



*Independent Statistics & Analysis*  
U.S. Energy Information  
Administration

---

# State-Level Energy-Related Carbon Dioxide Emissions, 2000–2011

August 2014



This report was prepared by the U.S. Energy Information Administration (EIA), the statistical and analytical agency within the U.S. Department of Energy. By law, EIA's data, analyses, and forecasts are independent of approval by any other officer or employee of the United States Government. The views in this report therefore should not be construed as representing those of the Department of Energy or other Federal agencies.

## Contents

---

Overview .....	1
Total state emission levels.....	1
Emissions by fuel .....	2
Emissions by sector.....	2
Per capita carbon dioxide emissions .....	2
Energy intensity .....	3
Carbon intensity of the energy supply.....	4
Carbon intensity of the economy .....	4
Electricity trade.....	4
Appendix A. Comparison of fuel detail for the State Energy Data System and the annual series appearing in the <i>Monthly Energy Review</i> data system .....	15

---

## Tables

---

Table 1. State energy-related carbon dioxide emissions by year (2000–2011).....	6
Table 2. 2011 state energy-related carbon dioxide emissions by fuel .....	7
Table 3. 2011 state energy-related carbon dioxide emissions by sector .....	8
Table 4. 2011 state energy-related carbon dioxide emission shares by sector.....	9
Table 5. Per capita energy-related carbon dioxide emissions by state (2000–2011).....	10
Table 6. Energy intensity by state (2000–2011) .....	11
Table 7. Carbon intensity of the energy supply by state (2000–2011).....	12
Table 8. Carbon intensity of the economy by state (2000–2011) .....	13
Table 9. Net electricity trade index and primary electricity source for selected states (2000–2011) .....	14

## Figures

---

Figure 1. Energy-related carbon dioxide emissions by state, 2011 .....	2
Figure 2. Per-capita energy-related carbon dioxide emissions by state, 2011.....	3

## Overview

This report reviews data on state-level energy-related carbon dioxide (CO<sub>2</sub>) emissions through 2011 that were first posted by EIA in February, 2014. The delay in the posting of the emissions estimates reflects significant efforts required to prepare state-level data on energy use by fuel type and sector that are published in the State Energy Data System (SEDS) and form the basis of the emissions estimates.

Beyond continuing its efforts to accelerate the SEDS data and the preparation of estimates of overall energy-related CO<sub>2</sub> emissions, EIA also plans to accelerate the release of state-level emissions data for specific sectors, notably electricity generation, that can be issued much earlier than state-level data covering all sectors. For example, [state-level electricity sector emissions](#) data for 2012 are already available on the EIA website (ADD LINK), and preliminary data for 2013 will be published shortly.

Energy-related CO<sub>2</sub> emissions vary significantly across states (Figure 1), whether considered on an absolute or per capita basis. The overall size of a state, as well as the available fuels, types of businesses, climate, and population density, play a role in both total and per capita emissions. Additionally, each state's energy system reflects circumstances specific to that state. For example, some states are located near abundant hydroelectric supplies, while others contain abundant coal resources. This paper presents a basic analysis of the factors that contribute to a state's CO<sub>2</sub> profile. This analysis neither attempts to assess the effect of state policies on absolute emissions levels or on changes over time, nor does it intend to imply that certain policies would be appropriate for a particular state.

The term *energy-related CO<sub>2</sub> emissions*, as used in this paper, includes emissions released at the location where fossil fuels are used. For feedstock application, carbon stored in products such as plastics is subtracted from reported emissions for the states where they are produced.

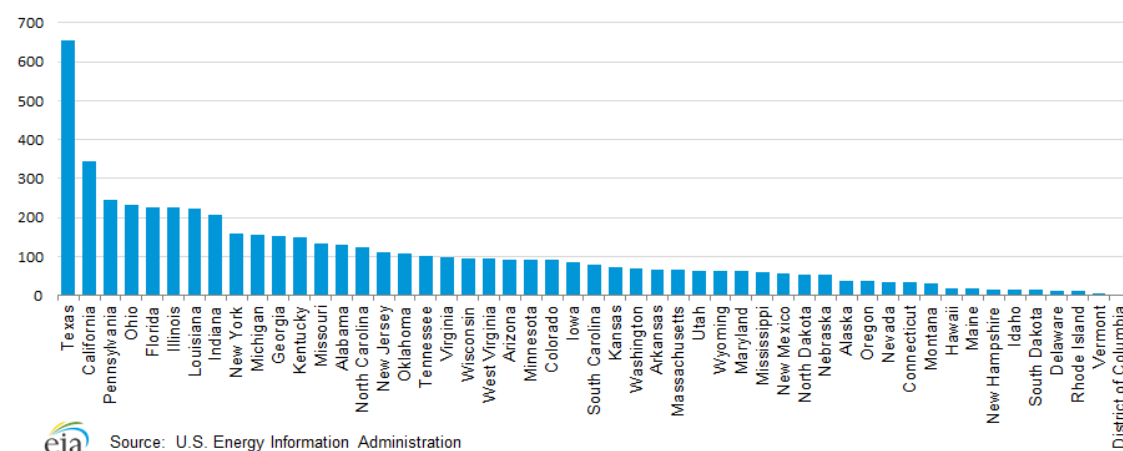
It is also important to recognize that the state-level CO<sub>2</sub> emissions data presented in this paper count emissions based on the location where the primary energy is consumed as a fuel. To the extent that fuels are used in one state to generate electricity that is consumed in another state, emissions are attributed to the former rather than the latter. An analysis that attributed emissions with consumption rather than production of electricity, which is beyond the scope of the present paper, would yield different results.

## Total state emission levels

Over the period from 2000 to 2011, CO<sub>2</sub> emissions fell in 37 states and rose in 13 states (Table 1). The greatest percentage decrease in CO<sub>2</sub> emissions occurred in Nevada at 26% (12 million metric tons). The greatest absolute decline was 65 million metric tons in Texas (9%). New York experienced a decline of 50 million metric tons (24%)—making it the largest percentage decline of the big states. The greatest percentage and absolute increase was in Nebraska at 26% (11 million metric tons).

**Figure 1. Energy-related carbon dioxide emissions by state, 2011**

million metric tons carbon dioxide



Source: U.S. Energy Information Administration

From 2010 to 2011, CO<sub>2</sub> emissions decreased in 42 states and rose in 8 states. Because of differences in data aggregations, it is difficult to compare the total for all states with the total for the United States. See the Appendix for a comparison of levels of data detail between the state and national data systems.

### Emissions by fuel

States exhibit very different emissions profiles by fuel type (Table 2). For example, in 2011, coal consumption accounted for 81% of CO<sub>2</sub> emissions in West Virginia. In California, less than 2% of CO<sub>2</sub> emissions came from coal, with 65% from petroleum. Rhode Island had no emissions from coal consumption, but 51% of its emissions were from natural gas. Both Vermont's and Hawaii's share of CO<sub>2</sub> emissions from petroleum were 92% in 2011. No other states exceeded 80% in terms of the share of emissions from petroleum; Maine's petroleum share was 76%.

### Emissions by sector

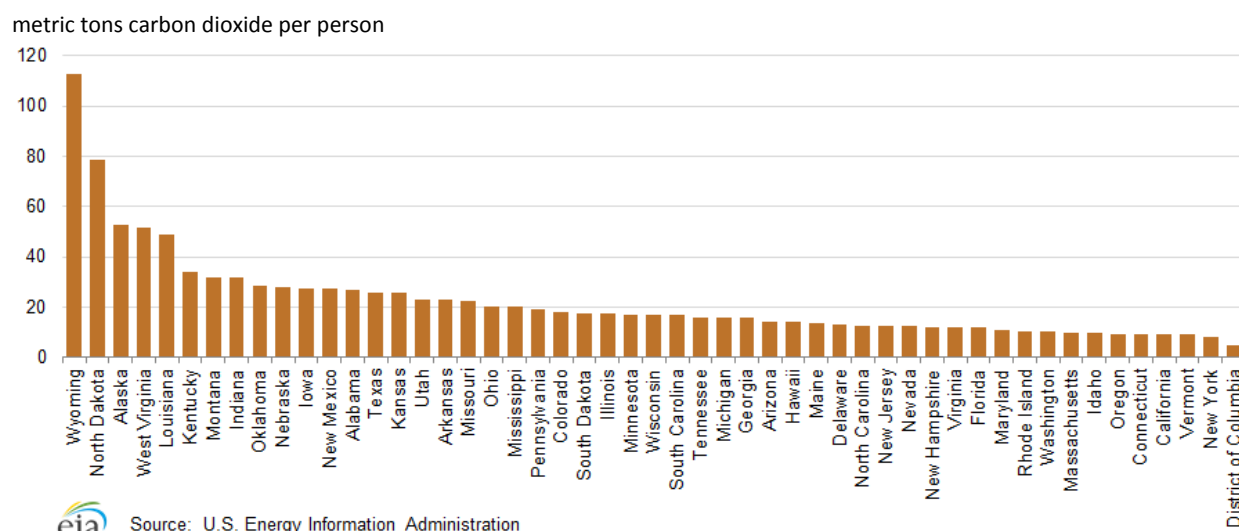
There can also be significant variations in terms of CO<sub>2</sub> emissions by sector (Tables 3 and 4—even for states that have similar fuel emissions profiles). These variations are due to factors such as the use of different fuels for electricity generation, climate, and sources of economic outputs (e.g., commercial versus industrial activity). For example, in Vermont the largest share of emissions in 2011 came from the transportation sector (57%), predominantly from petroleum, but the electric power sector share was close to zero because of Vermont's reliance on nuclear power. Vermont's residential sector share was 23%—indicative of a relatively cold climate where petroleum is the main heating fuel. Hawaii, where a dominant share of emissions is also from petroleum, has a residential share of 0.3%—the lowest in the United States because of minimal heating fuel requirements. The largest sector emissions share in Hawaii, like Vermont, was from the transportation sector (51%). However, unlike Vermont, Hawaii's electric power sector accounted for 39% of the total emissions, close to the national average emissions share for electricity. The dominant fossil fuel for the generation of electricity in Hawaii is petroleum.

