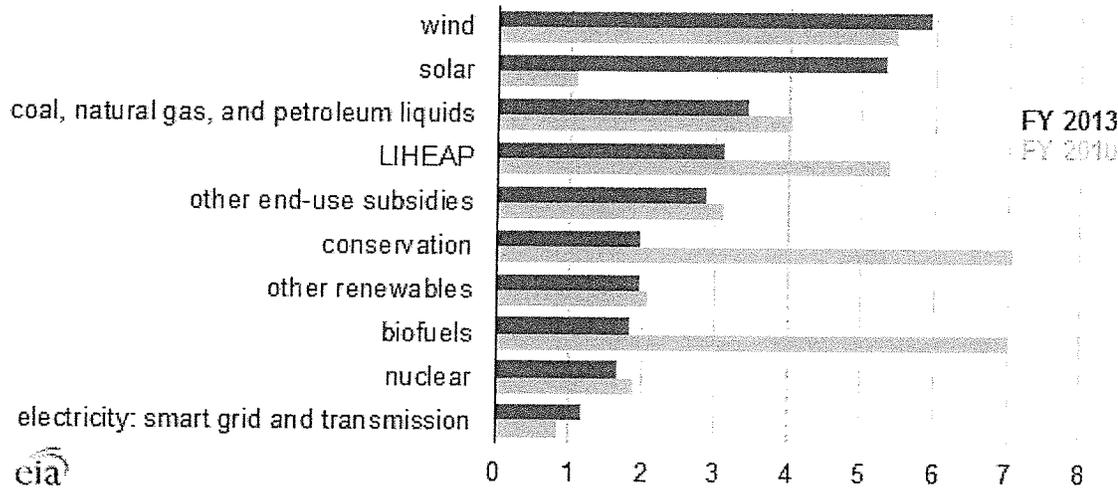
U.S. Energy Information Administration

Today in Energy

March 13, 2015

Total energy subsidies decline since 2010, with changes in support across fuel types

Quantified energy-specific subsidies and support by type, fiscal years 2010 and 2013
billion 2013 dollars



Source: EIA, *Direct Federal Financial Interventions and Subsidies in Energy in Fiscal Year 2013*

Note: LIHEAP is the Low Income Home Energy Assistance Program.

EIA has updated a report on federal subsidies to the energy industry, covering the 2013 fiscal year (FY). The most recent prior report reviewed subsidies in FY 2010, at or near the height of spending related to the American Recovery and Reinvestment Act of 2009 (more commonly known as the Recovery Act). Between FY 2010 and FY 2013, the total value of direct federal financial interventions and subsidies in energy markets decreased 23% from \$38.0 billion to \$29.3 billion dollars, reflecting changes in both the type of subsidies offered and fuels that received support.

EIA's updated study focuses on direct federal financial interventions by the federal government that provide a financial benefit with an identifiable federal budget impact and are specifically targeted at energy markets.

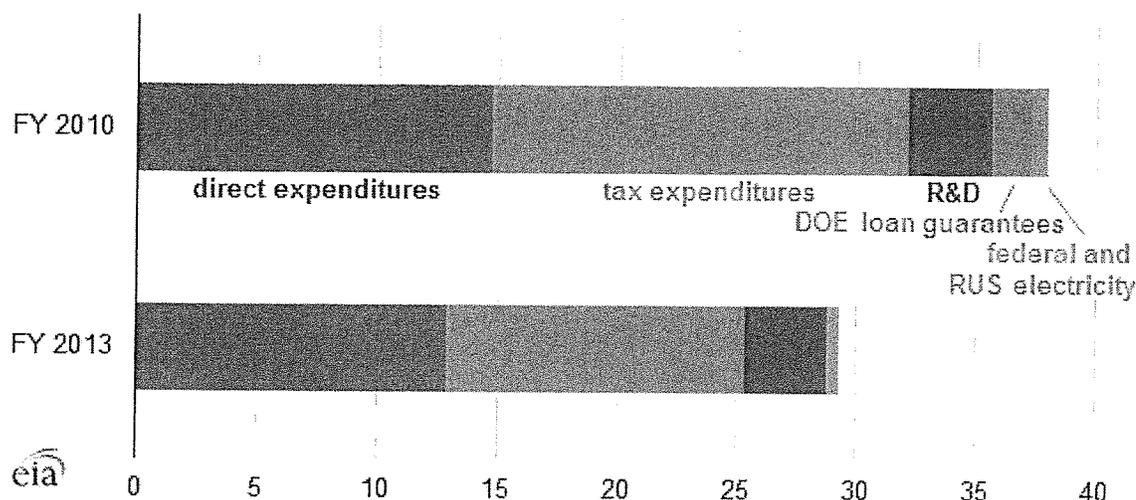
Within this scope are:

