



Independent Statistics & Analysis

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Energy-Related Carbon Dioxide Emissions by State, 2000–2015

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Overview

Energy-related carbon dioxide (CO₂) emissions vary significantly across states, whether considered on an absolute basis (Figure 1) or on a per capita basis. Total state CO₂ emissions include those from direct fuel use across all sectors, including residential, commercial, industrial, and transportation, as well as primary fuels consumed for electricity generation.

The physical size of a state, as well as the available fuels, types of businesses, climate, and population size and density, all play a role in determining the level of both total and per capita emissions. In addition, each state's energy system reflects circumstances specific to that state. For example, some states have abundant hydroelectric supplies, while others contain abundant coal resources.

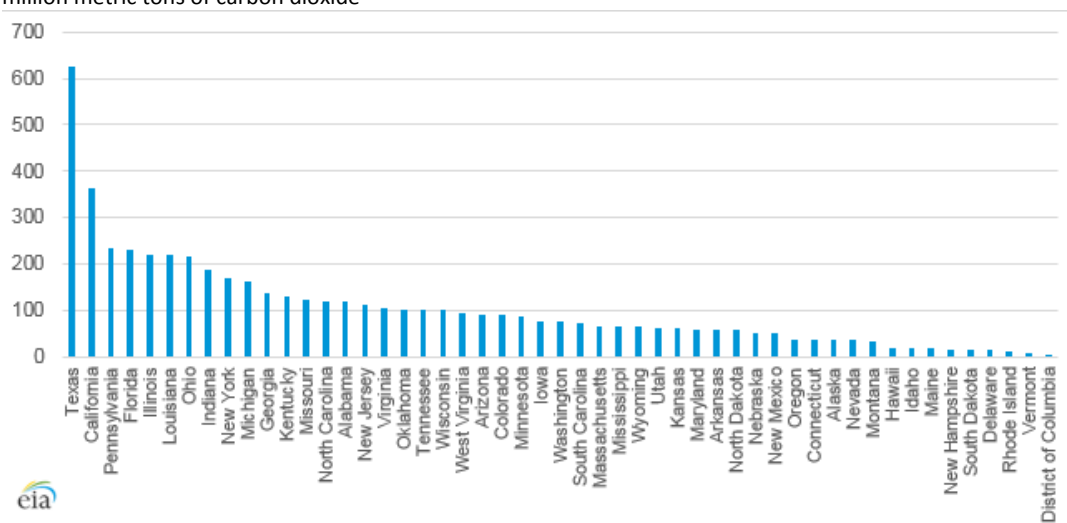
This paper examines the factors that contribute to a state's CO₂ profile. The analysis does not attempt to assess the effect of state policies on absolute emissions levels, or on current and future trends, nor does it intend to imply that certain policies would be appropriate for a particular state.

The term *energy-related CO₂ emissions*, as used in this analysis, includes emissions released at the location where fossil fuels are combusted. To the extent that fuels are used in one state to generate electricity consumed in another state, emissions are attributed to the state in which electricity is generated and fuels are combusted. Attributing emissions to the state consuming the electricity, rather than the state where it is generated, would yield different results. For feedstock uses of fossil fuels, carbon stored in products such as plastics is subtracted from reported emissions for the states where they are produced.

The calculations presented in this paper also assume that biomass used by electricity generators, by industries, and by homes and commercial buildings is carbon neutral, with combustion emissions fully offset by land sinks in a sustainable biomass cycle. Emissions may be underestimated to the extent that actual use of biomass energy is not carbon neutral.

Figure 1. Energy-related carbon dioxide emissions by state, 2015

million metric tons of carbon dioxide



Source: EIA, State Energy Data System and EIA calculations made for this analysis.

Total state emission levels

From 2000 to 2015, CO₂ emissions fell in 41 states and rose in 9 states (not including the District of Columbia) (Table 1). The greatest percentage decrease was Maine's 25%—a drop of 6 million metric tons (mt)—while the greatest absolute decline was 52 million mt in Ohio (a 19% reduction). Nebraska's 22% rise in emissions—an increase of 9 million mt—was the largest in both absolute and percentage terms between 2000 and 2015.

From 2014 to 2015, 31 states saw a decrease in emissions, while 18 experienced an increase—Oregon's emissions were unchanged. Over that period, national emissions decreased by about 2.7%. Because of differences in how the national and state data sets are collected and presented, it is not possible to directly compare the total for all states with the total for the United States. See Appendix A for a comparison of the state- and national-level data systems.

Emissions by fuel

States exhibit very different emissions profiles by fuel type (Table 2). For example, in 2015, coal consumption accounted for 75% of energy-related CO₂ emissions (69 million mt) in West Virginia and 71% of Wyoming's energy-related CO₂ emissions (46 million mt). In California, where less than 1% of CO₂ emissions came from coal (3 million mt), 64% came from petroleum (234 million mt). In Rhode Island, which had no emissions from coal, 53% of CO₂ emissions were from petroleum (6 million mt). Hawaii's and Vermont's shares of CO₂ emissions from petroleum in 2015 were 92% (17 million mt) and 89% (5 million mt), respectively. Maine's petroleum share was 81% (14 million mt). No other state's petroleum share exceeded 70%.

Emissions by sector

CO₂ emissions also vary significantly by sector (Tables 3 and 4), based on factors such as the use of different fuels for electricity generation, different climates, and different sources of economic outputs (e.g., commercial versus industrial activity). For example, in Vermont, the largest share of emissions in 2015 came from the transportation sector (55%, or 3 million mt), predominantly from petroleum, while the electric power sector share rounded to 0.0% because Vermont had virtually no reported generation using fossil fuels. Vermont's residential sector share (23%, or 1.4 million mt) reflected its relatively cold climate where petroleum is the main heating fuel. On the other hand, Hawaii, where a dominant share of emissions is also from petroleum, had a residential share of 0.2% (0.03 million mt) and the lowest in the United States because of its minimal heating fuel requirements. The largest sector emissions share in Hawaii, like Vermont, was from the transportation sector (54%, or 10 million mt). However, unlike Vermont, Hawaii's electric power sector share was relatively high (36%, or 7 million mt) because petroleum is the dominant fossil fuel generating electricity in Hawaii.

Per capita carbon dioxide emissions

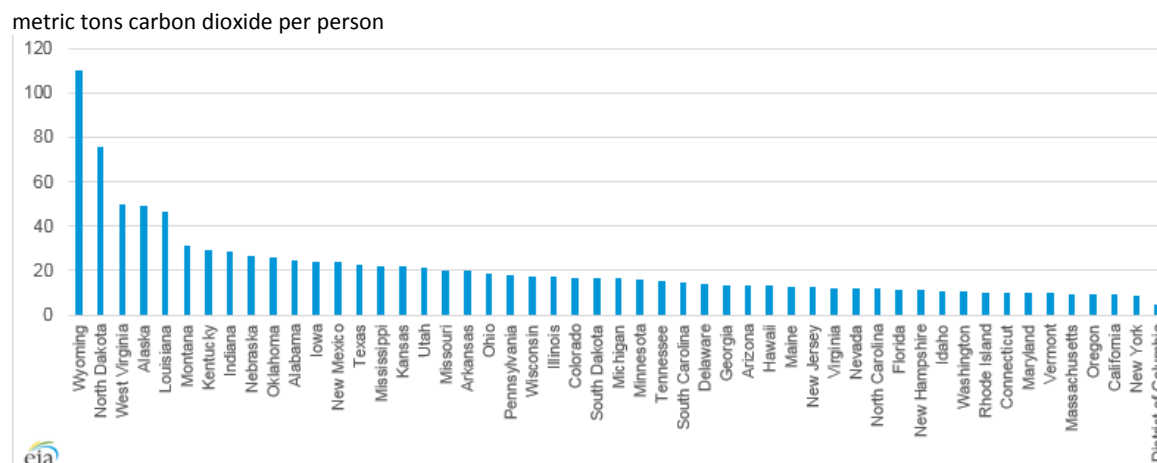
Another useful way to compare total CO₂ emissions across states is to divide them by state population and examine them on a per capita basis (Table 5 and Figure 2). Many factors contribute to variation in the amount of emissions per capita, including climate, the structure of the state economy, population density, energy sources, building standards, and explicit state policies to reduce emissions. The 2015 CO₂ emissions in Wyoming were 110 mt per capita, the highest in the United States. In 2015, Wyoming was the second-largest energy producer in the United States. Unlike the largest energy producer, Texas, with a population of 27 million, Wyoming has fewer than 600,000 people, giving Wyoming the lowest population density in the Lower 48 states.¹ Its winters are cold (the average low temperatures in January range between 5 to 10 degrees Fahrenheit²). These factors

¹ U.S. Energy Information Administration, State Profiles and Energy Estimates: <http://www.eia.gov/state/>.

² <http://www.wrcc.dri.edu/narratives/WYOMING.htm>.

raise Wyoming's per capita emissions compared with other states. The second-highest state per capita CO₂ emissions level was North Dakota at 75 mt per capita. West Virginia (50 mt per capita), Alaska (49 mt per capita), and Louisiana (47 mt per capita) round out the top five states in terms of per capita CO₂ emissions.

Figure 2. Per capita energy-related carbon dioxide emissions by state, 2015



Source: EIA, State Energy Data System and EIA calculations made for this analysis.

New York, with a population of almost 20 million people, had the lowest per capita CO₂ emissions of any state—fewer than 9 mt per capita. A large portion of the population is located in the New York City metropolitan area, where mass transit is readily available and most residences are multi-family units that provide efficiencies of scale in terms of energy used for heating and cooling. The New York economy is oriented towards low energy-consuming activities such as financial markets; for example, New York accounted for about 6% of the U.S. population in 2015, but consumed only 1% of the country's industrial energy.³ New York's energy prices are relatively high (the average retail electricity price of 15.28 cents per kWh was eighth highest in the country in 2015), which in turn encourages energy savings.⁴ Other states with fewer than 10 mt per capita include California, Maryland, Massachusetts, Oregon, and Vermont. Connecticut and Rhode Island produce slightly more than 10 mt of CO₂ per capita. The national average is 16 mt per capita.