### Per capita carbon dioxide emissions

Another way to compare total CO<sub>2</sub> 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 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. In 2011, CO<sub>2</sub> emissions in

Wyoming were 113 metric tons per capita, the highest in the United States. In 2011, Wyoming was the second-largest energy-producing state. Unlike the largest energy producer, Texas, which has a population of 26 million, Wyoming has fewer than 600,000 people, giving Wyoming the lowest population density in the Lower 48 states.<sup>1</sup> Its winters are cold (the average low temperatures in January range between 5 to 10 degrees Fahrenheit).<sup>2</sup> These factors act to raise Wyoming's per capita emissions compared to other states. The second-highest state per capita CO<sub>2</sub> emissions level was North Dakota at 78 metric tons per capita. Alaska (53 metric tons per capita), West Virginia (52 metric tons per capita), and Louisiana (49 metric tons per capita) round out the top five states in terms of per capita CO<sub>2</sub> emissions. All of these are fossil-energy-producing states. The activity of producing energy itself involves the consumption of large amounts of energy.

**Figure 2. Per capita energy-related carbon dioxide emissions by state, 2011**



New York, with a population of 19.5 million people, had the lowest per capita CO<sub>2</sub> emissions—8 metric tons 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 multifamily units that provide efficiencies of scale in terms of energy for heating and cooling. The New York economy is oriented toward high-value, low-energy-consuming activities such as financial markets. For example, New York contained about 6% of the U.S. population in 2011, but consumed only 1% of the country's industrial energy.<sup>3</sup> New York's energy prices are relatively high (the average retail electricity price of 15.89 cents per kWh was fourth-highest in the country in 2011), which in turn encourages energy savings.<sup>4</sup> Other states with relatively low per capita CO<sub>2</sub>—all around 9 metric tons per capita—include Vermont, California, Connecticut, and Oregon.

## 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 (Btu/GDP), plays an important role in its overall emissions profile (Table 6). The states with the highest

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

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

<sup>3</sup> U.S. Energy Information Administration, State Energy Data 2011, state population and energy consumption by sector.

<sup>4</sup> U.S. Energy Information Administration, State Electricity Profiles, Table 1, 2011 Summary Statistics

<http://www.eia.gov/electricity/state/archive/sep2011.pdf>



rates of emissions per capita in 2011 also had the higher energy intensity values: Wyoming (27,000 Btu per dollar), North Dakota (22,000 Btu per dollar), West Virginia (21,000 Btu per dollar), Louisiana (19,000 Btu per dollar), and Montana (17,000 Btu per dollar). Massachusetts, New York, Delaware, Connecticut, and California were the lowest—all around 4,000 Btu per dollar or less.

Many of the states with the lowest energy intensity are clustered in the relatively densely populated New England and Central Atlantic. The 2011 national average was 7,000 Btu per dollar of GDP.

### Carbon intensity of the energy supply

The carbon intensity of energy supply (CO<sub>2</sub>/Btu) is reflective of 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 top five states in 2011 for the energy carbon intensity as measured in kilograms of CO<sub>2</sub> per million Btu (kg CO<sub>2</sub>/MMBtu)—West Virginia (81 kg CO<sub>2</sub>/MMBtu), Kentucky (76 kg CO<sub>2</sub>/MMBtu), Wyoming (75 kg CO<sub>2</sub>/MMBtu), and Indiana and Utah (both 72 kg CO<sub>2</sub>/MMBtu)—are all states with coal as the dominant emissions source (Table 2). The national average carbon intensity of the energy supply in 2011 was 55 kg CO<sub>2</sub>/MMBtu. The states with lower carbon intensity tend to be those states with relatively substantial noncarbon electricity generation such as hydropower or nuclear. These states include, for example, Vermont and Washington (32 kg CO<sub>2</sub>/MMBtu), Oregon (33 kg CO<sub>2</sub>/MMBtu), Idaho (36 kg CO<sub>2</sub>/MMBtu), and South Dakota (38 kg CO<sub>2</sub>/MMBtu).

### Carbon intensity of the economy

Another measure, the overall carbon intensity of the economy (CO<sub>2</sub>/dollar of state GDP), combines energy intensity with the carbon intensity of that state's energy supply. As one would expect, the states with the highest carbon intensity of their economies (Table 8) as measured in metric tons of CO<sub>2</sub> per million dollars of state GDP (mt CO<sub>2</sub>/million chained 2005 dollars of GDP) are also the states with the highest values of energy intensity and carbon intensity of that energy supply. In 2011, these states include: Wyoming (2,023 mt CO<sub>2</sub>/million dollars of GDP), West Virginia (1,721 mt CO<sub>2</sub>/million dollars of GDP), North Dakota (1,565 mt CO<sub>2</sub>/million dollars of GDP), Louisiana (1,082 mt CO<sub>2</sub>/million dollars of GDP), and Kentucky (1,045 mt CO<sub>2</sub>/million dollars of GDP). The 2011 U.S. average was 411 mt CO<sub>2</sub>/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 (156 mt CO<sub>2</sub>/million dollars of GDP), Connecticut (164 mt CO<sub>2</sub>/million dollars of GDP), Massachusetts (189 mt CO<sub>2</sub>/million dollars of GDP), Oregon (195 mt CO<sub>2</sub>/million dollars of GDP), and California (199 mt CO<sub>2</sub>/million dollars of GDP).

### Electricity trade

Because this analysis does not account for electricity trade, it is important to understand how much this can influence a state's CO<sub>2</sub> emissions profile. The Net Electricity Trade Index (Table 9) indicates whether a state is self-sufficient in the generation of electricity in a given year (a value of 1.0); is a net importer of electricity in a given year (a value of less than 1.0); or is a net exporter of electricity in a given year (a value greater than 1.0). As indicated in Table 9, all but two of the 10 states with the highest per capita emissions are net exporters of electricity in at least some years. In particular, Wyoming, North Dakota, West Virginia, and Montana are large electricity exporters of power produced predominantly with coal. Oklahoma is a net exporter, but its dominant fuel is natural gas. Indiana is a small exporter in some years, but was export-neutral from 2009 to 2011. Kentucky, like Indiana, is a coal-fueled generation state, but has been export-neutral in recent years. Louisiana, the only state of high per capita emitters that is consistently a net importer of electricity, and Alaska, a state that is an importer in some years,

but export-neutral in most, are both fossil-fuel producing states with a large, energy-intensive component of their economies.

Four of the 10 states with the lowest per capita CO<sub>2</sub> emissions are consistent importers of electricity: California, Idaho, Massachusetts, and Maryland. Rhode Island was an electricity exporter in 2001 and was self-sufficient in 2000, 2008, 2009, and 2010. In 2011, it returned to being a slight exporter. In the other years Rhode Island was an importer of electricity (about 40% in 2004). Idaho generates its electricity principally with hydroelectric power and has historically imported 50% or more of its electricity from other states, although in 2011 that import percentage dropped to 30%. California consistently imports about 30% of its electricity, and natural gas is the dominant fuel for the electricity that it generates internally. New York, Massachusetts, and Rhode Island also use natural gas as the dominant fuel for electricity generation within the state.

In Vermont, which has been a consistent exporter of electricity, nuclear power is the dominant source of generation. The shutdown of Vermont Yankee, currently scheduled for the end of 2014, is likely to significantly change Vermont's electricity trade flows. Connecticut, also a nuclear power producer, is a slight exporter in some years, an importer in others, and roughly trade-neutral in yet others. Both Oregon and Washington are usually either self-sufficient or net exporters. However, in 2001, which was a particularly bad year for hydroelectric generation in the Pacific Northwest, both states were net importers of electricity. In 2011, a particularly good year for hydropower generation, both states were net exporters of electricity.

If the emissions associated with the generation of electricity were allocated to the states where that electricity is consumed, in many cases, the emissions profiles of both the producing and consuming states would change.

Table 1. State energy-related carbon dioxide emissions by year (2000–2011)