- Direct expenditures (cash payments directly to market participants)
- Tax expenditures (reductions in tax payments)
- Investment in research and development (R&D)
- Financial support to federal power marketing administrations (PMAs)
- Credit subsidies to recipients of federal loan guarantees

Some programs that benefit energy markets are not included in the analysis as they have broader applicability beyond the energy industry. For instance, accelerated depreciation tax schedules and domestic manufacturing tax deductions apply to both the energy sector and other industries. Other programs, such as the renewable fuels standard and indemnification laws such as the Price-Anderson Act that limits the liability of nuclear plant operators are not included because they lack a distinguishable federal budget impact.

Quantified energy-specific subsidies and support by type, fiscal years 2010 and 2013

billion 2013 dollars



Source: EIA, *Direct Federal Financial Interventions and Subsidies in Energy in Fiscal Year 2013*

Note: RUS is the U.S. Department of Agriculture's Rural Utilities Service.

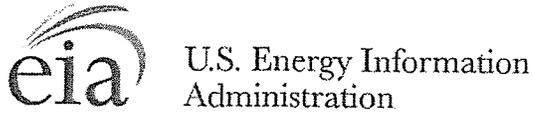
Between FY 2010 and 2013, the share of tax expenditure in total financial interventions and subsidies declined from 46% to 42%, while the share of direct expenditures grew from 39% to 44%, reflecting a move from subsidies for renewable liquid fuels such as ethanol to subsidies for renewable electricity, particularly solar power. Since FY 2010, the government has eliminated the Volumetric Ethanol Excise Tax Credit (VEETC) for fuel ethanol, and biofuels' share of total renewable energy subsidies fell from 45% in FY 2010 to 12% in FY 2013.

Meanwhile, the government revised tax credits for a growing solar power industry, allowing subsidy applicants to receive grants in lieu of tax credits. These grants, known as Energy Investment Grants or Section 1603 grants for the tax provision in the Recovery Act that established them, were one of the few energy subsidy programs created by the Recovery Act that still had a substantial budgetary impact by FY 2013.

The Section 1603 grants increased nearly \$4 billion between FY 2010 and FY 2013, while electricity-related tax expenditures for renewables doubled from \$1.9 billion to \$3.8 billion. Electricity-related subsidies, primarily directed towards fuels and technologies used for electricity production, increased in both absolute and percentage terms between FY 2010 and FY 2013, reflecting increases in both direct expenditures and estimated tax subsidies. Wind subsidies increased by less than 10%, going from \$5.5 billion in 2010 to \$5.9 billion in 2013. However, solar subsidies increased the most, both in absolute and percentage terms, going from \$1.1 billion to \$5.3 billion in 2013, with declining solar costs and state-level policies also supporting additional growth.

With lower adoption of tax credits for home efficiency improvements and the declining need for the Low Income Home Energy Assistance Program with an improving economy, support for conservation and end-use programs was at \$7.9 billion in FY 2013, down from \$15.6 billion in FY 2010. Federal subsidy support for fossil fuels declined from almost \$4 billion in FY 2010 to \$3.4 billion in FY 2013. Within those fossil fuel subsidies, support for coal declined by less than 3%, but support for oil and natural gas declined by almost 20%.