Energy intensity

The energy intensity of a state, as measured by the amount of energy consumed per unit of economic output or, specifically, British thermal units (Btu) per dollar of a state's gross domestic product (GDP), plays an important role in its overall emissions profile (Table 6). The states with the highest rates of emissions per capita in 2015 also tended to have higher energy-intensity values: Wyoming (24,000 Btu per chained 2009 dollar of GDP), Louisiana (20,000 Btu per dollar), West Virginia (19,000 Btu per dollar), North Dakota (16,000 Btu per dollar), and Montana and Alabama (both about 14,000 Btu per dollar). California, Connecticut, Maryland, Massachusetts, and New York were the lowest—each at about 3,000 Btu per dollar. Many of the states with the lowest energy intensities are clustered in the relatively densely populated New England and Middle Atlantic regions. The 2015 national average was 6,000 Btu per dollar of GDP.

³ U.S. Energy Information Administration, State Energy Data 2015, state population and energy consumption by sector. <https://www.eia.gov/state/seds/>

⁴ U.S. Energy Information Administration, State Electricity Profiles, Table 1, 2015 Summary Statistics <http://www.eia.gov/electricity/state/newyork/>.

Carbon intensity of the energy supply

The carbon intensity of energy supply (CO₂/Btu) reflects the energy fuel mix within a state (Table 7). As with energy intensity, the states with high carbon intensity of energy supply tend to be the states with high per capita emissions. The states with the most carbon-intensive energy supply as measured in kilograms of CO₂ per million Btu (kg CO₂/MMBtu)—West Virginia (79 kg CO₂/MMBtu), Wyoming (77 kg CO₂/MMBtu), Kentucky (74 kg CO₂/MMBtu), Utah (72 kg CO₂/MMBtu), and Indiana and North Dakota (both about 70 kg CO₂/MMBtu)—are all states with coal as the dominant emissions source (Table 2). The national average carbon intensity of the energy supply in 2015 was 55 kg CO₂/MMBtu. The states with lower carbon intensity of their energy supply tend to be those states with relatively substantial non-carbon electricity generation such as nuclear or hydropower. These states include Washington (36 kg CO₂/MMBtu), Vermont and Oregon (both 37 kg CO₂/MMBtu), New Hampshire (39 kg CO₂/MMBtu), and Maine and South Dakota (both 40 kg CO₂/MMBtu).

Carbon intensity of the economy

Another measure, the overall carbon intensity of the economy (CO₂/dollar of state GDP), combines energy intensity with the carbon intensity of that state's energy supply. As expected, the states with the highest carbon intensity of their economies (Table 8) as measured in metric tons (mt) of CO₂ per million dollars of state GDP (mt CO₂/million chained 2009 dollars of GDP) are also the states with the highest values of energy intensity and carbon intensity of that energy supply. In 2015, these states included: Wyoming (1,814 mt CO₂/million dollars of GDP), West Virginia (1,371 mt CO₂/million dollars of GDP), North Dakota (1,122 mt CO₂/million dollars of GDP), Louisiana (1,055 mt CO₂/million dollars of GDP), and Montana (786 mt CO₂/million dollars of GDP). The 2015 U.S. average was 320 mt CO₂/million dollars of GDP. The states with the lowest carbon intensity of economic activity are also states that appear on the lower end of both energy intensity and the carbon intensity of that energy supply. These states include: New York (133 mt CO₂/million dollars of GDP), Massachusetts (150 mt CO₂/million dollars of GDP), Connecticut (160 mt CO₂/million dollars of GDP), California (163 mt CO₂/million dollars of GDP), and Maryland (181 mt CO₂/million dollars of GDP).

Electricity trade

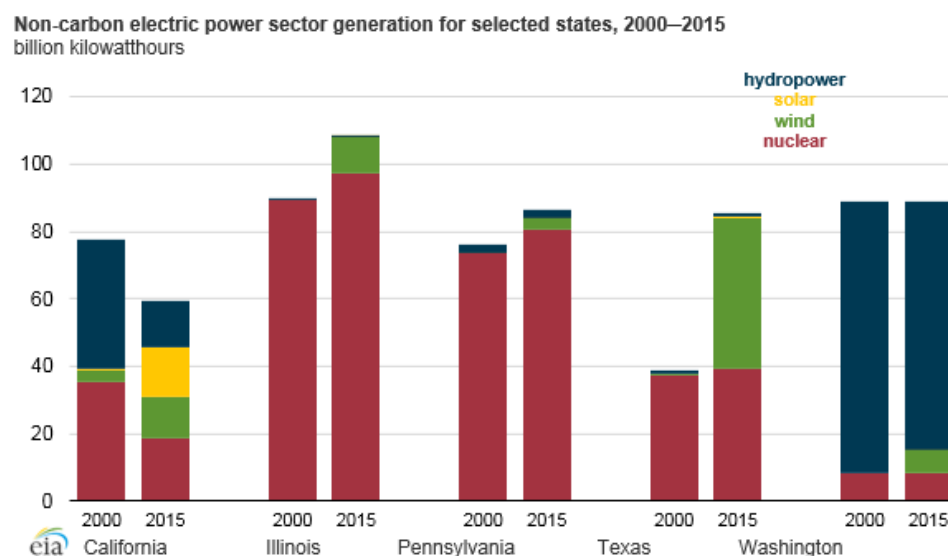
This analysis assigns all emissions related to the primary energy consumed for the production of electricity to the state where that electricity is produced rather than where it is consumed. As a result, the states that produce electricity from fossil fuels (especially coal) and sell that electricity across state lines tend to have higher per capita CO₂ emissions than states that consume more electricity than they produce (Table 9). If the emissions associated with the generation of electricity were allocated to the states where that electricity is consumed, the emissions profiles of both the producing and consuming states would be different in many cases.

Non-carbon energy

Historically, the primary non-carbon-producing energy forms have been nuclear and hydroelectric generation. Neither energy form has experienced significant capacity increases in the United States in recent years. On the other hand, nonhydropower renewable energy forms such as wind and solar have experienced significant growth over the past decade, which has changed the non-carbon generation profile of several states.

Although California increased its electricity generated by wind and solar between 2000 and 2015 (Figure 3), generation from hydropower and nuclear fell between 2000 and 2015. In total, California non-carbon electricity generation fell from 78 billion kilowatthours (kWh) in 2000 to 59 billion kWh in 2015. Illinois increased its nuclear output from existing nuclear capacity while adding wind capacity and in 2015, the state produced 108 billion kWh from non-carbon generation sources. Pennsylvania experienced a pattern similar to that in Illinois. In contrast, Texas has more than doubled its non-carbon generation output over that period, from 39 billion kWh in 2000 to 86 billion kWh in 2015. This doubling resulted from a stable level of nuclear generation and additions of wind capacity. Washington State has always relied heavily on hydropower generation and has added wind capacity to its generation mix, which helped during the relatively low precipitation year in 2015.

Figure 3. Changes in non-carbon electric power sector generation in selected states, 2000–2015



Source: EIA, State Energy Data System and EIA calculations made for this analysis.

See Appendix B for other EIA state-related energy and environmental products.

Table 1. State energy-related carbon dioxide emissions by year (2000, 2005–2015)

million metric tons carbon dioxide

State	2000	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	Change (2000–2015)	
													Percent	Absolute
Alabama	142.2	143.3	145.7	147.4	139.6	120.0	132.7	129.9	123.2	120.9	123.1	119.8	-15.7%	-22.4
Alaska	44.3	48.1	45.8	44.0	39.4	37.8	38.7	38.5	38.0	35.9	35.1	36.2	-18.4%	-8.2
Arizona	86.1	96.7	99.9	101.9	102.3	93.4	95.2	93.3	91.3	95.1	93.1	90.9	5.6%	4.8
Arkansas	63.7	60.2	62.1	63.4	64.2	61.6	65.9	67.3	66.1	68.5	69.0	59.1	-7.1%	-4.6
California	382.4	389.3	397.5	402.5	385.7	372.0	365.9	352.2	357.1	359.8	356.7	363.6	-4.9%	-18.9
Colorado	84.6	95.4	96.4	99.0	97.0	92.9	95.5	91.8	90.7	91.3	91.8	90.3	6.6%	5.6
Connecticut	43.0	44.1	41.0	40.3	37.7	35.9	36.2	34.9	34.1	34.9	35.1	36.5	-15.2%	-6.5
Delaware	16.7	17.4	16.2	17.1	16.2	12.0	11.8	12.9	13.9	13.6	13.3	13.4	-19.4%	-3.2
District of Columbia	4.3	3.9	3.2	3.4	3.1	3.2	3.2	3.1	2.7	2.8	3.0	3.0	-30.1%	-1.3
Florida	239.7	260.7	259.1	256.8	238.6	224.3	242.1	229.1	222.8	221.9	227.5	231.4	-3.5%	-8.3
Georgia	169.2	185.0	182.5	185.1	172.4	162.6	172.0	156.7	136.5	134.8	139.7	137.1	-19.0%	-32.1
Hawaii	18.8	23.1	23.3	24.1	19.4	19.0	19.1	19.5	19.0	18.5	18.5	18.6	-1.0%	-0.2
Idaho	15.7	15.8	15.8	16.4	15.6	15.2	16.0	15.8	15.7	17.2	16.7	17.8	13.4%	2.1
Illinois	233.8	243.6	235.4	243.0	241.4	226.3	231.2	230.0	217.5	231.9	233.9	219.2	-6.2%	-14.6
Indiana	238.4	236.8	235.0	234.5	230.2	207.6	218.7	210.9	196.5	201.6	206.8	188.1	-21.1%	-50.3
Iowa	77.8	78.7	80.0	85.2	89.0	84.0	88.2	85.3	79.9	81.1	81.8	75.8	-2.6%	-2.0
Kansas	76.2	72.1	72.3	80.1	74.7	72.9	72.7	70.9	66.2	69.9	70.1	63.1	-17.2%	-13.1
Kentucky	145.9	153.9	156.9	156.9	154.4	144.3	151.2	149.3	138.6	139.0	139.4	130.2	-10.8%	-15.7
Louisiana	231.2	209.8	222.3	226.6	229.2	213.8	234.3	236.7	224.7	217.4	216.9	218.2	-5.6%	-13.0
Maine	22.4	23.1	21.3	21.0	19.1	18.4	18.1	17.6	15.9	16.6	16.6	16.8	-24.9%	-5.6
Maryland	77.4	83.5	77.2	77.5	73.8	70.5	69.1	64.4	59.9	59.2	61.3	59.5	-23.2%	-18.0
Massachusetts	82.5	84.5	76.5	79.9	76.7	70.3	71.8	68.0	61.7	65.6	63.7	65.6	-20.5%	-16.9
Michigan	194.0	190.6	179.4	181.9	175.4	164.4	165.6	160.3	153.7	162.6	162.3	162.6	-16.2%	-31.4
Minnesota	98.0	101.9	99.3	100.8	100.3	92.6	92.4	92.1	87.2	90.1	95.1	87.7	-10.6%	-10.4
Mississippi	61.6	64.2	66.3	68.4	64.9	60.9	65.8	60.9	62.8	61.0	64.2	65.1	5.8%	3.5
Missouri	126.0	143.3	141.9	140.7	137.3	131.1	135.1	135.2	127.6	132.8	132.4	123.3	-2.2%	-2.7
Montana	31.4	35.5	35.7	37.7	36.9	32.9	34.7	31.8	30.5	32.0	32.4	32.2	2.6%	0.8
Nebraska	41.6	43.7	44.3	44.6	46.6	47.3	49.8	52.2	50.5	53.5	52.1	50.6	21.8%	9.1
Nevada	45.4	49.9	41.5	41.7	40.9	39.4	37.5	33.8	34.5	36.3	37.1	35.2	-22.4%	-10.2
New Hampshire	17.5	21.3	19.4	19.2	18.7	17.1	16.6	16.2	14.6	14.3	14.9	15.1	-13.5%	-2.4
New Jersey	124.0	130.6	123.2	131.0	128.8	111.6	114.3	115.3	104.5	107.7	113.7	111.9	-9.8%	-12.2
New Mexico	58.2	59.3	59.8	59.0	56.4	57.3	53.3	55.7	53.6	53.2	50.1	50.2	-13.7%	-8.0
New York	212.6	211.6	193.2	199.6	190.0	173.9	174.5	164.9	161.5	162.7	170.1	168.3	-20.8%	-44.3
North Carolina	149.1	154.0	148.6	154.4	149.2	133.0	142.8	128.4	121.2	124.9	127.1	120.4	-19.2%	-28.7
North Dakota	50.8	52.4	50.7	52.5	52.9	51.4	52.2	53.7	56.1	56.8	58.6	57.1	12.4%	6.3
Ohio	266.2	271.8	265.0	270.2	263.5	238.5	249.5	237.7	217.8	231.6	232.9	214.5	-19.4%	-51.7
Oklahoma	100.3	107.1	110.3	109.5	112.2	106.5	106.3	108.0	105.2	104.0	105.1	101.4	1.1%	1.1