million metric tons of carbon dioxide

State	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	Change 2000 to 2011	
													Percent	Absolute
Alabama	141.0	132.4	137.2	138.0	140.1	141.8	144.1	146.0	138.5	119.1	132.3	128.7	-8.7%	-12.2
Alaska	44.3	43.4	43.5	43.6	46.7	48.0	45.7	44.0	39.4	37.8	38.6	38.3	-13.6%	-6.0
Arizona	85.5	87.9	87.2	88.9	95.8	95.9	99.1	101.1	101.4	92.6	93.9	91.8	7.4%	6.3
Arkansas	63.3	62.5	60.9	61.6	61.9	59.7	61.5	62.9	63.7	61.0	65.6	66.7	5.5%	3.5
California	376.7	381.6	380.3	367.7	385.4	382.8	390.3	395.9	378.7	365.5	360.3	345.8	-8.2%	-30.9
Colorado	84.3	92.4	90.4	89.7	92.5	94.7	95.6	98.3	96.6	92.5	95.1	91.2	8.3%	7.0
Connecticut	41.7	40.6	38.8	41.4	43.1	42.7	39.6	38.9	36.5	34.9	35.1	33.1	-20.6%	-8.6
Delaware	15.8	15.3	15.1	15.7	15.6	16.5	15.3	16.2	15.4	11.3	11.1	11.8	-25.2%	-4.0
District of Columbia	4.3	4.1	4.2	3.9	4.0	3.9	3.2	3.4	3.1	3.1	3.2	3.1	-27.8%	-1.2
Florida	238.5	237.3	240.4	244.3	255.8	259.2	257.3	255.0	236.3	222.0	239.2	227.1	-4.8%	-11.4
Georgia	167.7	160.0	164.7	167.6	172.6	183.1	180.4	183.2	170.4	160.7	169.7	153.9	-8.2%	-13.8
Hawaii	18.7	19.2	20.5	21.5	22.5	23.1	23.4	24.2	19.5	19.0	18.9	19.3	3.1%	0.6
Idaho	15.5	15.5	14.9	14.3	15.5	15.6	15.6	16.2	15.3	15.0	15.8	15.5	-0.1%	0.0
Illinois	230.7	221.8	223.8	226.7	233.4	240.1	231.8	239.8	237.8	223.3	228.4	225.3	-2.4%	-5.5
Indiana	235.7	226.4	229.3	234.9	234.9	233.9	231.9	231.7	227.5	205.2	216.0	207.0	-12.2%	-28.7
Iowa	76.9	75.8	76.3	75.7	77.8	77.9	79.1	84.5	87.4	82.6	87.2	83.6	8.7%	6.7
Kansas	75.8	71.5	76.3	78.3	75.4	71.6	71.7	79.5	76.6	75.1	75.2	73.2	-3.4%	-2.6
Kentucky	144.9	148.4	148.6	144.4	151.1	153.2	156.1	156.1	153.6	143.6	150.3	147.7	1.9%	2.8
Louisiana	244.7	216.2	224.3	219.7	231.5	223.4	233.4	237.2	227.2	208.1	227.8	222.8	-9.0%	-21.9
Maine	22.3	22.4	23.9	23.5	23.9	23.0	21.1	20.8	18.9	18.2	17.8	17.8	-19.9%	-4.4
Maryland	77.2	77.7	77.5	80.2	81.4	83.3	76.7	77.2	73.3	70.0	68.9	63.8	-17.4%	-13.4
Massachusetts	81.0	81.0	81.7	83.0	81.1	82.8	74.7	78.3	75.1	68.8	70.4	65.8	-18.8%	-15.2
Michigan	192.2	188.1	187.5	184.6	186.7	188.5	177.1	179.9	173.2	162.4	163.2	157.4	-18.1%	-34.9
Minnesota	97.4	94.4	96.9	100.9	100.1	101.2	98.4	100.0	99.4	91.7	91.9	91.3	-6.3%	-6.1
Mississippi	60.9	69.6	62.1	63.6	65.0	63.3	65.4	67.6	64.1	60.2	65.2	60.1	-1.3%	-0.8
Missouri	124.2	130.0	130.6	137.3	138.4	141.4	139.9	138.9	135.7	129.6	133.7	133.0	7.1%	8.8
Montana	31.3	31.9	30.7	32.7	34.4	35.5	35.7	37.6	36.8	32.9	34.5	31.7	1.2%	0.4
Nebraska	41.2	42.6	42.0	43.1	42.8	43.3	43.8	44.2	46.2	46.9	49.4	51.7	25.5%	10.5
Nevada	45.2	44.5	41.3	43.4	47.5	49.6	41.2	41.4	40.6	39.1	37.0	33.3	-26.5%	-12.0
New Hampshire	17.4	16.8	17.5	20.8	21.8	21.1	19.2	19.0	18.6	16.9	16.4	16.0	-7.8%	-1.3
New Jersey	120.4	117.8	118.0	119.3	121.4	126.4	118.8	126.9	124.8	108.0	110.7	110.2	-8.5%	-10.2
New Mexico	58.0	58.2	55.2	57.4	58.4	59.0	59.7	58.9	57.0	58.0	54.2	56.5	-2.6%	-1.5
New York	208.1	203.7	197.5	207.6	209.8	206.7	188.1	195.0	185.4	169.8	170.1	158.2	-24.0%	-49.9
North Carolina	145.2	140.8	141.9	142.5	145.2	149.7	144.1	150.3	145.0	129.4	138.7	122.8	-15.5%	-22.5
North Dakota	50.8	51.7	51.3	50.9	49.4	52.4	50.7	52.5	52.8	51.3	52.1	53.6	5.6%	2.8
Ohio	263.3	253.8	259.6	267.2	261.5	268.5	261.6	267.2	260.6	235.9	246.4	233.4	-11.4%	-29.9
Oklahoma	99.9	101.2	101.4	103.6	99.4	106.5	109.7	109.0	111.6	105.9	105.6	107.2	7.3%	7.3
Oregon	41.1	40.4	38.9	39.3	40.3	40.7	39.8	43.3	42.3	40.4	39.8	36.3	-11.7%	-4.8
Pennsylvania	274.7	261.9	268.4	272.0	274.5	277.9	271.6	275.0	266.9	242.2	253.3	244.7	-10.9%	-30.0
Rhode Island	11.6	12.1	11.6	11.3	10.7	11.0	10.3	10.9	10.5	11.1	10.8	10.7	-7.8%	-0.9
South Carolina	80.1	78.6	79.9	80.3	87.7	86.3	86.8	87.2	84.9	80.0	82.8	77.8	-2.9%	-2.3
South Dakota	14.1	13.4	13.7	13.6	13.6	13.2	13.2	13.8	14.8	14.6	15.0	14.4	2.8%	0.4
Tennessee	126.1	125.0	124.0	122.0	123.9	125.3	127.5	126.9	120.5	100.5	107.5	102.9	-18.5%	-23.3
Texas	720.3	712.1	724.1	716.1	718.8	689.1	690.0	684.3	655.1	626.4	662.3	655.5	-9.0%	-64.8
Utah	64.9	62.8	62.0	62.7	65.1	66.7	68.0	70.0	69.1	64.4	63.6	63.9	-1.5%	-1.0
Vermont	6.7	6.6	6.3	6.5	7.0	6.7	6.6	6.4	5.9	6.1	5.8	5.7	-15.0%	-1.0
Virginia	121.9	119.7	118.1	122.2	125.8	127.7	121.0	126.5	115.1	104.2	107.0	97.4	-20.1%	-24.6
Washington	82.7	79.3	72.7	74.6	76.4	77.9	75.8	81.1	78.1	76.0	74.2	68.9	-16.7%	-13.8
West Virginia	114.1	104.1	116.9	113.3	110.5	112.6	112.8	115.1	110.9	88.8	99.0	96.0	-15.9%	-18.1
Wisconsin	107.0	105.0	106.2	104.1	106.4	109.7	101.9	103.7	104.0	95.2	97.5	96.2	-10.1%	-10.8
Wyoming	62.9	63.2	61.9	63.7	63.6	62.9	63.8	66.2	66.7	63.5	65.0	63.8	1.5%	0.9
Total <sup>1</sup>	5,870.3	5,762.3	5,797.9	5,841.1	5,948.3	5,977.0	5,890.2	5,989.5	5,788.6	5,380.4	5,573.4	5,384.0	-8.3%	-486.4

Source: U.S. Energy Information Administration (EIA), State Energy Data System and EIA calculations made for this analysis.

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

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

Table 2. 2011 state energy-related carbon dioxide emissions by fuel

State	million metric tons of carbon dioxide			Total	shares		
	Coal	Petroleum	Natural Gas		Coal	Petroleum	Natural Gas
Alabama	61.4	34.9	32.4	128.7	47.7%	27.1%	25.2%
Alaska	1.5	18.9	17.9	38.3	3.8%	49.5%	46.7%
Arizona	43.4	32.9	15.5	91.8	47.3%	35.8%	16.9%
Arkansas	28.9	22.6	15.3	66.7	43.3%	33.8%	22.9%
California	5.1	225.0	115.7	345.8	1.5%	65.1%	33.5%
Colorado	34.8	31.2	25.2	91.2	38.2%	34.2%	27.6%
Connecticut	0.6	20.3	12.3	33.1	1.7%	61.2%	37.1%
Delaware	1.7	6.0	4.2	11.8	14.1%	50.5%	35.4%
District of Columbia	0.0	1.3	1.8	3.1	0.1%	42.4%	57.5%
Florida	52.2	109.4	65.5	227.1	23.0%	48.2%	28.8%
Georgia	59.9	66.0	28.0	153.9	38.9%	42.9%	18.2%
Hawaii	1.5	17.8	0.0	19.3	7.9%	92.1%	0.0%
Idaho	0.7	10.4	4.4	15.5	4.7%	66.7%	28.6%
Illinois	99.3	74.2	51.8	225.3	44.1%	33.0%	23.0%
Indiana	125.8	48.1	33.2	207.0	60.7%	23.2%	16.0%
Iowa	43.7	25.4	14.5	83.6	52.3%	30.4%	17.4%
Kansas	32.7	25.5	15.0	73.2	44.7%	34.8%	20.5%
Kentucky	95.4	40.4	11.9	147.7	64.6%	27.3%	8.1%
Louisiana	25.4	118.6	78.8	222.8	11.4%	53.2%	35.4%
Maine	0.1	13.2	3.9	17.2	0.8%	76.4%	22.7%
Maryland	22.8	30.6	10.4	63.8	35.7%	48.0%	16.4%
Massachusetts	4.0	37.5	24.2	65.8	6.1%	57.0%	36.9%
Michigan	65.2	50.6	41.5	157.4	41.4%	32.2%	26.4%
Minnesota	29.8	39.0	22.5	91.3	32.6%	42.8%	24.6%
Mississippi	10.1	26.7	23.2	60.1	16.9%	44.5%	38.6%
Missouri	77.9	40.8	14.3	133.0	58.6%	30.6%	10.8%
Montana	15.6	11.9	4.2	31.7	49.3%	37.4%	13.3%
Nebraska	26.9	15.6	9.2	51.7	52.1%	30.2%	17.7%
Nevada	5.9	13.8	13.6	33.3	17.8%	41.3%	40.9%
New Hampshire	2.3	9.9	3.8	16.0	14.4%	61.8%	23.8%
New Jersey	4.6	70.2	35.3	110.2	4.2%	63.7%	32.1%
New Mexico	26.9	16.3	13.4	56.5	47.6%	28.8%	23.6%
New York	11.7	81.1	65.4	158.2	7.4%	51.2%	41.3%
North Carolina	58.9	48.0	15.9	122.8	48.0%	39.1%	12.9%
North Dakota	37.2	12.6	3.8	53.6	69.4%	23.4%	7.1%
Ohio	115.4	73.7	44.4	233.4	49.4%	31.6%	19.0%
Oklahoma	35.7	35.6	35.9	107.2	33.3%	33.2%	33.5%
Oregon	3.3	22.2	10.8	36.3	9.1%	61.2%	29.7%
Pennsylvania	114.4	77.8	52.5	244.7	46.8%	31.8%	21.4%
Rhode Island	0.0	5.3	5.4	10.7	0.0%	49.3%	50.7%
South Carolina	34.5	31.0	12.2	77.8	44.4%	39.9%	15.7%
South Dakota	3.0	7.5	3.9	14.4	21.0%	52.0%	27.0%
Tennessee	45.4	44.1	13.4	102.9	44.1%	42.8%	13.0%
Texas	159.9	298.5	197.2	655.5	24.4%	45.5%	30.1%
Utah	32.7	19.1	12.2	63.9	51.1%	29.8%	19.1%
Vermont	0.0	5.2	0.5	5.7	0.0%	92.0%	8.0%
Virginia	27.2	50.0	20.2	97.4	27.9%	51.4%	20.7%
Washington	5.4	49.1	14.4	68.9	7.8%	71.3%	20.9%
West Virginia	77.6	11.8	6.5	96.0	80.9%	12.3%	6.7%
Wisconsin	42.2	33.0	21.0	96.2	43.9%	34.3%	21.9%
Wyoming	44.1	11.1	8.5	63.8	69.2%	17.4%	13.4%
Total <sup>1</sup>	1,855.2	2,221.2	1,307.0	5,383.3	34.5%	41.3%	24.3%