Principal contributors: EIA Staff



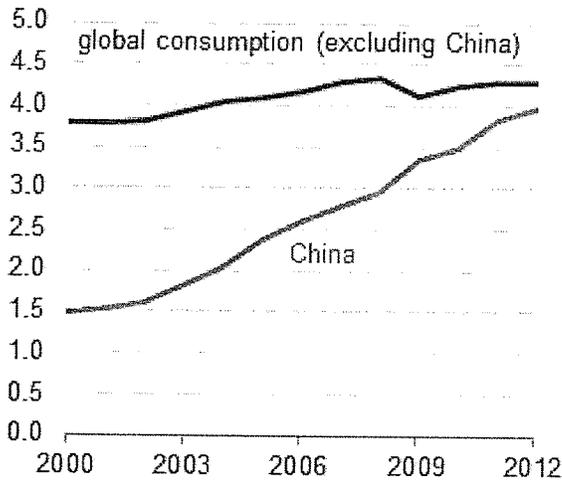
Today in Energy

May 14, 2014

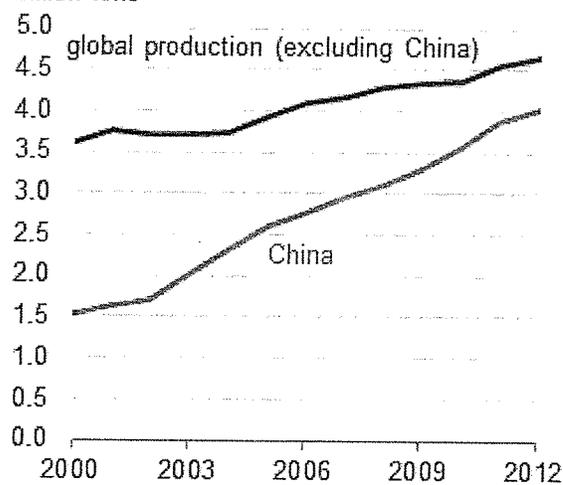
China produces and consumes almost as much coal as the rest of the world combined

Coal consumption and production in China and the rest of the world

coal consumption
billion tons



coal production
billion tons



Source: U.S. Energy Information Administration, International Energy Statistics

Note: For countries whose 2012 data was unavailable, 2011 data were extrapolated forward one year. These countries comprised about 3% of both total consumption and total production.

Chinese production and consumption of coal increased for the 13th consecutive year in 2012. China is by far the world's largest producer and consumer of coal, accounting for 46% of global coal production and 49% of global coal consumption—almost as much as the rest of the world combined. As a manufacturing country that has large electric power requirements, China's coal consumption fuels its economic growth. China's gross domestic product (GDP) grew 7.7% in 2012, following an average GDP growth rate of 10% per year from 2000 to 2011.

The top 10 coal-producing countries supplied 90% of the world's coal in 2012. China produced nearly four times as much coal as the second largest producer, the United States, which had a 12% share of global production. China has accounted for 69% of the 3.2 billion ton increase in global coal production over the past 10 years.

The top 10 coal-consuming countries consumed 85% of the world's coal in 2012. Eight of the 10 largest producers are among the top 10 consumers. China is the largest coal consumer, accounting for 49% of the world's total coal. The next largest, the United States, consumed 11% of the world's total. China's coal consumption increased by more than 2.3 billion tons over the past 10 years, accounting for 83% of the global increase in coal consumption.

Coal accounts for most of China's energy consumption, and coal has maintained an approximate 70% share of Chinese consumption (on a Btu basis) since at least 1980, the starting date for EIA's global coal data. By way of comparison, coal was 18% of U.S. energy use and 28% of global energy use in 2012.

Principal contributor: Joseph Ayoub