Table 1. State energy-related carbon dioxide emissions by year (2000, 2005–2015) (cont.)

million metric tons carbon dioxide

State	2000	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	Change (2000–2015)	
													Percent	Absolute
Oregon	41.4	41.1	40.3	43.8	42.8	40.9	40.7	37.2	36.9	39.1	38.0	38.1	-8.1%	-3.3
Pennsylvania	277.5	281.1	275.0	278.0	269.8	245.0	256.3	248.7	238.5	248.1	247.8	233.2	-16.0%	-44.4
Rhode Island	11.7	11.2	10.5	11.1	10.7	11.3	11.0	11.0	10.5	10.2	10.6	10.9	-7.2%	-0.8
South Carolina	81.6	87.9	88.6	88.8	86.5	81.5	84.5	80.2	73.9	70.5	74.8	73.4	-10.1%	-8.3
South Dakota	14.2	13.3	13.4	13.9	15.0	14.8	15.1	14.6	15.0	15.5	15.5	14.2	-0.3%	0.0
Tennessee	128.0	127.3	129.6	128.9	122.5	102.5	109.9	106.3	100.0	98.5	103.8	99.8	-22.1%	-28.3
Texas	657.6	612.2	623.4	620.0	585.0	550.1	582.5	601.5	596.3	623.0	625.4	625.8	-4.8%	-31.7
Utah	65.2	67.1	68.4	70.4	69.5	64.8	64.0	64.5	61.8	67.0	65.4	63.2	-3.0%	-2.0
Vermont	6.8	6.8	6.7	6.5	5.9	6.2	5.9	5.8	5.5	5.8	5.9	6.1	-9.3%	-0.6
Virginia	123.1	129.2	122.6	127.9	116.7	105.7	108.7	99.7	97.7	105.0	103.9	103.0	-16.3%	-20.1
Washington	83.2	78.5	76.4	81.7	78.8	76.7	75.6	70.3	70.6	74.9	73.4	75.7	-9.0%	-7.5
West Virginia	114.9	113.4	113.7	115.9	111.7	89.5	99.8	97.2	91.5	93.8	99.4	92.0	-19.9%	-22.9
Wisconsin	108.0	110.9	103.1	104.8	105.2	96.3	98.6	97.7	90.6	101.2	101.2	99.6	-7.8%	-8.4
Wyoming	63.2	63.3	64.1	66.5	66.9	63.8	65.3	64.2	66.4	68.6	65.6	64.8	2.6%	1.6
Total¹	5,849.1	5,948.9	5,879.7	5,975.3	5,780.6	5,364.2	5,557.4	5,423.2	5,208.0	5,341.9	5,391.6	5,249.3	-10.3%	-599.8

¹For the United States as a whole see, EIA, *Monthly Energy Review*, Section 12: Environment. Differing methodologies cause the total for all states to be different from the national-level estimate. See Appendix A for details on the data series differences.

Note: The District of Columbia is included in the data tables and figures but not in the analysis because it is not a state.

Source: EIA, State Energy Data System and EIA calculations made for this analysis.

Table 2. 2015 state energy-related carbon dioxide emissions by fuel

State	million metric tons of carbon dioxide				shares		
	Coal	Petroleum	Natural Gas	Total	Coal	Petroleum	Natural Gas
Alabama	46.6	36.3	37.0	119.8	38.9%	30.3%	30.8%
Alaska	1.8	16.4	17.9	36.2	5.1%	45.4%	49.5%
Arizona	36.4	35.1	19.4	90.9	40.1%	38.6%	21.3%
Arkansas	21.4	22.0	15.7	59.1	36.2%	37.1%	26.6%
California	2.9	234.3	126.4	363.6	0.8%	64.4%	34.8%
Colorado	32.1	32.0	26.1	90.3	35.6%	35.5%	28.9%
Connecticut	0.6	22.0	13.8	36.5	1.7%	60.3%	38.0%
Delaware	0.7	7.0	5.7	13.4	5.1%	52.3%	42.6%
District of Columbia	0.0	1.2	1.8	3.0	0.0%	40.0%	59.7%
Florida	44.1	114.9	72.5	231.4	19.0%	49.6%	31.3%
Georgia	37.3	62.1	37.8	137.1	27.2%	45.3%	27.6%
Hawaii	1.5	17.1	0.0	18.6	8.0%	92.0%	0.1%
Idaho	0.4	11.7	5.7	17.8	2.2%	65.6%	32.1%
Illinois	80.2	85.4	53.7	219.2	36.6%	38.9%	24.5%
Indiana	94.8	54.3	39.0	188.1	50.4%	28.9%	20.7%
Iowa	32.9	26.8	16.1	75.8	43.4%	35.4%	21.2%
Kansas	25.8	23.5	13.8	63.1	40.9%	37.2%	21.9%
Kentucky	75.2	40.4	14.6	130.2	57.8%	31.0%	11.2%
Louisiana	16.5	120.1	81.7	218.2	7.5%	55.0%	37.4%
Maine	0.2	13.7	2.9	16.8	1.4%	81.5%	17.2%
Maryland	15.7	32.6	11.2	59.5	26.4%	54.9%	18.8%
Massachusetts	2.3	39.1	24.3	65.6	3.5%	59.5%	37.0%
Michigan	58.2	58.1	46.3	162.6	35.8%	35.7%	28.5%
Minnesota	25.6	38.2	23.8	87.7	29.2%	43.6%	27.2%
Mississippi	6.8	30.0	28.3	65.1	10.4%	46.1%	43.5%
Missouri	65.8	43.1	14.4	123.3	53.4%	35.0%	11.7%
Montana	16.9	11.4	4.0	32.2	52.3%	35.4%	12.3%
Nebraska	25.1	16.5	9.0	50.6	49.6%	32.5%	17.9%
Nevada	3.5	15.2	16.6	35.2	9.8%	43.1%	47.1%
New Hampshire	1.0	10.3	3.8	15.1	6.9%	68.3%	24.8%
New Jersey	2.2	68.4	41.3	111.9	1.9%	61.1%	36.9%
New Mexico	20.4	16.0	13.8	50.2	40.6%	31.9%	27.5%
New York	3.9	90.3	74.1	168.3	2.3%	53.7%	44.0%
North Carolina	38.3	54.8	27.4	120.4	31.8%	45.5%	22.7%
North Dakota	38.5	13.4	5.2	57.1	67.4%	23.5%	9.1%
Ohio	81.5	78.1	54.9	214.5	38.0%	36.4%	25.6%
Oklahoma	26.5	37.1	37.8	101.4	26.2%	36.6%	37.3%

Table 2. 2015 state energy-related carbon dioxide emissions by fuel (cont.)

State	million metric tons of carbon dioxide				shares		
	Coal	Petroleum	Natural Gas	Total	Coal	Petroleum	Natural Gas
Oregon	2.5	22.6	13.0	38.1	6.6%	59.3%	34.1%
Pennsylvania	82.6	79.2	71.4	233.2	35.4%	34.0%	30.6%
Rhode Island	0.0	5.8	5.1	10.9	0.0%	53.0%	47.0%
South Carolina	22.8	35.6	15.0	73.4	31.0%	48.6%	20.4%
South Dakota	1.9	7.9	4.4	14.2	13.1%	55.6%	31.2%
Tennessee	35.0	47.7	17.1	99.8	35.1%	47.8%	17.1%
Texas	126.6	283.3	216.0	625.8	20.2%	45.3%	34.5%
Utah	31.2	19.3	12.8	63.2	49.3%	30.5%	20.2%
Vermont	0.0	5.5	0.7	6.1	0.0%	89.4%	10.6%
Virginia	21.9	53.3	27.9	103.0	21.2%	51.7%	27.0%
Washington	5.5	52.8	17.4	75.7	7.3%	69.7%	23.0%
West Virginia	69.0	12.8	10.2	92.0	75.0%	13.9%	11.1%
Wisconsin	38.5	35.8	25.3	99.6	38.7%	35.9%	25.4%
Wyoming	46.0	11.0	7.8	64.8	71.0%	17.0%	12.0%
Total¹	1,466.7	2,301.0	1,481.6	5,249.3	27.9%	43.8%	28.2%

¹For the United States as a whole see, EIA, *Monthly Energy Review*, Section 12: Environment. Differing methodologies cause the total for all states to be different from the national-level estimate. See Appendix A for details on the data series differences.