Source: U.S. Energy Information Administration (EIA), State Energy Data System and EIA calculations made for this analysis.

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

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

**Table 3. 2011 state energy-related carbon dioxide emissions by sector**

million metric tons of carbon dioxide

State	Commercial	Electric Power	Residential	Industrial	Transportation	Total
Alabama	2.1	74.0	2.4	18.3	32.0	128.7
Alaska	2.6	3.2	1.7	16.8	13.9	38.3
Arizona	2.4	52.3	2.4	4.5	30.2	91.8
Arkansas	2.5	34.2	2.1	8.6	19.2	66.7
California	17.4	36.5	29.7	62.9	199.3	345.8
Colorado	3.9	38.9	7.8	13.1	27.5	91.2
Connecticut	3.6	6.6	7.2	0.8	15.0	33.1
Delaware	0.7	3.8	1.0	2.4	4.0	11.8
District of Columbia	1.1	0.2	0.7	0.0	1.2	3.1
Florida	4.8	110.5	1.4	9.4	101.0	227.1
Georgia	3.8	67.8	6.7	13.1	62.5	153.9
Hawaii	0.3	7.4	0.1	1.6	9.9	19.3
Idaho	1.2	0.4	1.8	3.4	8.7	15.5
Illinois	12.4	91.2	23.6	34.2	63.9	225.3
Indiana	5.3	108.7	8.3	43.7	41.1	207.0
Iowa	4.2	37.2	4.5	17.0	20.8	83.6
Kansas	2.0	34.2	4.1	14.7	18.2	73.2
Kentucky	2.3	93.6	3.5	17.0	31.2	147.7
Louisiana	1.9	46.4	2.3	123.2	48.9	222.8
Maine	1.9	2.1	2.7	2.5	8.0	17.2
Maryland	4.6	22.0	5.9	3.5	27.7	63.8
Massachusetts	6.3	14.3	13.6	2.2	29.3	65.8
Michigan	9.9	64.9	19.5	16.9	46.0	157.4
Minnesota	6.0	28.9	8.4	17.2	30.8	91.3
Mississippi	1.5	23.0	1.7	10.2	23.7	60.1
Missouri	4.0	78.6	6.6	6.3	37.4	133.0
Montana	1.4	16.6	1.7	4.1	7.9	31.7
Nebraska	1.9	25.4	2.6	8.2	13.6	51.7
Nevada	1.9	14.5	2.4	1.7	12.8	33.3
New Hampshire	1.4	5.0	2.4	0.6	6.7	16.0
New Jersey	11.7	15.6	14.0	5.6	63.4	110.2
New Mexico	1.5	30.8	2.2	8.4	13.5	56.5
New York	24.3	33.8	30.9	5.3	63.9	158.2
North Carolina	4.3	61.7	5.2	6.3	45.3	122.8
North Dakota	1.3	28.4	1.0	15.1	7.8	53.6
Ohio	10.6	110.7	17.6	32.4	62.1	233.4
Oklahoma	2.6	49.1	3.8	20.9	30.7	107.2
Oregon	2.0	6.4	2.9	4.7	20.3	36.3
Pennsylvania	10.3	114.2	19.5	39.2	61.4	244.7
Rhode Island	0.9	3.5	2.1	0.4	3.8	10.7
South Carolina	1.6	37.9	1.8	7.0	29.4	77.8
South Dakota	0.8	2.8	1.1	3.5	6.3	14.4
Tennessee	3.6	40.5	4.1	13.5	41.1	102.9
Texas	12.6	237.8	12.1	204.6	188.5	655.5
Utah	2.6	33.6	4.0	6.9	16.8	63.9
Vermont	0.6	0.0	1.3	0.5	3.2	5.7
Virginia	4.6	28.5	6.4	11.7	46.1	97.4
Washington	3.8	7.4	5.6	12.4	39.7	68.9
West Virginia	1.6	72.0	1.8	9.9	10.7	96.0
Wisconsin	5.5	41.8	8.9	12.3	27.7	96.2
Wyoming	1.2	41.1	1.0	13.0	7.6	63.8
Total <sup>1</sup>	223.2	2,140.3	326.0	912.0	1,781.9	5,383.3

Source: U.S. Energy Information Administration (EIA), State Energy Data System and EIA calculations made for this analysis.

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

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

**Table 4. 2011 state energy-related carbon dioxide emission shares by sector**

percent of total

State	shares				
	Commercial	Electric Power	Residential	Industrial	Transportation
Alabama	1.6%	57.5%	1.8%	14.2%	24.9%
Alaska	6.8%	8.3%	4.5%	44.0%	36.4%
Arizona	2.6%	57.0%	2.6%	4.9%	32.9%
Arkansas	3.8%	51.3%	3.2%	12.9%	28.8%
California	5.0%	10.5%	8.6%	18.2%	57.6%
Colorado	4.3%	42.6%	8.6%	14.4%	30.2%
Connecticut	10.8%	19.9%	21.8%	2.3%	45.2%
Delaware	6.1%	32.3%	8.1%	20.0%	33.5%
District of Columbia	34.1%	5.6%	22.1%	0.7%	37.5%
Florida	2.1%	48.7%	0.6%	4.2%	44.5%
Georgia	2.5%	44.1%	4.4%	8.5%	40.6%
Hawaii	1.5%	38.5%	0.3%	8.4%	51.3%
Idaho	7.6%	2.9%	11.4%	21.9%	56.2%
Illinois	5.5%	40.5%	10.5%	15.2%	28.3%
Indiana	2.6%	52.5%	4.0%	21.1%	19.8%
Iowa	5.0%	44.5%	5.3%	20.3%	24.8%
Kansas	2.7%	46.7%	5.6%	20.1%	24.9%
Kentucky	1.6%	63.4%	2.4%	11.5%	21.2%
Louisiana	0.9%	20.8%	1.0%	55.3%	22.0%
Maine	10.8%	12.1%	15.8%	14.8%	46.5%
Maryland	7.2%	34.5%	9.3%	5.5%	43.5%
Massachusetts	9.6%	21.8%	20.7%	3.4%	44.6%
Michigan	6.3%	41.3%	12.4%	10.8%	29.2%
Minnesota	6.6%	31.7%	9.2%	18.8%	33.7%
Mississippi	2.5%	38.2%	2.9%	17.0%	39.4%
Missouri	3.0%	59.1%	4.9%	4.8%	28.2%
Montana	4.3%	52.3%	5.4%	13.0%	24.9%
Nebraska	3.6%	49.1%	5.1%	15.9%	26.3%
Nevada	5.6%	43.7%	7.2%	5.1%	38.4%
New Hampshire	8.5%	30.9%	14.8%	4.0%	41.7%
New Jersey	10.6%	14.2%	12.7%	5.0%	57.5%
New Mexico	2.7%	54.6%	3.9%	14.9%	23.9%
New York	15.4%	21.4%	19.5%	3.4%	40.4%
North Carolina	3.5%	50.2%	4.2%	5.1%	36.9%
North Dakota	2.4%	53.0%	2.0%	28.1%	14.6%
Ohio	4.5%	47.4%	7.5%	13.9%	26.6%
Oklahoma	2.4%	45.9%	3.6%	19.5%	28.7%
Oregon	5.5%	17.7%	7.9%	13.0%	56.0%
Pennsylvania	4.2%	46.7%	8.0%	16.0%	25.1%
Rhode Island	8.1%	32.6%	19.8%	3.9%	35.6%
South Carolina	2.1%	48.7%	2.4%	9.0%	37.8%
South Dakota	5.2%	19.6%	7.3%	24.4%	43.5%
Tennessee	3.5%	39.4%	4.0%	13.1%	40.0%
Texas	1.9%	36.3%	1.8%	31.2%	28.8%
Utah	4.1%	52.6%	6.3%	10.9%	26.2%
Vermont	11.3%	0.1%	22.5%	9.4%	56.7%
Virginia	4.8%	29.3%	6.6%	12.0%	47.3%
Washington	5.5%	10.7%	8.2%	18.0%	57.7%
West Virginia	1.7%	75.0%	1.8%	10.3%	11.2%
Wisconsin	5.7%	43.5%	9.3%	12.8%	28.8%
Wyoming	1.8%	64.4%	1.5%	20.4%	11.9%
Average all states	4.1%	39.8%	6.1%	16.9%	33.1%

Source: U.S. Energy Information Administration, State Energy Data System and EIA calculations made for this analysis.