Note: The District of Columbia is included in the data tables and figures but not in the analysis because it is not a state.

Source: EIA, State Energy Data System and EIA calculations made for this analysis.

Table 3. 2015 state energy-related carbon dioxide emissions by sector

million metric tons carbon dioxide

State	Commercial	Electric Power	Residential	Industrial	Transportation	Total
Alabama	2.2	61.9	2.1	20.9	32.8	119.8
Alaska	2.6	3.0	1.6	17.0	12.1	36.2
Arizona	2.9	49.6	2.1	4.3	31.9	90.9
Arkansas	3.1	27.0	2.0	8.3	18.7	59.1
California	18.6	44.3	23.4	71.4	206.0	363.6
Colorado	4.0	36.6	7.4	14.6	27.6	90.3
Connecticut	4.3	7.4	7.7	1.9	15.1	36.5
Delaware	0.9	3.3	1.0	3.8	4.4	13.4
District of Columbia	1.0	0.0	0.8	0.0	1.1	3.0
Florida	6.9	107.6	1.1	11.6	104.1	231.4
Georgia	4.6	55.7	6.9	13.5	56.4	137.1
Hawaii	0.4	6.6	0.0	1.5	10.1	18.6
Idaho	1.3	1.5	1.5	3.3	10.2	17.8
Illinois	13.4	76.5	22.8	35.6	71.0	219.2
Indiana	5.4	87.3	8.0	44.0	43.5	188.1
Iowa	4.3	28.4	4.1	18.6	20.3	75.8
Kansas	2.2	26.4	3.6	12.0	18.9	63.1
Kentucky	2.6	76.7	3.2	16.0	31.7	130.2
Louisiana	2.2	39.2	2.1	127.2	47.6	218.2
Maine	1.8	1.6	3.0	1.7	8.8	16.8
Maryland	5.3	16.7	6.5	2.5	28.5	59.5
Massachusetts	7.6	11.3	13.5	3.5	29.7	65.6
Michigan	10.8	62.4	19.3	20.3	49.8	162.6
Minnesota	6.4	27.0	8.0	16.9	29.5	87.7
Mississippi	1.6	24.7	1.6	11.0	26.2	65.1
Missouri	4.5	65.8	6.0	9.5	37.4	123.3
Montana	1.2	17.6	1.5	4.3	7.6	32.2
Nebraska	2.0	23.4	2.3	9.2	13.8	50.6
Nevada	2.2	14.4	2.2	2.1	14.3	35.2
New Hampshire	1.5	3.5	2.7	0.8	6.7	15.1
New Jersey	10.7	17.9	15.5	9.6	58.1	111.9
New Mexico	1.7	24.6	2.1	7.4	14.4	50.2

Table 3. 2015 state energy-related carbon dioxide emissions by sector (cont.)

million metric tons carbon dioxide

State	Commercial	Electric Power	Residential	Industrial	Transportation	Total
New York	22.8	29.2	35.2	9.7	71.4	168.3
North Carolina	5.8	51.7	5.3	10.2	47.5	120.4
North Dakota	1.1	29.8	0.9	16.2	9.2	57.1
Ohio	11.8	82.6	17.8	38.5	63.8	214.5
Oklahoma	3.1	39.6	3.7	22.6	32.4	101.4
Oregon	2.0	8.6	2.3	4.8	20.4	38.1
Pennsylvania	11.5	87.9	20.7	53.6	59.5	233.2
Rhode Island	1.0	2.8	2.4	0.6	4.1	10.9
South Carolina	2.1	29.3	1.8	8.4	31.8	73.4
South Dakota	0.7	1.9	0.9	3.8	6.8	14.2
Tennessee	3.9	33.5	4.1	16.3	42.0	99.8
Texas	13.4	213.6	12.7	169.2	216.9	625.8
Utah	2.4	32.9	3.4	7.8	16.8	63.2
Vermont	1.0	0.0	1.4	0.4	3.3	6.1
Virginia	5.9	31.8	6.5	11.6	47.2	103.0
Washington	4.1	10.8	4.7	13.1	43.0	75.7
West Virginia	1.7	66.0	1.8	10.7	11.9	92.0
Wisconsin	6.0	41.5	8.8	13.7	29.6	99.6
Wyoming	1.1	43.3	0.8	11.9	7.7	64.8
Total¹	241.4	1,886.5	320.6	947.4	1,853.4	5,249.3

¹For the United States as a whole see, EIA, *Monthly Energy Review*, Section 12: Environment. Differing methodologies cause the total for all states to be different from the national-level estimate. See Appendix A for details on the data series differences.

Note: The District of Columbia is included in the data tables and figures but not in the analysis because it is not a state.

Source: EIA, State Energy Data System and EIA calculations made for this analysis.

Table 4. 2015 state energy-related carbon dioxide emission shares by sector

percent of total

State	Shares				
	Commercial	Electric Power	Residential	Industrial	Transportation
Alabama	1.8%	51.7%	1.8%	17.4%	27.3%
Alaska	7.1%	8.2%	4.4%	47.1%	33.3%
Arizona	3.2%	54.6%	2.3%	4.8%	35.1%
Arkansas	5.3%	45.7%	3.4%	14.0%	31.6%
California	5.1%	12.2%	6.4%	19.6%	56.6%
Colorado	4.4%	40.5%	8.2%	16.2%	30.6%
Connecticut	11.9%	20.4%	21.0%	5.2%	41.5%
Delaware	7.0%	24.2%	7.7%	28.2%	32.8%
District of Columbia	34.3%	0.0%	27.7%	0.7%	37.3%
Florida	3.0%	46.5%	0.5%	5.0%	45.0%
Georgia	3.4%	40.6%	5.0%	9.8%	41.1%
Hawaii	1.9%	35.5%	0.2%	8.1%	54.3%
Idaho	7.1%	8.4%	8.5%	18.7%	57.2%
Illinois	6.1%	34.9%	10.4%	16.2%	32.4%
Indiana	2.9%	46.4%	4.2%	23.4%	23.1%
Iowa	5.7%	37.5%	5.4%	24.6%	26.8%
Kansas	3.5%	41.9%	5.8%	19.0%	29.9%
Kentucky	2.0%	58.9%	2.5%	12.3%	24.4%
Louisiana	1.0%	18.0%	0.9%	58.3%	21.8%
Maine	10.4%	9.5%	17.8%	10.0%	52.2%
Maryland	9.0%	28.0%	11.0%	4.2%	47.9%
Massachusetts	11.6%	17.3%	20.5%	5.3%	45.3%
Michigan	6.6%	38.4%	11.9%	12.5%	30.6%
Minnesota	7.3%	30.8%	9.1%	19.2%	33.6%
Mississippi	2.5%	37.9%	2.4%	16.9%	40.3%
Missouri	3.7%	53.4%	4.8%	7.7%	30.4%
Montana	3.8%	54.6%	4.5%	13.5%	23.6%
Nebraska	3.9%	46.2%	4.6%	18.1%	27.3%
Nevada	6.3%	41.0%	6.2%	6.0%	40.6%
New Hampshire	9.7%	23.1%	17.7%	5.1%	44.4%
New Jersey	9.6%	16.0%	13.9%	8.6%	52.0%
New Mexico	3.4%	48.9%	4.1%	14.7%	28.8%

Table 4. 2015 state energy-related carbon dioxide emission shares by sector (cont.)

percent of total

State	Shares				
	Commercial	Electric Power	Residential	Industrial	Transportation
New York	13.6%	17.3%	20.9%	5.8%	42.4%
North Carolina	4.8%	42.9%	4.4%	8.4%	39.4%
North Dakota	1.9%	52.1%	1.6%	28.3%	16.2%
Ohio	5.5%	38.5%	8.3%	18.0%	29.7%
Oklahoma	3.1%	39.1%	3.7%	22.3%	31.9%
Oregon	5.2%	22.5%	6.0%	12.6%	53.7%
Pennsylvania	4.9%	37.7%	8.9%	23.0%	25.5%
Rhode Island	9.2%	25.6%	22.2%	5.6%	37.4%
South Carolina	2.9%	39.9%	2.4%	11.5%	43.3%
South Dakota	5.2%	13.4%	6.5%	27.0%	47.9%
Tennessee	3.9%	33.6%	4.1%	16.3%	42.1%
Texas	2.1%	34.1%	2.0%	27.0%	34.7%
Utah	3.8%	52.0%	5.3%	12.3%	26.6%
Vermont	16.0%	0.0%	22.7%	6.7%	54.6%
Virginia	5.7%	30.9%	6.3%	11.3%	45.9%
Washington	5.4%	14.3%	6.2%	17.3%	56.8%
West Virginia	1.8%	71.7%	1.9%	11.6%	12.9%
Wisconsin	6.0%	41.7%	8.8%	13.8%	29.7%
Wyoming	1.7%	66.9%	1.2%	18.4%	11.9%
Average all states	4.6%	35.9%	6.1%	18.0%	35.3%

Note: The District of Columbia is included in the data tables but not in the analysis because it is not a state.

Source: EIA, State Energy Data System, and EIA calculations made for this analysis.

Table 5. Per capita energy-related carbon dioxide emissions by state (2000, 2005–2015)

metric tons carbon dioxide per person

State	2000	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	Change (2000–2015)	
													Percent	Absolute
Alabama	31.9	31.4	31.5	31.5	29.6	25.2	27.7	27.1	25.6	25.0	25.4	24.7	-22.7%	-7.3
Alaska	70.6	72.0	67.8	64.8	57.4	54.1	54.1	53.3	52.0	48.8	47.6	49.0	-30.6%	-21.6
Arizona	16.7	16.6	16.6	16.5	16.3	14.7	14.9	14.4	13.9	14.4	13.9	13.3	-20.1%	-3.3
Arkansas	23.8	21.6	22.0	22.2	22.3	21.3	22.6	22.9	22.4	23.2	23.3	19.9	-16.5%	-3.9
California	11.3	10.9	11.0	11.1	10.5	10.1	9.8	9.3	9.4	9.4	9.2	9.3	-17.1%	-1.9
Colorado	19.6	20.6	20.4	20.6	19.8	18.7	18.9	17.9	17.5	17.3	17.2	16.6	-15.3%	-3.0
Connecticut	12.6	12.6	11.7	11.4	10.6	10.1	10.1	9.7	9.5	9.7	9.8	10.2	-19.2%	-2.4
Delaware	21.2	20.6	18.9	19.6	18.3	13.4	13.1	14.2	15.2	14.7	14.2	14.2	-32.9%	-7.0
District of Columbia	7.5	6.9	5.6	5.9	5.3	5.4	5.3	5.0	4.2	4.4	4.6	4.5	-40.4%	-3.0
Florida	14.9	14.6	14.3	14.0	12.9	12.0	12.8	12.0	11.5	11.3	11.4	11.4	-23.5%	-3.5
Georgia	20.6	20.7	19.9	19.8	18.1	16.9	17.7	16.0	13.8	13.5	13.8	13.4	-34.6%	-7.1
Hawaii	15.5	17.8	17.8	18.3	14.5	14.1	14.0	14.2	13.6	13.2	13.0	13.0	-15.6%	-2.4
Idaho	12.1	11.1	10.8	10.9	10.1	9.8	10.2	10.0	9.8	10.6	10.2	10.8	-10.8%	-1.3
Illinois	18.8	19.3	18.6	19.1	18.9	17.7	18.0	17.9	16.9	18.0	18.2	17.1	-9.2%	-1.7
Indiana	39.1	37.7	37.1	36.8	35.8	32.1	33.7	32.4	30.1	30.7	31.4	28.5	-27.3%	-10.7
Iowa	26.5	26.5	26.8	28.4	29.5	27.7	28.9	27.8	26.0	26.2	26.3	24.3	-8.6%	-2.3
Kansas	28.3	26.3	26.2	28.8	26.6	25.7	25.4	24.7	22.9	24.1	24.2	21.7	-23.3%	-6.6
Kentucky	36.0	36.8	37.2	36.9	36.0	33.4	34.8	34.2	31.6	31.6	31.6	29.4	-18.3%	-6.6
Louisiana	51.7	45.8	51.6	51.8	51.7	47.6	51.5	51.7	48.8	47.0	46.7	46.7	-9.6%	-5.0
Maine	17.5	17.5	16.1	15.8	14.3	13.8	13.6	13.2	11.9	12.5	12.5	12.6	-27.8%	-4.9
Maryland	14.6	14.9	13.7	13.7	13.0	12.3	11.9	11.0	10.2	10.0	10.3	9.9	-32.0%	-4.7
Massachusetts	13.0	13.2	11.9	12.4	11.9	10.8	10.9	10.3	9.3	9.8	9.4	9.7	-25.4%	-3.3
Michigan	19.5	19.0	17.9	18.2	17.6	16.6	16.8	16.2	15.5	16.4	16.4	16.4	-15.9%	-3.1
Minnesota	19.9	19.9	19.2	19.4	19.1	17.5	17.4	17.2	16.2	16.6	17.4	16.0	-19.5%	-3.9
Mississippi	21.6	22.1	22.8	23.4	22.0	20.6	22.1	20.4	21.0	20.4	21.5	21.8	0.8%	0.2
Missouri	22.5	24.7	24.3	23.9	23.2	22.0	22.5	22.5	21.2	22.0	21.8	20.3	-9.7%	-2.2
Montana	34.7	37.8	37.5	39.0	37.8	33.5	35.0	31.9	30.4	31.5	31.7	31.2	-10.2%	-3.5
Nebraska	24.3	24.8	25.0	25.0	26.0	26.1	27.2	28.4	27.2	28.6	27.7	26.7	10.2%	2.5
Nevada	22.5	20.5	16.4	16.0	15.4	14.7	13.9	12.4	12.5	13.0	13.1	12.2	-45.7%	-10.3
New Hampshire	14.1	16.4	14.8	14.6	14.2	13.0	12.6	12.3	11.0	10.8	11.2	11.4	-19.3%	-2.7
New Jersey	14.7	15.1	14.2	15.1	14.8	12.7	13.0	13.0	11.8	12.1	12.7	12.5	-14.9%	-2.2
New Mexico	31.9	30.7	30.5	29.7	28.1	28.1	25.8	26.8	25.7	25.5	24.0	24.1	-24.4%	-7.8
New York	11.2	11.1	10.1	10.4	9.9	9.0	9.0	8.4	8.2	8.3	8.6	8.5	-23.8%	-2.7
North Carolina	18.5	17.7	16.7	16.9	16.0	14.1	14.9	13.3	12.4	12.7	12.8	12.0	-35.0%	-6.4
North Dakota	79.2	81.1	78.2	80.4	80.4	77.2	77.3	78.4	79.9	78.4	79.2	75.5	-4.7%	-3.7
Ohio	23.4	23.7	23.1	23.5	22.9	20.7	21.6	20.6	18.9	20.0	20.1	18.5	-21.1%	-4.9
Oklahoma	29.0	30.2	30.7	30.1	30.6	28.6	28.3	28.5	27.6	27.0	27.1	25.9	-10.6%	-3.1

Table 5. Per capita energy-related carbon dioxide emissions by state (2000, 2005–2015) (cont.)

metric tons carbon dioxide per person

State	2000	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	Change (2000–2015)	
													Percent	Absolute
Oregon	12.1	11.4	11.0	11.8	11.3	10.7	10.6	9.6	9.5	10.0	9.6	9.5	-21.7%	-2.6
Pennsylvania	22.6	22.6	22.0	22.1	21.4	19.3	20.2	19.5	18.7	19.4	19.4	18.2	-19.3%	-4.4
Rhode Island	11.2	10.5	9.9	10.5	10.1	10.7	10.5	10.5	10.0	9.6	10.1	10.3	-7.7%	-0.9
South Carolina	20.3	20.6	20.3	20.0	19.1	17.7	18.2	17.2	15.6	14.8	15.5	15.0	-26.1%	-5.3
South Dakota	18.8	17.2	17.1	17.6	18.8	18.3	18.5	17.8	18.0	18.3	18.1	16.5	-12.1%	-2.3
Tennessee	22.4	21.3	21.3	20.9	19.6	16.2	17.3	16.6	15.5	15.2	15.9	15.1	-32.6%	-7.3
Texas	31.4	26.9	26.7	26.0	24.1	22.2	23.1	23.5	22.9	23.5	23.2	22.8	-27.3%	-8.6
Utah	29.0	27.3	27.1	27.1	26.1	23.8	23.1	22.9	21.6	23.1	22.2	21.1	-27.2%	-7.9
Vermont	11.1	11.0	10.7	10.5	9.5	9.9	9.4	9.3	8.7	9.2	9.4	9.8	-11.6%	-1.3
Virginia	17.3	17.0	16.0	16.5	14.9	13.3	13.5	12.3	11.9	12.7	12.5	12.3	-28.9%	-5.0
Washington	14.1	12.6	12.0	12.6	12.0	11.5	11.2	10.3	10.2	10.7	10.4	10.6	-24.9%	-3.5
West Virginia	63.6	62.3	62.2	63.2	60.7	48.4	53.8	52.4	49.3	50.6	53.7	50.0	-21.4%	-13.6
Wisconsin	20.1	20.0	18.5	18.7	18.6	17.0	17.3	17.1	15.8	17.6	17.6	17.3	-14.1%	-2.8
Wyoming	127.9	123.1	122.6	124.3	122.6	113.9	115.6	112.9	115.1	117.7	112.4	110.4	-13.7%	-17.5
Average all states	20.7	20.1	19.7	19.8	19.0	17.5	18.0	17.4	16.6	16.9	16.9	16.4	-21.1%	-4.4

Note: The District of Columbia is included in the data tables but not in the analysis because it is not a state.

Source: EIA, State Energy Data System, and EIA calculations made for this analysis.

Table 6. Energy intensity by state (2000, 2005–2015)

thousand Btu per chained 2009 dollar of GDP

State	2000	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	Change (2000–2015)	
													Percent	Absolute
Alabama	16.4	14.4	14.3	14.3	14.2	13.7	14.2	14.2	13.8	13.7	13.5	13.7	-16.0%	-2.6
Alaska	20.7	19.6	17.2	15.8	14.0	12.7	13.2	12.8	12.1	12.0	12.4	12.2	-41.2%	-8.5
Arizona	7.7	6.7	6.5	6.6	7.0	7.0	7.1	6.9	6.7	6.8	6.7	6.7	-13.3%	-1.0
Arkansas	13.0	10.9	11.0	11.5	11.4	11.6	11.8	11.7	11.6	11.2	10.3	11.3	-13.5%	-1.8
California	4.4	3.8	3.8	3.7	3.6	3.6	3.6	3.5	3.3	3.3	3.1	3.2	-28.4%	-1.3
Colorado	5.5	5.8	5.8	5.9	5.8	5.7	5.8	5.6	5.4	5.4	5.0	5.2	-5.4%	-0.3
Connecticut	3.5	3.4	3.3	4.1	3.8	3.7	3.9	3.9	3.7	3.5	3.5	3.4	-0.9%	0.0
Delaware	4.3	4.3	3.9	4.1	4.1	3.1	3.2	3.6	4.0	3.9	3.7	3.7	-13.0%	-0.6
District of Columbia	0.9	0.7	0.6	0.6	0.5	0.6	0.6	0.6	0.5	0.5	0.5	0.5	-38.9%	-0.3
Florida	6.1	5.3	5.2	5.1	5.2	5.3	5.5	5.4	5.2	5.2	5.1	5.1	-15.2%	-0.9
Georgia	7.5	7.1	6.9	6.9	6.7	6.8	7.1	6.6	6.1	6.0	5.9	6.0	-20.8%	-1.6
Hawaii	5.1	5.0	4.9	5.0	4.1	4.2	4.1	4.2	4.0	4.0	3.9	4.0	-21.8%	-1.1
Idaho	8.8	7.3	7.4	6.9	6.8	7.0	7.0	7.8	7.4	7.3	7.3	7.2	-17.4%	-1.5
Illinois	7.1	7.0	6.6	6.7	6.9	6.8	6.9	6.7	6.4	6.7	6.4	6.7	-5.5%	-0.4
Indiana	12.2	11.4	11.0	10.7	10.7	10.5	10.4	10.2	9.6	9.7	9.1	9.7	-20.4%	-2.5
Iowa	10.1	9.2	9.3	9.7	10.5	10.8	11.2	10.9	10.6	9.8	10.1	10.4	2.9%	0.3
Kansas	10.9	9.6	9.2	9.8	9.0	9.3	9.3	8.6	8.3	8.9	8.2	9.1	-17.0%	-1.8
Kentucky	13.0	12.5	12.3	12.4	12.2	12.0	12.0	11.6	10.8	10.9	10.2	10.9	-15.8%	-2.0
Louisiana	24.0	18.2	19.2	20.2	19.9	18.6	19.4	20.6	19.9	20.3	20.1	20.1	-16.2%	-3.9
Maine	10.6	9.8	9.1	9.2	9.2	8.7	8.6	8.7	8.2	8.7	8.2	8.4	-20.6%	-2.2
Maryland	5.3	4.6	4.2	4.3	4.1	4.0	3.8	3.6	3.4	3.4	3.3	3.4	-35.0%	-1.8
Massachusetts	3.9	3.6	3.3	3.3	3.3	3.1	3.1	3.0	2.7	2.8	2.7	2.7	-29.1%	-1.1
Michigan	7.3	7.4	6.9	7.2	7.4	7.4	7.3	7.1	6.7	7.0	6.8	7.0	-4.4%	-0.3
Minnesota	7.1	6.5	6.4	6.6	6.6	6.5	6.5	6.3	6.0	6.1	5.8	6.2	-12.0%	-0.9
Mississippi	13.3	12.4	12.5	12.6	11.4	11.6	12.5	12.1	12.1	11.8	13.0	12.3	-7.1%	-0.9
Missouri	7.6	8.0	7.9	7.9	7.6	7.5	7.5	7.6	7.2	7.3	6.9	7.3	-3.1%	-0.2
Montana	18.2	16.7	16.7	16.4	16.3	15.2	15.0	14.7	13.7	13.8	13.2	13.9	-23.6%	-4.3
Nebraska	9.6	8.9	8.8	9.2	9.4	9.4	10.0	9.6	9.2	9.5	9.4	9.4	-2.0%	-0.2
Nevada	6.7	5.6	4.9	4.9	5.1	5.5	5.3	4.8	5.1	5.4	5.2	5.3	-21.1%	-1.4
New Hampshire	6.6	7.2	6.5	6.7	6.7	6.3	6.4	6.0	5.6	6.0	5.8	6.0	-10.0%	-0.7
New Jersey	5.0	4.8	4.5	4.7	4.6	4.5	4.5	4.6	4.2	4.3	4.4	4.5	-10.5%	-0.5
New Mexico	11.7	10.3	10.4	10.4	9.8	9.8	9.3	9.7	9.4	9.5	8.8	8.9	-24.0%	-2.8
New York	3.9	3.6	3.3	3.4	3.4	3.1	3.0	3.0	2.8	2.9	2.9	2.9	-24.7%	-1.0
North Carolina	7.3	6.5	6.0	6.1	5.9	5.7	6.0	5.5	5.4	5.6	5.3	5.6	-23.7%	-1.7
North Dakota	20.2	26.1	24.2	23.7	24.2	22.7	22.6	21.0	20.6	16.4	16.1	16.0	-20.9%	-4.2
Ohio	8.0	7.5	7.4	7.5	7.6	7.2	7.3	6.8	6.4	6.6	6.2	6.6	-17.6%	-1.4
Oklahoma	12.7	12.1	11.8	11.8	11.8	11.5	11.6	11.1	10.6	10.2	9.6	9.8	-22.4%	-2.8