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

**Table 5. Per capita energy-related carbon dioxide emissions by state (2000–2011)**

metric tons of carbon dioxide per person

State	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	Change	
													2000 to 2011 Percent	Absolute
Alabama	31.7	29.6	30.6	30.6	30.9	31.0	31.1	31.2	29.3	25.0	27.7	26.8	-15.4%	-4.9
Alaska	70.5	68.4	67.8	67.3	70.9	72.0	67.7	64.8	57.4	54.0	54.0	52.9	-25.0%	-17.7
Arizona	16.6	16.7	16.2	16.1	17.0	16.4	16.4	16.4	16.1	14.6	14.7	14.2	-14.3%	-2.4
Arkansas	23.6	23.2	22.5	22.6	22.5	21.4	21.8	22.1	22.1	21.1	22.4	22.7	-3.8%	-0.9
California	11.1	11.1	10.9	10.4	10.8	10.7	10.8	10.9	10.3	9.9	9.7	9.2	-17.2%	-1.9
Colorado	19.5	20.9	20.1	19.8	20.2	20.4	20.3	20.5	19.7	18.6	18.8	17.8	-8.4%	-1.6
Connecticut	12.2	11.8	11.2	11.9	12.3	12.2	11.2	11.0	10.3	9.8	9.8	9.2	-24.4%	-3.0
Delaware	20.1	19.3	18.7	19.2	18.8	19.5	17.8	18.6	17.4	12.7	12.3	13.0	-35.2%	-7.1
District of Columbia	7.5	7.1	7.3	6.9	7.0	6.9	5.5	5.9	5.3	5.3	5.3	5.0	-33.3%	-2.5
Florida	14.9	14.5	14.4	14.4	14.7	14.5	14.2	13.9	12.8	11.9	12.7	11.9	-19.9%	-3.0
Georgia	20.4	19.1	19.4	19.4	19.7	20.5	19.7	19.6	17.9	16.7	17.5	15.7	-23.1%	-4.7
Hawaii	15.4	15.7	16.5	17.2	17.7	17.9	17.8	18.4	14.6	14.1	13.8	14.0	-9.2%	-1.4
Idaho	12.0	11.7	11.1	10.5	11.1	10.9	10.6	10.7	10.0	9.6	10.0	9.8	-18.1%	-2.2
Illinois	18.6	17.8	17.9	18.1	18.5	19.0	18.3	18.9	18.7	17.4	17.8	17.5	-5.6%	-1.0
Indiana	38.7	36.9	37.3	37.9	37.7	37.2	36.6	36.3	35.4	31.8	33.3	31.8	-17.9%	-6.9
Iowa	26.3	25.9	26.0	25.7	26.4	26.3	26.5	28.2	29.0	27.2	28.6	27.3	3.9%	1.0
Kansas	28.1	26.5	28.1	28.8	27.6	26.1	25.9	28.6	27.3	26.5	26.3	25.5	-9.3%	-2.6
Kentucky	35.8	36.5	36.3	35.1	36.4	36.6	37.0	36.7	35.8	33.3	34.6	33.8	-5.5%	-2.0
Louisiana	54.7	48.3	49.9	48.6	50.8	48.8	54.2	54.2	51.2	46.3	50.1	48.7	-11.0%	-6.0
Maine	17.4	17.4	18.4	18.0	18.2	17.4	15.9	15.7	14.2	13.7	13.4	13.4	-23.0%	-4.0
Maryland	14.5	14.4	14.3	14.6	14.7	14.9	13.6	13.7	12.9	12.2	11.9	10.9	-24.8%	-3.6
Massachusetts	12.7	12.7	12.7	12.9	12.7	12.9	11.7	12.2	11.6	10.6	10.7	10.0	-21.8%	-2.8
Michigan	19.3	18.8	18.7	18.4	18.6	18.8	17.6	18.0	17.4	16.4	16.5	15.9	-17.5%	-3.4
Minnesota	19.7	18.9	19.3	20.0	19.7	19.8	19.0	19.2	18.9	17.4	17.3	17.1	-13.5%	-2.7
Mississippi	21.4	24.4	21.7	22.2	22.5	21.8	22.5	23.1	21.7	20.3	22.0	20.2	-5.6%	-1.2
Missouri	22.2	23.0	23.0	24.1	24.1	24.4	23.9	23.6	22.9	21.7	22.3	22.1	-0.1%	0.0
Montana	34.7	35.1	33.6	35.6	37.0	37.7	37.4	39.0	37.8	33.4	34.9	31.8	-8.3%	-2.9
Nebraska	24.1	24.7	24.3	24.8	24.5	24.6	24.7	24.8	25.7	25.9	27.0	28.1	16.8%	4.0
Nevada	22.4	21.2	19.0	19.3	20.3	20.4	16.3	15.9	15.3	14.6	13.7	12.2	-45.4%	-10.2
New Hampshire	14.0	13.4	13.8	16.3	16.9	16.3	14.7	14.5	14.1	12.8	12.5	12.2	-13.2%	-1.9
New Jersey	14.3	13.9	13.8	13.9	14.1	14.6	13.7	14.6	14.3	12.3	12.6	12.5	-12.7%	-1.8
New Mexico	31.9	31.8	29.8	30.6	30.7	30.6	30.4	29.6	28.4	28.5	26.3	27.2	-14.7%	-4.7
New York	11.0	10.7	10.3	10.8	10.9	10.8	9.8	10.2	9.6	8.8	8.8	8.1	-25.9%	-2.8
North Carolina	18.0	17.2	17.0	16.9	17.0	17.2	16.2	16.5	15.6	13.7	14.5	12.7	-29.2%	-5.2
North Dakota	79.1	80.9	80.4	79.7	76.7	81.0	78.1	80.3	80.3	77.1	77.3	78.3	-1.0%	-0.8
Ohio	23.2	22.3	22.8	23.4	22.8	23.4	22.8	23.2	22.6	20.5	21.4	20.2	-12.7%	-2.9
Oklahoma	28.9	29.2	29.1	29.5	28.2	30.0	30.5	30.0	30.4	28.5	28.1	28.3	-2.1%	-0.6
Oregon	12.0	11.7	11.1	11.1	11.3	11.3	10.9	11.6	11.2	10.6	10.4	9.4	-21.7%	-2.6
Pennsylvania	22.4	21.3	21.8	22.0	22.1	22.3	21.7	21.9	21.2	19.1	19.9	19.2	-14.1%	-3.2
Rhode Island	11.0	11.5	10.8	10.6	10.0	10.3	9.7	10.3	9.9	10.5	10.2	10.2	-7.9%	-0.9
South Carolina	19.9	19.3	19.4	19.4	20.8	20.2	19.9	19.6	18.7	17.4	17.8	16.7	-16.3%	-3.3
South Dakota	18.6	17.6	18.0	17.8	17.7	17.0	16.9	17.4	18.6	18.1	18.3	17.5	-5.7%	-1.1
Tennessee	22.1	21.7	21.4	20.9	21.0	20.9	20.9	20.5	19.3	15.9	16.9	16.1	-27.3%	-6.0
Texas	34.4	33.4	33.4	32.5	32.1	30.3	29.5	28.7	26.9	25.3	26.2	25.6	-25.6%	-8.8
Utah	28.9	27.5	26.6	26.5	27.1	27.1	26.9	26.9	25.9	23.6	22.9	22.7	-21.4%	-6.2
Vermont	11.0	10.7	10.3	10.6	11.2	10.9	10.6	10.3	9.4	9.8	9.2	9.1	-17.3%	-1.9
Virginia	17.2	16.6	16.2	16.6	16.8	16.9	15.8	16.3	14.7	13.1	13.3	12.0	-30.0%	-5.1
Washington	14.0	13.2	12.0	12.2	12.4	12.5	11.9	12.6	11.9	11.4	11.0	10.1	-27.8%	-3.9
West Virginia	63.1	57.8	64.7	62.5	60.8	61.9	61.7	62.8	60.3	48.1	53.4	51.7	-18.0%	-11.4
Wisconsin	19.9	19.4	19.5	19.0	19.3	19.8	18.3	18.5	18.4	16.8	17.1	16.9	-15.4%	-3.1
Wyoming	127.3	127.6	123.7	126.7	124.9	122.4	122.0	123.8	122.1	113.4	115.3	112.5	-11.6%	-14.8
Average all states	20.8	20.2	20.2	20.1	20.3	20.2	19.7	19.9	19.0	17.5	18.0	17.3	-16.9%	-3.5

Source: U.S. Energy Information Administration, State Energy Data System and EIA calculations made for this analysis.