Table 6. Energy intensity by state (2000, 2005–2015) (cont.)

thousand Btu per chained 2009 dollar of GDP

State	2000	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	Change (2000–2015)	
													Percent	Absolute
Oregon	7.6	6.4	6.3	6.0	5.9	5.4	5.5	5.6	8.3	5.7	5.2	5.6	-26.6%	-2.0
Pennsylvania	8.8	8.2	8.0	7.9	7.7	7.5	7.6	7.4	7.1	7.3	6.9	7.3	-17.4%	-1.5
Rhode Island	4.6	3.6	3.4	3.7	3.9	4.1	4.0	4.0	3.8	3.6	3.9	3.8	-16.9%	-0.8
South Carolina	11.7	11.4	11.0	10.8	10.6	10.9	11.0	10.6	10.1	9.9	9.6	9.8	-16.1%	-1.9
South Dakota	10.0	7.8	8.0	7.9	8.3	8.9	9.6	9.4	9.3	9.1	8.6	9.3	-6.7%	-0.7
Tennessee	9.3	8.5	8.2	8.3	7.9	7.4	7.7	7.4	6.8	6.9	6.5	6.9	-26.0%	-2.4
Texas	13.3	11.3	10.2	9.7	9.3	9.7	9.6	9.1	9.1	8.6	10.7	8.8	-33.8%	-4.5
Utah	9.9	8.6	8.2	8.0	8.1	7.7	7.6	7.5	7.2	7.5	6.6	7.1	-28.0%	-2.8
Vermont	8.1	6.7	7.2	6.7	6.7	7.5	6.9	6.7	7.6	8.0	6.0	8.0	-0.9%	-0.1
Virginia	6.2	5.5	5.2	5.3	5.0	4.7	4.7	4.4	4.4	4.6	4.6	4.7	-23.9%	-1.5
Washington	7.6	6.3	6.4	6.1	5.9	5.9	5.7	6.0	5.8	5.6	5.2	5.4	-28.0%	-2.1
West Virginia	23.4	22.0	21.7	22.0	20.9	17.3	18.5	17.8	17.2	17.7	17.3	18.5	-20.9%	-4.9
Wisconsin	7.7	7.1	6.7	6.8	6.9	6.6	6.7	6.4	6.1	6.5	6.2	6.4	-16.5%	-1.3
Wyoming	30.8	26.3	23.8	23.7	22.2	22.1	23.3	23.6	25.0	25.3	23.6	24.0	-22.0%	-6.8
Average all states	7.9	7.0	6.8	6.8	6.7	6.5	6.6	6.4	6.1	6.2	5.9	6.1	-21.9%	-1.7

Note: The District of Columbia is included in the data tables but not in the analysis because it is not a state.

Source: EIA, State Energy Data System, and EIA calculations made for this analysis.

Table 7. Carbon intensity by state (2000, 2005–2015)

kilograms of energy-related carbon dioxide per million Btu

State	2000	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	Change (2000–2015)	
													Percent	Absolute
Alabama	58.7	58.0	58.3	58.7	56.5	52.1	54.5	52.8	50.9	49.7	50.6	49.4	-15.7%	-9.2
Alaska	59.7	60.2	61.3	60.9	60.6	59.1	59.2	58.9	58.5	58.3	58.1	58.3	-2.3%	-1.4
Arizona	55.0	57.1	57.9	56.9	55.9	54.7	55.4	54.5	53.8	54.8	53.7	52.1	-5.4%	-3.0
Arkansas	57.3	55.8	55.6	55.2	56.0	54.1	55.0	55.7	55.2	57.8	56.9	53.5	-6.6%	-3.8
California	52.9	53.1	53.2	54.1	54.1	53.7	52.9	51.1	53.2	52.8	52.8	52.9	-0.1%	0.0
Colorado	69.1	68.6	68.7	67.5	66.5	65.4	65.8	65.1	65.3	64.2	63.4	63.3	-8.4%	-5.8
Connecticut	50.2	51.7	49.6	49.4	49.6	46.2	46.2	45.1	44.9	44.8	45.5	45.2	-10.0%	-5.0
Delaware	71.3	71.6	71.3	71.6	70.5	67.2	65.8	61.8	61.0	61.5	60.0	59.6	-16.4%	-11.7
District of Columbia	61.0	61.6	60.1	59.6	59.0	54.9	54.3	54.0	53.0	52.6	53.1	53.0	-13.1%	-8.0
Florida	63.5	63.6	62.4	62.4	60.2	58.7	60.2	59.2	58.7	57.7	58.0	57.1	-10.0%	-6.3
Georgia	60.1	61.7	61.6	61.9	61.6	59.2	59.1	57.7	53.9	53.1	53.6	52.0	-13.4%	-8.1
Hawaii	68.7	71.0	71.2	71.4	70.0	68.6	68.8	68.4	68.3	66.5	66.2	65.8	-4.1%	-2.8
Idaho	39.5	42.5	39.5	42.5	40.5	40.3	42.0	37.2	38.8	41.7	40.1	41.6	5.4%	2.1
Illinois	53.8	54.1	53.9	53.8	53.2	52.0	52.2	52.1	51.0	51.4	51.2	49.8	-7.4%	-4.0
Indiana	77.6	77.5	78.3	77.7	77.0	75.6	75.2	73.8	72.6	72.4	72.2	70.0	-9.9%	-7.6
Iowa	66.3	63.3	62.7	62.0	60.3	56.5	56.1	54.8	53.4	51.7	51.5	49.3	-25.6%	-17.0
Kansas	65.0	65.8	65.1	64.8	64.3	63.2	62.1	63.0	60.8	59.7	58.0	56.5	-13.0%	-8.4
Kentucky	78.3	76.9	78.1	77.9	78.1	76.8	77.4	77.4	76.6	76.1	75.5	74.4	-4.9%	-3.8
Louisiana	52.9	53.5	54.6	54.6	55.7	54.4	54.5	54.9	53.9	52.9	52.4	52.6	-0.7%	-0.4
Maine	45.3	45.9	44.9	44.1	40.3	41.9	41.1	40.2	38.7	38.6	39.0	40.2	-11.1%	-5.0
Maryland	60.6	62.0	61.4	60.7	59.8	58.8	58.6	57.0	56.0	55.1	55.5	54.3	-10.4%	-6.3
Massachusetts	61.3	62.3	60.5	61.3	59.9	57.9	57.3	56.0	55.2	56.7	55.1	55.5	-9.4%	-5.8
Michigan	63.0	60.1	60.9	60.6	59.8	61.1	59.6	57.8	57.7	57.6	56.3	56.6	-10.1%	-6.3
Minnesota	58.8	58.7	58.3	57.5	56.4	54.9	53.7	53.9	52.4	52.9	52.6	51.6	-12.2%	-7.2
Mississippi	55.8	57.7	57.8	57.8	58.4	56.1	56.1	54.1	54.5	54.1	55.2	52.9	-5.3%	-2.9
Missouri	70.8	72.0	71.9	71.4	70.4	69.7	70.7	70.9	70.2	71.0	70.1	68.8	-2.8%	-2.0
Montana	59.7	62.5	60.9	62.4	61.6	60.1	61.7	56.4	57.4	59.3	57.9	59.7	0.1%	0.0
Nebraska	60.3	60.6	60.1	57.2	57.5	57.9	54.7	57.6	58.6	58.5	55.3	53.9	-10.6%	-6.4
Nevada	67.3	66.6	61.4	61.8	61.2	59.7	59.2	57.5	56.3	56.5	57.5	53.8	-20.1%	-13.5
New Hampshire	47.7	47.2	46.9	44.8	44.6	43.2	40.7	42.3	40.5	36.9	38.0	38.7	-18.9%	-9.0
New Jersey	54.8	56.0	54.8	54.9	55.1	51.8	52.3	52.0	50.5	50.4	51.2	50.5	-7.8%	-4.3
New Mexico	72.1	72.1	71.2	69.8	69.2	70.4	68.6	68.8	67.9	67.6	66.1	66.2	-8.1%	-5.9
New York	53.1	52.7	50.7	51.0	49.5	48.2	48.6	46.7	46.6	45.6	46.1	45.7	-13.8%	-7.3
North Carolina	60.1	60.1	59.8	61.0	59.4	56.8	57.6	55.6	53.9	52.6	53.1	51.1	-14.9%	-8.9
North Dakota	81.2	81.2	80.6	80.3	79.2	76.7	73.3	70.5	71.5	70.6	69.7	69.8	-14.0%	-11.4
Ohio	68.6	70.6	70.4	70.5	69.5	69.4	69.5	68.5	66.1	66.6	65.6	64.0	-6.7%	-4.6
Oklahoma	67.4	66.0	66.1	64.6	64.8	64.4	63.4	64.1	62.0	60.9	61.2	58.8	-12.7%	-8.6

Table 7. Carbon intensity by state (2000, 2005–2015) (cont.)

kilograms of energy-related carbon dioxide per million Btu

State	2000	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	Change (2000–2015)	
													Percent	Absolute
Oregon	38.1	40.4	37.5	40.3	39.2	38.5	39.6	34.1	34.3	36.5	35.3	36.6	-3.7%	-1.4
Pennsylvania	61.3	60.9	60.8	60.3	59.3	57.1	57.5	56.4	55.4	55.0	54.2	52.5	-14.4%	-8.8
Rhode Island	59.0	61.3	59.9	59.8	56.4	57.2	57.0	56.9	57.3	57.1	56.8	56.9	-3.5%	-2.1
South Carolina	48.2	48.4	49.3	48.9	48.8	46.5	47.1	45.6	44.0	41.8	43.6	42.4	-12.1%	-5.8
South Dakota	52.9	51.2	49.9	50.7	49.5	45.4	42.4	39.2	41.1	42.9	41.7	40.4	-23.6%	-12.5
Tennessee	61.7	59.4	61.7	61.3	60.4	55.9	57.1	56.2	55.7	53.0	54.8	54.6	-11.6%	-7.2
Texas	53.0	51.8	52.3	52.2	51.6	50.5	50.1	50.5	49.8	49.6	49.6	48.7	-8.1%	-4.3
Utah	75.7	76.4	75.4	75.1	74.7	74.1	73.5	72.5	72.0	72.7	72.3	72.0	-4.9%	-3.7
Vermont	37.3	39.3	35.9	37.7	34.0	32.1	32.5	32.2	26.8	26.7	27.1	37.4	0.1%	0.1
Virginia	59.5	58.9	58.5	58.9	57.5	55.1	55.8	54.5	52.4	53.5	52.5	51.9	-12.8%	-7.6
Washington	37.2	38.4	35.7	37.8	36.9	37.6	37.5	32.9	32.7	35.4	34.7	36.4	-2.1%	-0.8
West Virginia	84.5	84.3	84.2	84.6	83.9	81.1	82.2	81.7	80.7	80.0	80.2	79.1	-6.4%	-5.4
Wisconsin	62.3	62.1	60.7	60.5	60.4	59.3	59.0	59.2	56.7	59.2	59.0	59.1	-5.2%	-3.3
Wyoming	81.7	81.3	81.3	80.2	79.7	77.8	76.7	74.7	75.8	76.7	76.3	76.9	-5.9%	-4.8
Average all states	60.4	60.7	60.1	60.1	59.2	57.6	57.5	56.3	55.6	55.5	55.2	54.8	-9.3%	-5.6

Note: The District of Columbia is included in the data tables but not in the analysis because it is not a state.

Source: EIA, State Energy Data System, and EIA calculations made for this analysis.

Table 8. Carbon intensity of the economy by state (2000, 2005–2015)

metric tons of energy-related carbon dioxide per million chained 2009 dollars of GDP

State	2000	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	Change (2000–2015)	
													Percent	Absolute
Alabama	959.6	834.3	834.2	840.5	800.0	713.2	772.2	747.4	702.0	682.7	695.6	669.8	-30.2%	-289.9
Alaska	1,234.2	1,178.6	1,053.0	963.0	849.3	748.8	778.2	755.3	707.2	699.8	706.7	723.8	-41.4%	-510.4
Arizona	425.6	384.9	375.9	374.0	389.5	385.2	391.8	377.1	361.6	374.9	360.5	347.1	-18.5%	-78.5
Arkansas	747.0	607.0	614.3	632.0	639.2	628.1	650.5	651.8	640.8	645.8	642.0	548.7	-26.5%	-198.3
California	233.3	203.8	201.2	201.3	193.5	194.5	188.9	179.4	177.3	174.3	166.5	162.6	-30.3%	-70.7
Colorado	379.6	400.0	396.3	395.6	384.2	375.8	384.0	363.8	351.9	343.5	329.9	314.8	-17.1%	-64.9
Connecticut	205.2	190.3	172.9	162.8	154.4	153.8	155.9	152.5	149.5	155.1	157.0	159.5	-22.3%	-45.7
Delaware	307.0	304.7	278.6	295.6	292.8	208.9	208.3	223.0	244.4	242.6	224.8	221.9	-27.7%	-85.1
District of Columbia	54.1	42.4	33.9	35.1	31.1	32.3	31.7	29.8	25.6	27.4	28.8	28.1	-48.2%	-26.1
Florida	384.4	337.2	324.7	321.4	312.2	310.7	332.8	316.7	305.4	298.0	297.9	292.4	-23.9%	-92.1
Georgia	452.5	435.2	423.9	426.9	410.1	402.0	421.4	379.1	326.3	317.6	319.7	306.1	-32.4%	-146.4
Hawaii	349.5	355.5	351.4	357.6	285.9	289.8	282.8	287.1	275.4	265.9	263.3	259.2	-25.8%	-90.3
Idaho	346.5	308.3	292.0	292.9	276.5	281.9	293.7	290.8	288.0	306.2	290.4	303.7	-12.3%	-42.8
Illinois	382.6	377.1	354.7	362.1	368.3	354.6	357.8	349.3	323.8	346.6	344.4	319.6	-16.5%	-63.1
Indiana	949.7	880.7	857.5	832.6	823.5	792.0	783.6	751.8	698.1	699.5	703.5	635.1	-33.1%	-314.6
Iowa	667.8	582.4	584.0	598.2	636.0	612.6	629.9	598.2	540.9	546.4	534.4	484.4	-27.5%	-183.4
Kansas	708.8	629.0	600.5	634.9	577.3	587.9	575.1	543.6	504.1	531.1	525.2	463.0	-34.7%	-245.8
Kentucky	1,014.7	962.7	957.2	965.8	950.0	923.2	925.1	900.8	830.5	825.8	824.7	762.3	-24.9%	-252.4
Louisiana	1,270.7	975.2	1,050.6	1,104.8	1,109.4	1,013.9	1,060.5	1,131.8	1,073.4	1,074.6	1,054.5	1,055.1	-17.0%	-215.6
Maine	479.7	450.1	408.9	405.5	372.6	365.0	355.4	349.7	316.2	333.6	328.3	328.6	-31.5%	-151.1
Maryland	319.6	287.3	260.2	260.5	245.4	234.2	222.4	203.3	188.2	185.5	190.3	180.6	-43.5%	-139.0
Massachusetts	236.9	224.4	199.9	203.8	195.3	182.2	179.8	166.5	148.4	158.0	151.0	149.9	-36.7%	-87.0
Michigan	461.5	441.8	423.5	433.9	442.3	452.8	432.4	408.3	384.1	400.6	394.4	384.5	-16.7%	-77.0
Minnesota	417.6	381.1	372.5	377.1	373.2	358.7	346.9	338.5	316.2	319.9	328.9	299.5	-28.3%	-118.1
Mississippi	740.9	716.6	724.3	729.3	664.9	650.1	698.5	656.1	661.4	638.9	680.7	688.3	-7.1%	-52.6
Missouri	535.9	578.1	567.5	561.6	537.6	523.4	533.7	540.7	505.2	517.2	514.6	472.3	-11.9%	-63.6
Montana	1,088.9	1,046.0	1,020.0	1,025.2	1,003.2	912.9	927.4	827.2	788.4	819.6	807.2	786.1	-27.8%	-302.7
Nebraska	581.1	538.3	530.9	526.6	543.4	544.0	548.9	551.9	537.5	555.0	521.7	505.7	-13.0%	-75.4
Nevada	453.1	374.2	300.1	303.4	312.6	327.8	311.0	278.9	288.6	302.8	305.4	279.6	-38.3%	-173.5
New Hampshire	317.1	338.6	303.2	300.5	297.7	274.3	260.0	253.3	226.5	221.3	227.0	225.3	-28.9%	-91.7
New Jersey	273.9	266.0	246.6	260.8	255.9	231.4	236.0	240.2	213.6	217.1	229.0	221.7	-19.1%	-52.2
New Mexico	845.6	744.5	740.2	728.8	680.9	691.6	640.0	667.0	641.6	643.1	588.7	580.5	-31.3%	-265.1
New York	207.9	189.0	168.7	173.9	168.9	151.4	146.8	138.1	131.1	132.4	136.0	133.0	-36.0%	-74.9
North Carolina	437.3	392.8	359.1	372.7	351.7	326.0	346.3	307.8	291.4	295.6	294.9	272.2	-37.8%	-165.1

Table 8. Carbon intensity of the economy by state (2000, 2005–2015) (cont.)

metric tons of energy-related carbon dioxide per million chained 2009 dollars of GDP