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

Table 6. Energy intensity by state (2000–2011)

thousand Btu per dollar of GDP

State	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	Change 2000 to 2011	
													Percent	Absolute
Alabama	18.3	17.1	17.4	17.2	16.9	16.4	16.3	16.2	15.9	15.7	16.3	16.5	-9.4%	-1.7
Alaska	21.7	20.6	19.8	20.2	20.3	21.1	18.7	17.8	15.9	14.3	14.7	14.3	-34.3%	-7.4
Arizona	8.7	8.5	8.4	8.0	8.3	7.6	7.3	7.4	7.6	7.7	7.7	7.6	-13.4%	-1.2
Arkansas	14.3	14.1	13.9	13.6	13.1	12.2	12.3	12.6	12.6	12.8	13.1	13.1	-8.4%	-1.2
California	4.9	4.8	4.8	4.6	4.5	4.3	4.3	4.2	4.1	4.2	4.1	4.0	-17.9%	-0.9
Colorado	6.3	6.7	6.4	6.4	6.5	6.4	6.3	6.4	6.4	6.4	6.3	6.1	-3.3%	-0.2
Connecticut	4.6	4.3	4.3	4.5	4.6	4.4	4.1	3.9	3.8	4.1	4.0	3.9	-16.9%	-0.8
Delaware	5.0	4.7	4.8	4.7	4.5	4.5	4.2	4.2	4.3	3.3	3.2	3.6	-27.7%	-1.4
District of Columbia	1.0	0.9	0.9	0.8	0.8	0.8	0.6	0.7	0.6	0.6	0.6	0.6	-41.9%	-0.4
Florida	6.9	6.6	6.6	6.4	6.3	6.0	5.9	5.8	5.8	5.9	6.2	6.0	-12.8%	-0.9
Georgia	8.6	8.1	8.3	8.2	8.2	8.3	8.0	8.0	7.5	7.9	8.2	7.5	-12.5%	-1.1
Hawaii	5.6	5.6	5.7	5.9	5.8	5.7	5.6	5.7	4.7	4.8	4.7	4.9	-11.9%	-0.7
Idaho	10.1	9.0	8.9	8.0	8.0	7.6	8.1	7.5	7.5	7.7	7.5	8.4	-16.6%	-1.7
Illinois	8.1	7.9	7.9	7.9	7.8	7.9	7.5	7.7	7.8	7.8	7.7	7.7	-5.5%	-0.4
Indiana	13.8	13.4	13.3	13.2	12.9	12.8	12.4	12.2	12.4	12.3	12.3	12.0	-13.5%	-1.9
Iowa	11.1	11.0	11.0	10.5	10.4	10.4	10.6	10.9	11.9	12.3	12.5	12.2	9.6%	1.1
Kansas	12.0	11.3	11.7	11.8	11.5	10.5	10.3	10.9	10.6	11.0	10.8	10.4	-12.9%	-1.5
Kentucky	14.5	14.9	14.7	14.2	14.5	14.5	14.2	14.3	14.1	14.0	14.0	13.7	-5.4%	-0.8
Louisiana	26.0	22.6	23.2	21.4	21.5	19.9	21.1	22.2	21.3	19.5	19.5	19.3	-25.6%	-6.6
Maine	11.8	11.6	11.7	11.0	11.1	11.2	10.3	10.3	10.4	9.8	9.8	9.7	-17.9%	-2.1
Maryland	6.1	5.7	5.5	5.6	5.5	5.5	5.0	5.0	4.8	4.8	4.6	4.3	-28.8%	-1.8
Massachusetts	4.5	4.3	4.3	4.3	4.2	4.2	3.9	3.9	3.8	3.7	3.7	3.5	-22.0%	-1.0
Michigan	8.3	8.4	8.4	8.1	8.3	8.4	8.0	8.2	8.5	8.6	8.5	8.3	0.1%	0.0
Minnesota	7.9	7.6	7.6	7.4	7.2	7.3	7.2	7.4	7.4	7.3	7.2	7.0	-10.5%	-0.8
Mississippi	14.5	15.5	14.2	13.8	14.0	13.7	13.9	13.8	12.8	13.2	13.9	13.4	-7.3%	-1.1
Missouri	8.7	9.0	8.9	9.1	9.1	9.2	9.1	9.0	8.8	9.0	9.0	8.9	2.8%	0.2
Montana	20.4	18.3	18.9	18.4	18.6	18.9	19.0	18.8	18.8	17.5	17.5	17.5	-14.1%	-2.9
Nebraska	10.6	10.6	10.7	10.0	10.3	10.0	9.9	10.2	10.5	10.6	11.5	11.5	8.5%	0.9
Nevada	7.7	7.5	6.8	6.8	6.8	6.5	5.7	5.5	5.6	6.0	5.7	5.2	-31.7%	-2.4
New Hampshire	7.5	7.3	7.4	8.3	8.6	8.4	7.6	7.8	7.7	7.4	7.3	6.8	-9.8%	-0.7
New Jersey	5.7	5.5	5.5	5.3	5.3	5.4	5.1	5.4	5.3	5.1	5.2	5.3	-8.2%	-0.5
New Mexico	13.8	13.4	12.4	12.5	11.9	12.1	12.1	12.2	12.0	11.9	11.3	11.8	-14.8%	-2.0
New York	4.6	4.4	4.4	4.5	4.4	4.2	3.8	3.9	3.9	3.8	3.6	3.5	-25.1%	-1.2
North Carolina	7.8	7.5	7.5	7.7	7.5	7.2	6.7	6.7	6.7	6.4	6.6	6.0	-23.1%	-1.8
North Dakota	29.4	29.5	27.8	25.9	25.5	26.2	24.9	24.8	23.4	22.9	22.4	22.1	-24.7%	-7.3
Ohio	9.1	8.8	8.6	8.7	8.6	8.7	8.6	8.7	8.9	8.6	8.8	8.4	-7.6%	-0.7
Oklahoma	13.5	13.2	13.1	13.2	12.7	13.5	13.2	13.1	12.9	12.7	12.7	12.6	-6.3%	-0.8
Oregon	9.0	8.2	8.1	7.8	7.4	7.1	6.8	6.7	6.4	6.5	5.8	5.9	-33.9%	-3.0
Pennsylvania	10.0	9.6	9.6	9.6	9.6	9.6	9.3	9.3	9.2	9.0	9.0	8.8	-11.9%	-1.2
Rhode Island	5.2	5.1	4.6	4.3	4.0	4.1	3.9	4.2	4.4	4.5	4.4	4.4	-15.0%	-0.8
South Carolina	12.9	12.4	12.7	12.3	13.0	12.8	12.5	12.3	12.2	12.7	12.7	12.3	-4.6%	-0.6
South Dakota	10.0	8.4	8.5	8.4	8.4	8.2	8.5	8.4	8.9	9.6	10.5	11.0	9.7%	1.0
Tennessee	10.5	10.5	10.1	9.9	9.7	9.6	9.1	9.2	8.8	8.4	8.5	8.1	-22.5%	-2.4
Texas	14.3	13.7	13.7	13.4	12.9	12.2	11.7	11.1	10.7	10.5	10.7	10.6	-25.6%	-3.6
Utah	10.8	10.2	9.9	10.0	9.9	9.7	9.4	9.3	9.0	8.6	8.2	8.2	-23.7%	-2.6
Vermont	9.1	8.2	7.9	8.0	7.7	7.6	8.1	7.6	7.7	8.7	7.8	7.8	-13.9%	-1.3
Virginia	6.9	6.4	6.3	6.3	6.3	6.2	5.8	5.9	5.6	5.3	5.2	4.9	-29.5%	-2.0
Washington	8.6	7.5	8.0	7.7	7.6	7.3	7.4	7.1	7.0	6.9	6.7	6.9	-19.6%	-1.7
West Virginia	27.4	25.0	27.6	26.6	25.6	26.0	25.7	26.3	25.9	21.3	22.7	21.3	-22.4%	-6.1
Wisconsin	8.7	8.5	8.4	8.2	8.0	8.2	7.6	7.8	8.0	7.8	7.7	7.5	-14.0%	-1.2
Wyoming	33.4	31.3	30.1	30.6	29.4	29.6	27.5	27.8	26.8	25.5	26.6	27.1	-18.7%	-6.2
Average all states	8.8	8.5	8.4	8.3	8.2	8.0	7.7	7.7	7.6	7.6	7.6	7.4	-15.6%	-1.4

Source: U.S. Energy Information Administration, State Energy Data System and EIA calculations made for this analysis.

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



Table 7. Carbon intensity of the energy supply by state (2000–2011)