State	2000	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	Change (2000–2015)	
													Percent	Absolute
North Dakota	2,258.3	1,965.9	1,826.7	1,812.3	1,662.1	1,581.0	1,482.3	1,372.3	1,172.4	1,158.6	1,115.3	1,121.8	-50.3%	-1,136.5
Ohio	548.9	530.5	518.2	529.1	525.5	497.4	506.6	465.8	420.0	442.3	433.0	394.7	-28.1%	-154.2
Oklahoma	853.2	801.0	779.2	758.6	763.4	741.2	737.9	713.6	658.4	623.4	602.1	565.5	-33.7%	-287.7
Oregon	315.9	267.3	240.0	252.7	233.9	225.8	213.7	187.6	191.6	207.3	198.1	189.9	-39.9%	-126.1
Pennsylvania	539.7	501.3	488.1	477.5	456.5	426.8	434.6	416.4	392.9	402.1	394.1	361.5	-33.0%	-178.2
Rhode Island	270.0	222.4	205.1	222.1	221.1	235.7	225.7	228.1	216.8	208.0	216.2	219.1	-18.9%	-50.9
South Carolina	562.4	550.5	544.6	529.8	518.5	507.8	519.1	482.2	442.8	414.3	426.7	407.4	-27.6%	-155.0
South Dakota	527.2	401.1	399.3	399.1	412.4	402.5	405.5	369.9	382.9	390.3	387.7	345.6	-34.4%	-181.6
Tennessee	577.2	507.6	504.8	507.0	479.0	415.6	438.9	413.5	376.9	365.7	379.3	353.5	-38.8%	-223.7
Texas	706.6	584.7	560.7	531.4	498.4	471.6	486.6	485.0	455.0	452.4	438.0	419.3	-40.7%	-287.4
Utah	750.3	655.2	615.2	597.9	601.5	572.1	555.4	545.1	515.8	546.4	516.1	478.0	-36.3%	-272.3
Vermont	302.4	263.6	257.0	251.8	228.0	241.9	223.1	215.0	202.9	214.2	217.3	224.9	-25.6%	-77.5
Virginia	366.1	325.9	302.3	313.4	286.6	259.5	260.8	237.6	231.4	248.6	245.9	238.0	-35.0%	-128.1
Washington	281.1	241.6	226.8	228.5	218.7	220.0	212.9	196.3	191.5	198.4	189.0	189.5	-32.6%	-91.6
West Virginia	1,978.2	1,852.7	1,828.7	1,864.2	1,749.6	1,401.9	1,521.9	1,451.4	1,387.7	1,415.0	1,486.6	1,371.1	-30.7%	-607.1
Wisconsin	479.7	442.9	406.0	410.8	417.9	392.9	392.6	381.1	348.5	384.2	379.2	368.6	-23.2%	-111.1
Wyoming	2,514.5	2,134.2	1,934.1	1,899.2	1,771.9	1,717.9	1,790.4	1,766.0	1,894.8	1,937.4	1,831.0	1,813.6	-27.9%	-701.0
Average all states	465.7	417.9	402.3	401.7	389.8	372.0	375.9	361.0	339.2	342.2	337.3	320.1	-31.3%	-145.6

Note: The District of Columbia is included in the data tables but not in the analysis because it is not a state.

Source: EIA, State Energy Data System, and EIA calculations made for this analysis.

Table 9. Net electricity trade index and primary electricity source for states with least and most energy-related carbon dioxide emissions per capita (2000–2015)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	Primary Source
Most CO2 per capita																	
Wyoming	3.3	3.1	3.1	3.0	2.9	2.9	2.7	2.6	2.4	2.5	2.5	2.4	2.6	2.7	2.5	2.5	Coal
North Dakota	2.9	2.7	2.6	2.5	2.4	2.7	2.4	2.5	2.4	2.5	2.5	2.4	2.3	2.1	1.9	2.0	Coal
West Virginia	3.0	2.7	3.0	3.0	2.8	2.8	2.6	2.5	2.4	2.2	2.3	2.3	2.2	2.2	2.3	2.1	Coal
Alaska	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	Natural Gas
Louisiana	1.0	1.1	1.1	1.1	1.1	1.1	1.1	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	Natural Gas
Montana	1.6	1.9	1.8	1.8	1.8	1.9	1.8	1.7	1.7	1.7	2.0	2.0	1.8	1.8	1.9	1.9	Coal
Kentucky	1.1	1.1	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.9	1.0	1.1	1.0	Coal
Indiana	1.2	1.1	1.1	1.1	1.1	1.1	1.1	1.0	1.1	1.0	1.0	1.0	1.0	0.9	1.0	0.9	Coal
Nebraska	1.1	1.1	1.1	1.1	1.1	1.1	1.0	1.1	1.0	1.1	1.1	1.1	1.0	1.1	1.2	1.3	Coal
Oklahoma	1.0	1.0	1.1	1.1	1.1	1.2	1.2	1.2	1.2	1.3	1.2	1.2	1.2	1.1	1.1	1.1	Natural Gas
Least CO2 per capita																	
Idaho	0.5	0.4	0.4	0.4	0.5	0.5	0.5	0.4	0.5	0.5	0.5	0.5	0.7	0.6	0.6	0.6	Hydroelectric
Washington	1.0	0.9	1.2	1.1	1.1	1.1	1.1	1.1	1.1	1.0	1.0	1.1	1.1	1.1	1.1	1.1	Hydroelectric
Rhode Island	0.9	1.0	0.9	0.7	0.6	0.7	0.7	0.9	0.9	1.0	1.0	1.1	1.0	0.8	0.8	0.9	Natural Gas
Connecticut	1.0	0.9	0.9	0.8	0.9	0.9	1.0	0.9	1.0	1.0	1.1	1.1	1.1	1.1	1.1	1.2	Nuclear
Maryland	0.8	0.7	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.6	0.6	0.6	0.6	0.5	0.6	0.6	Nuclear
Vermont	1.6	1.4	1.3	1.3	1.2	1.2	1.5	1.3	1.5	1.7	1.5	1.6	3.0	3.2	3.1	2.2	Hydroelectric
Massachusetts	0.7	0.7	0.7	0.8	0.8	0.8	0.7	0.8	0.8	0.7	0.8	0.7	0.6	0.6	0.6	0.6	Natural Gas
Oregon	0.9	0.9	1.0	1.0	1.1	1.0	1.0	1.0	1.1	1.1	1.1	1.2	1.2	1.2	1.2	1.2	Hydroelectric
California	0.8	0.7	0.7	0.7	0.7	0.7	0.8	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	Natural Gas
New York	0.9	1.0	0.9	0.9	0.9	0.9	1.0	1.0	1.0	0.9	0.9	1.0	1.0	1.0	1.0	1.0	Natural Gas

Note: The District of Columbia is included in the data tables but not in the analysis because it is not a state.

Greater than 1.0 indicates a net exporter of electricity.

Less than 1.0 indicates a net importer of electricity.

Source: EIA, State Electricity Profiles, Supply and Disposition of Electricity, 1990 through 2015, <http://www.eia.gov/electricity/state/>

Appendix A. Comparison of fuel detail in the State Energy Data System and the annual series appearing in the *Monthly Energy Review* data system

Consumption Sector	Energy Source Category	State Energy Data System Fuel Detail	Monthly Energy Review Fuel Detail
Residential	Coal	Coal	Coal
Residential	Natural Gas	Natural Gas	Natural Gas
Residential	Petroleum	Distillate Fuel	Distillate Fuel
Residential	Petroleum	Kerosene	Kerosene
Residential	Petroleum	LPG	LPG
Commercial	Coal	Coal	Coal
Commercial	Natural Gas	Natural Gas	Natural Gas
Commercial	Petroleum	Distillate Fuel	Distillate Fuel
Commercial	Petroleum	Kerosene	Kerosene
Commercial	Petroleum	LPG	LPG
Commercial	Petroleum	Motor Gasoline	Motor Gasoline
Commercial	Petroleum	Residual Fuel	Residual Fuel
Commercial	Petroleum	Not Available	Pet Coke
Industrial	Coal	Total Coal	Total Coal
Industrial	Coal/Coke	Not Available	Coking coal
Industrial	Coal	Not Available	Other Coal
Industrial	Coal/Coke	Not Available	Net Coke Imports
Industrial	Natural Gas	Natural Gas	Natural Gas
Industrial	Petroleum	Asphalt and Road Oil	Asphalt and Road Oil
Industrial	Petroleum	Distillate Fuel	Distillate Fuel
Industrial	Petroleum	Kerosene	Kerosene
Industrial	Petroleum	Total LPG (HGL)	Total LPG (HGL)
Industrial	Petroleum	Not Available	Normal Butane/Butylene
Industrial	Petroleum	Not Available	Ethane/Ethylene
Industrial	Petroleum	Not Available	Isobutane/Isobutylene
Industrial	Petroleum	Not Available	Propane/Propylene
Industrial	Petroleum	Not Available	Butane/Propane Mix
Industrial	Petroleum	Not Available	Ethane/Propane Mix
Industrial	Petroleum	Lubricants	Lubricants
Industrial	Petroleum	Motor Gasoline	Motor Gasoline
Industrial	Petroleum	Residual Fuel	Residual Fuel
Industrial	Petroleum	Petroleum Products (Other)	Details on following page

Consumption Sector	Energy Source Category	State Energy Data System Fuel Detail	Annual/Monthly Energy Review Fuel Detail
Industrial	Petroleum	Not Available	Petroleum Coke
Industrial	Petroleum	Not Available	Aviation Gas Blending Components
Industrial	Petroleum	Not Available	Motor Gasoline Blending Components
Industrial	Petroleum	Not Available	Pentanes Plus
Industrial	Petroleum	Not Available	Petrochemical Feedstocks
Industrial	Petroleum	Not Available	Special Naphthas
Industrial	Petroleum	Not Available	Still Gas
Industrial	Petroleum	Not Available	Unfinished Oils
Industrial	Petroleum	Not Available	Waxes

Appendix B. Other state-related links

The underlying energy data used to calculate the state-level CO₂ values: <http://www.eia.gov/state/seds/>. The State Energy Data System (SEDS) is the main repository for all of EIA's state-based energy data.

The state CO₂ data used for this analysis: <http://www.eia.gov/environment/emissions/state/>. These data contain CO₂ emissions data for each state by sector and fuel based on information from SEDS.

State Energy Profiles: <http://www.eia.gov/state/>

These profiles contain narratives and rankings for each state.

State Electricity Profiles: <http://www.eia.gov/electricity/state/>

These profiles contain data and analysis focused on electricity.

Two fuel-specific profiles:

State Renewable Energy Profiles: <http://www.eia.gov/renewable/state/>

State nuclear profiles: <http://www.eia.gov/nuclear/state/>

United States energy map: <http://www.eia.gov/state/maps.cfm?src=home-f3>

This interactive map shows the major energy facilities and infrastructure in the United States.

State emissions for the electric power industry for SO₂ and NO_x as well as CO₂. The electric power industry includes electricity generated in the electric power, industrial, and commercial sectors.

<http://www.eia.gov/electricity/data/state/>

Download this spreadsheet from link.

U. S. electric power industry estimated emissions by state, back to 1990 (EIA-767 and EIA-906)