kilograms of energy-related carbon dioxide per million Btu

State	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	Change 2000 to 2011	
													Percent	Absolute
Alabama	58.2	57.8	57.5	57.2	56.5	57.3	57.6	58.0	55.7	51.1	53.7	51.7	-11.0%	-6.4
Alaska	59.7	59.0	59.4	59.4	60.3	60.2	61.2	60.8	60.5	59.8	60.0	60.0	0.5%	0.3
Arizona	54.7	55.8	54.5	55.5	55.8	56.6	57.3	56.2	55.2	54.0	54.4	53.4	-2.4%	-1.3
Arkansas	56.9	56.4	54.4	54.6	55.1	55.3	55.0	54.6	55.3	53.5	54.7	55.5	-2.5%	-1.4
California	52.2	53.4	53.2	52.0	52.8	52.2	52.2	53.1	52.8	52.3	51.4	49.5	-5.2%	-2.7
Colorado	68.7	68.5	69.0	68.0	68.4	68.0	68.1	66.9	65.7	64.8	65.5	64.2	-6.6%	-4.5
Connecticut	48.7	50.5	49.5	49.6	48.9	49.9	47.8	47.6	47.6	44.8	44.7	42.7	-12.3%	-6.0
Delaware	67.8	66.6	65.7	67.3	67.3	67.9	67.2	67.8	66.8	62.5	61.1	56.9	-16.0%	-10.9
District of Columbia	60.8	61.9	61.1	60.5	60.9	61.2	59.5	59.0	58.3	58.0	58.1	57.7	-5.2%	-3.1
Florida	63.1	63.6	62.4	62.9	62.9	63.1	61.7	61.6	59.1	57.6	58.7	57.2	-9.3%	-5.9
Georgia	59.5	59.4	58.5	59.6	59.5	61.0	60.8	61.1	60.6	58.2	57.9	56.2	-5.6%	-3.3
Hawaii	68.5	71.1	71.8	71.2	71.2	70.8	70.9	71.1	69.4	68.8	68.4	67.6	-1.4%	-1.0
Idaho	39.1	43.8	41.7	43.0	43.0	42.0	39.0	41.9	39.7	39.3	40.9	35.9	-8.3%	-3.2
Illinois	53.0	52.3	52.1	51.9	53.0	53.3	53.0	53.0	52.4	51.2	51.3	50.6	-4.7%	-2.5
Indiana	76.8	77.3	76.6	76.2	76.6	76.5	77.1	76.6	75.8	74.2	73.7	71.9	-6.4%	-4.9
Iowa	65.5	66.7	65.4	65.6	63.7	62.6	61.8	61.2	59.4	55.7	55.3	53.3	-18.8%	-12.3
Kansas	64.6	63.5	64.9	64.7	63.6	65.4	64.5	64.1	63.5	62.3	61.6	61.9	-4.2%	-2.7
Kentucky	77.8	77.6	76.7	76.3	76.4	76.4	77.4	77.2	77.3	76.1	76.6	76.2	-2.0%	-1.5
Louisiana	56.1	55.8	55.8	56.6	56.7	57.1	57.4	57.2	58.0	57.0	57.0	55.9	-0.2%	-0.1
Maine	45.1	45.4	46.6	48.2	47.0	45.0	44.5	43.6	39.8	41.6	40.5	40.9	-9.1%	-4.1
Maryland	60.4	62.3	62.4	61.6	61.3	61.7	60.9	60.2	59.0	57.8	57.7	55.6	-8.0%	-4.8
Massachusetts	60.2	61.4	60.8	61.0	60.4	61.3	59.0	59.8	58.3	56.6	56.1	54.2	-9.9%	-6.0
Michigan	62.4	61.3	59.8	60.3	59.8	59.4	60.1	59.7	58.9	60.0	58.3	56.3	-9.8%	-6.1
Minnesota	58.4	58.6	58.8	60.2	59.1	58.2	57.7	56.9	55.6	54.0	53.0	52.9	-9.5%	-5.6
Mississippi	55.2	59.0	56.9	58.1	57.8	57.0	56.9	57.0	57.4	55.0	55.2	53.0	-4.0%	-2.2
Missouri	69.8	70.3	70.4	70.9	71.0	70.9	70.7	70.1	69.1	68.2	69.0	68.9	-1.2%	-0.8
Montana	59.6	65.3	60.4	63.3	63.4	62.3	60.7	62.2	61.3	60.3	61.9	56.7	-4.9%	-2.9
Nebraska	59.7	60.7	59.0	61.0	58.4	59.9	59.4	56.5	56.7	57.2	54.1	56.5	-5.4%	-3.2
Nevada	67.1	67.1	66.2	66.6	66.5	66.3	60.9	61.2	60.5	59.1	58.3	56.5	-15.8%	-10.6
New Hampshire	47.5	47.4	47.4	48.9	47.8	46.8	46.4	44.3	44.0	42.6	40.2	41.9	-11.7%	-5.6
New Jersey	53.2	52.9	52.4	53.6	54.4	54.1	52.8	53.1	53.2	49.7	50.1	49.0	-7.8%	-4.2
New Mexico	71.9	72.4	72.1	72.8	72.4	71.8	71.0	69.5	68.6	69.8	68.2	68.2	-5.2%	-3.7
New York	52.0	51.7	50.8	52.1	51.7	51.4	49.3	49.7	48.0	46.9	47.2	44.7	-13.9%	-7.2
North Carolina	58.5	58.7	58.2	56.6	57.8	58.4	57.9	59.1	57.4	54.9	55.7	52.8	-9.7%	-5.7
North Dakota	81.2	81.2	81.4	81.9	80.7	81.0	80.4	80.1	78.9	76.5	73.1	70.7	-12.9%	-10.5
Ohio	67.8	68.8	70.1	70.7	68.9	69.7	69.4	69.5	68.4	67.8	67.9	66.6	-1.8%	-1.2
Oklahoma	67.1	66.9	67.4	67.3	65.5	65.7	65.7	64.1	64.3	63.8	62.7	63.2	-5.8%	-3.9
Oregon	37.8	41.1	38.1	39.0	38.8	39.9	37.0	39.8	38.6	37.7	38.3	32.8	-13.0%	-4.9
Pennsylvania	60.7	60.1	60.3	60.3	59.7	60.2	60.1	59.5	58.4	56.4	56.6	55.5	-8.5%	-5.2
Rhode Island	58.2	59.2	59.9	60.4	60.2	60.2	58.7	58.5	55.0	57.1	56.7	55.6	-4.5%	-2.6
South Carolina	47.3	48.1	46.7	47.3	48.5	47.4	48.2	47.8	47.6	45.5	45.9	44.0	-6.9%	-3.3
South Dakota	52.4	57.3	54.4	52.9	52.7	50.6	49.2	49.9	48.6	44.6	41.8	38.3	-26.9%	-14.1
Tennessee	60.8	59.5	59.2	58.7	58.1	58.4	60.5	60.1	59.1	54.4	55.4	54.2	-11.0%	-6.7
Texas	58.1	58.4	58.1	58.3	57.8	58.2	57.9	57.4	56.9	56.2	55.7	53.7	-7.5%	-4.4
Utah	75.4	76.1	76.2	75.5	76.3	75.9	74.9	74.6	74.0	73.3	72.7	71.6	-5.0%	-3.8
Vermont	37.1	39.0	38.2	37.9	40.3	38.9	35.4	37.2	33.4	32.0	32.3	31.8	-14.3%	-5.3
Virginia	59.0	60.2	59.9	59.8	58.5	58.2	57.6	58.0	56.4	54.0	54.6	53.0	-10.1%	-6.0
Washington	37.0	41.3	35.2	37.2	37.7	38.1	35.3	37.4	36.4	37.0	36.5	31.9	-13.7%	-5.1
West Virginia	83.9	83.2	83.8	84.1	83.7	83.6	83.4	83.8	83.1	80.4	81.6	80.8	-3.6%	-3.0
Wisconsin	61.7	61.4	61.6	60.8	61.7	61.4	59.9	59.7	59.5	58.2	58.1	57.9	-6.2%	-3.8
Wyoming	81.3	81.5	81.4	81.1	81.6	80.9	80.9	79.8	79.3	77.7	76.6	74.6	-8.3%	-6.8
Average all states	59.5	60.0	59.4	59.7	59.5	59.6	59.2	59.1	58.3	56.9	56.9	55.3	-7.0%	-4.2

Source: U.S. Energy Information Administration, State Energy Data System and EIA calculations made for this analysis.

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

**Table 8. Carbon intensity of the economy by state (2000–2011)**

metric tons of energy-related carbon dioxide per million chained 2005 dollars of GDP

State	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	Change 2000 to 2011	
													Percent	Absolute
Alabama	1,062.3	988.9	1,000.5	985.4	953.4	939.2	937.8	939.6	888.3	804.6	873.4	856.3	-19.4%	-206.0
Alaska	1,295.7	1,214.2	1,173.2	1,201.4	1,223.7	1,271.1	1,148.0	1,082.1	960.1	857.7	884.9	856.5	-33.9%	-439.2
Arizona	478.0	473.8	458.7	444.9	462.4	431.0	415.6	414.4	420.4	418.3	420.0	404.2	-15.4%	-73.8
Arkansas	815.8	796.3	756.3	741.6	719.2	674.0	676.7	688.5	694.8	686.0	719.3	729.3	-10.6%	-86.5
California	255.9	258.9	253.1	237.3	237.8	226.6	223.6	224.5	215.6	218.5	211.7	199.3	-22.1%	-56.6
Colorado	431.4	457.7	442.2	436.6	441.8	435.8	428.5	431.0	418.1	411.8	413.4	389.4	-9.7%	-42.0
Connecticut	225.6	217.6	211.8	224.5	222.7	217.3	194.5	186.4	180.2	182.0	177.8	164.4	-27.1%	-61.2
Delaware	340.8	314.7	317.7	313.0	299.8	302.8	278.9	286.8	286.2	206.4	196.6	206.8	-39.3%	-134.0
District of Columbia	61.3	55.1	54.7	50.3	49.5	47.3	37.8	39.4	34.9	36.2	35.8	33.7	-44.9%	-27.5
Florida	434.1	421.3	412.3	400.2	398.9	380.5	363.5	356.9	342.7	340.5	363.6	343.5	-20.9%	-90.6
Georgia	509.2	478.7	487.8	488.0	489.7	504.2	488.7	485.4	455.8	458.4	471.9	420.6	-17.4%	-88.6
Hawaii	384.0	396.6	412.6	416.3	414.7	406.3	397.6	406.9	323.8	332.0	324.6	333.3	-13.2%	-50.7
Idaho	394.4	393.7	369.9	345.4	345.5	320.8	315.9	314.2	298.7	303.6	308.0	301.6	-23.5%	-92.7
Illinois	429.4	411.5	413.8	411.0	413.5	422.7	398.5	407.3	409.4	400.4	397.6	387.0	-9.9%	-42.4
Indiana	1,060.7	1,036.4	1,021.2	1,008.7	984.6	977.2	959.7	934.2	940.5	911.8	906.9	859.3	-19.0%	-201.4
Iowa	730.1	734.6	719.4	687.2	660.6	649.0	652.9	666.3	706.7	687.7	691.3	650.0	-11.0%	-80.1
Kansas	773.8	720.3	762.4	763.0	733.9	683.0	661.7	702.3	670.9	683.7	667.1	645.9	-16.5%	-127.9
Kentucky	1,127.7	1,153.1	1,125.3	1,080.1	1,111.2	1,104.2	1,101.0	1,105.5	1,091.7	1,065.4	1,069.8	1,045.5	-7.3%	-82.2
Louisiana	1,456.3	1,259.9	1,291.7	1,210.9	1,216.1	1,134.4	1,212.7	1,270.9	1,234.6	1,111.1	1,112.2	1,082.1	-25.7%	-374.2
Maine	533.5	525.7	547.4	531.7	521.0	504.8	457.9	451.1	415.3	407.0	396.5	397.9	-25.4%	-135.6
Maryland	368.0	355.2	344.1	347.8	339.9	336.9	305.4	302.2	283.1	275.0	262.8	241.2	-34.4%	-126.7
Massachusetts	268.6	262.3	264.3	264.3	253.8	256.0	227.9	234.8	223.6	210.3	206.4	188.7	-29.8%	-80.0
Michigan	516.6	518.2	501.9	487.6	498.9	501.7	482.1	489.3	501.2	516.3	494.4	466.3	-9.7%	-50.2
Minnesota	460.4	442.8	444.8	447.9	427.4	425.4	413.3	419.6	410.6	393.8	379.6	372.7	-19.1%	-87.7
Mississippi	800.6	915.9	810.1	803.8	809.4	778.5	789.4	786.7	735.8	723.7	768.1	713.0	-10.9%	-87.6
Missouri	606.1	635.0	627.9	648.4	645.5	653.6	644.3	633.4	610.6	612.2	619.0	615.5	1.5%	9.4
Montana	1,213.8	1,195.6	1,138.5	1,165.3	1,179.9	1,180.4	1,156.3	1,170.6	1,153.5	1,058.6	1,080.0	991.5	-18.3%	-222.3
Nebraska	631.1	643.8	630.7	613.1	603.1	596.6	588.8	575.3	594.8	609.1	619.7	647.6	2.6%	16.5
Nevada	513.7	500.9	453.7	452.3	453.3	433.7	346.0	335.0	338.8	353.0	332.9	295.6	-42.5%	-218.1
New Hampshire	356.0	345.4	349.9	404.5	412.0	393.4	352.6	347.1	340.7	315.8	294.6	283.4	-20.4%	-72.7
New Jersey	305.2	292.4	289.0	286.4	286.0	293.8	269.8	286.1	281.2	255.8	258.1	258.1	-15.4%	-47.0
New Mexico	992.6	968.5	897.2	906.9	863.6	871.3	862.4	845.8	826.2	833.8	770.5	802.0	-19.2%	-190.6
New York	241.3	227.5	221.6	232.2	228.2	215.3	188.2	193.1	187.7	176.2	169.2	155.7	-35.5%	-85.6
North Carolina	458.7	439.5	437.5	434.3	432.3	422.1	389.9	396.7	383.8	350.6	366.9	318.8	-30.5%	-139.9
North Dakota	2,387.7	2,395.2	2,264.9	2,125.4	2,058.8	2,122.1	2,006.3	1,987.5	1,844.9	1,755.8	1,637.6	1,565.4	-34.4%	-822.3
Ohio	613.8	603.4	604.0	616.0	592.1	604.7	595.2	606.2	605.9	584.4	594.6	557.3	-9.2%	-56.6
Oklahoma	905.0	882.8	879.8	889.0	830.4	883.7	864.8	839.7	830.4	813.2	795.3	798.9	-11.7%	-106.1
Oregon	339.0	337.7	309.5	304.1	288.9	283.8	252.7	266.1	248.5	245.5	223.9	194.8	-42.6%	-144.3
Pennsylvania	607.2	577.1	578.7	576.2	573.4	576.3	555.9	552.9	535.6	505.4	512.2	489.0	-19.5%	-118.2
Rhode Island	301.0	304.6	278.5	262.1	242.3	249.3	229.6	245.2	241.3	258.2	248.2	244.6	-18.8%	-56.5
South Carolina	611.8	594.8	594.5	580.0	630.1	608.2	603.5	589.5	580.6	577.1	584.3	543.2	-11.2%	-68.7
South Dakota	523.1	483.8	460.5	446.6	440.7	416.8	418.0	419.5	432.7	428.4	437.7	419.5	-19.8%	-103.7
Tennessee	636.8	624.6	600.8	578.8	564.9	558.5	553.3	551.3	522.2	457.1	468.2	439.6	-31.0%	-197.3
Texas	827.9	798.6	793.2	782.7	744.9	711.5	679.0	638.6	608.2	592.2	595.0	570.1	-31.1%	-257.8
Utah	814.8	774.0	756.7	752.6	759.3	736.1	703.9	690.8	665.0	631.9	598.7	590.3	-27.6%	-224.5
Vermont	336.2	321.4	301.2	303.1	310.7	296.6	287.2	282.5	257.4	277.6	252.1	248.1	-26.2%	-88.0
Virginia	408.8	384.3	374.3	374.5	370.3	358.4	333.3	344.8	314.2	286.4	285.6	259.1	-36.6%	-149.7
Washington	319.1	310.5	281.9	284.7	287.3	279.0	260.6	265.4	253.6	253.5	243.3	221.5	-30.6%	-97.6
West Virginia	2,301.6	2,084.4	2,310.7	2,240.6	2,147.5	2,170.7	2,144.7	2,204.8	2,150.4	1,712.0	1,856.1	1,721.0	-25.2%	-580.6
Wisconsin	538.2	523.3	519.4	497.5	495.6	501.8	458.2	463.4	475.5	451.3	444.9	433.9	-19.4%	-104.3
Wyoming	2,713.5	2,546.7	2,450.6	2,483.6	2,401.7	2,397.2	2,220.5	2,221.1	2,125.2	1,979.9	2,037.8	2,022.6	-25.5%	-690.9
Average all states	523.1	507.0	501.6	494.7	487.6	476.7	457.5	457.1	444.7	429.6	431.5	410.7	-21.5%	-112.3

Source: U.S. Energy Information Administration, State Energy Data System and EIA calculations made for this analysis.

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

Table 9. Net electricity trade index and primary electricity source for selected states (2000–2011)

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	Primary Source
Least CO <sub>2</sub> per capita													
✓ New York	0.9	1.0	1.0	0.9	0.9	0.9	1.0	1.0	1.0	1.0	0.9	1.0	Natural Gas
Vermont	1.6	1.4	1.3	1.4	1.2	1.2	1.5	1.3	1.5	1.7	1.5	1.6	Nuclear
California	0.8	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.7	Natural Gas
Connecticut	1.0	0.9	0.9	0.9	1.0	1.0	1.1	0.9	0.9	1.1	1.1	1.1	Nuclear
Oregon	1.0	0.9	1.0	1.0	1.1	1.0	1.0	1.1	1.1	1.1	1.1	1.2	Hydroelectric
Idaho	0.5	0.4	0.4	0.4	0.4	0.5	0.5	0.4	0.5	0.5	0.5	0.7	Hydroelectric
Massachusetts	0.7	0.7	0.7	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.7	Natural Gas
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	Hydroelectric
Rhode Island	1.0	1.1	0.9	0.7	0.6	0.8	0.8	0.9	1.0	1.0	1.0	1.1	Natural Gas
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	Coal
Most CO <sub>2</sub> per capita													
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	Coal
Oklahoma	1.0	1.1	1.1	1.1	1.1	1.2	1.2	1.2	1.2	1.2	1.1	1.2	Natural Gas
Indiana	1.2	1.1	1.1	1.1	1.1	1.0	1.1	1.1	1.1	1.0	1.0	1.0	Coal
Montana	1.7	1.9	1.7	1.8	1.7	1.6	1.6	1.5	1.5	1.3	2.0	2.0	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	Coal
Louisiana	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	0.9	Natural Gas
West Virginia	3.0	2.6	2.9	3.0	2.8	2.8	2.6	2.5	2.4	2.1	2.3	2.3	Coal
Alaska	0.9	1.0	1.0	0.9	0.9	1.0	1.0	1.0	0.9	1.0	1.0	1.0	Natural Gas
North Dakota	3.0	2.6	2.4	2.3	2.2	2.6	2.3	2.3	2.3	2.3	2.4	2.4	Coal
✓ Wyoming	3.3	3.1	3.0	3.0	2.9	2.9	2.6	2.5	2.4	2.4	2.5	2.4	Coal

Greater than 1.0 indicates a net exporter of electricity.

Less than 1.0 indicates a net importer of electricity.

Exactly 1.0 indicates self-sufficient.

Source: U.S. Energy Information Administration, State Electricity Profiles, Supply and Disposition of Electricity, 1990 through 2011 <http://www.eia.gov/electricity/state/>

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

## Appendix A. Comparison of fuel detail for 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	Annual/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	Coal Total	Coal Total
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	LPG Total	LPG Total
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)	Detail as follows:
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

<b>Consumption Sector</b>	<b>Energy Source Category</b>	<b>State Energy Data System Fuel Detail</b>	<b>Annual/Monthly Energy Review Fuel Detail</b>
Transportation	Coal	Coal	Coal
Transportation	Natural Gas	Natural Gas	Natural Gas
Transportation	Petroleum	Aviation Gasoline	Aviation Gasoline
Transportation	Petroleum	Distillate Fuel	Distillate Fuel
Transportation	Petroleum	Jet Fuel (Total)	Jet Fuel (Total)
Transportation	Petroleum	LPG	LPG
Transportation	Petroleum	Lubricants	Lubricants
Transportation	Petroleum	Motor Gasoline	Motor Gasoline
Transportation	Petroleum	Residual Fuel	Residual Fuel
Electric Power	Coal	Coal	Coal
Electric Power	Natural Gas	Natural Gas	Natural Gas
Electric Power	Petroleum	Distillate Fuel (inc. Kerosene Jet Fuel)	Distillate Fuel (inc. Kerosene Jet Fuel)
Electric Power	Petroleum	Petroleum Coke	Petroleum Coke
Electric Power	Petroleum	Residual Fuel	Residual Fuel
Electric Power	Renewables	Not Available	Geothermal
Electric Power	Waste	Not Available	Non-biomass waste