

2022 State Energy Report

The following report is provided by the Iowa Economic Development Authority (IEDA) as a summary of key energy data and trends from 2022. The State Energy Office, housed at IEDA, implements a variety of programs providing grant and loan assistance, produces reports and studies to further energy innovation and advancements, and serves as a resource to public and private stakeholders.

The 2022 report consists of the following sections:

Appendix 1 Iowa State Energy Profile: Excerpts from a database sponsored by the U.S. Energy Information Administration (EIA), a division within the U.S. Department of Energy that serves as a comprehensive source of energy information. EIA collects, analyzes, and disseminates a wide range of energy information that is updated periodically and available through the following website: <https://www.eia.gov/state/analysis.php?sid=IA>.

Appendix 2 Additional Sources of Energy Related Data: A listing of other sources of information relevant to energy supply and demand in the State.

Appendix 1: Iowa State Energy Profile

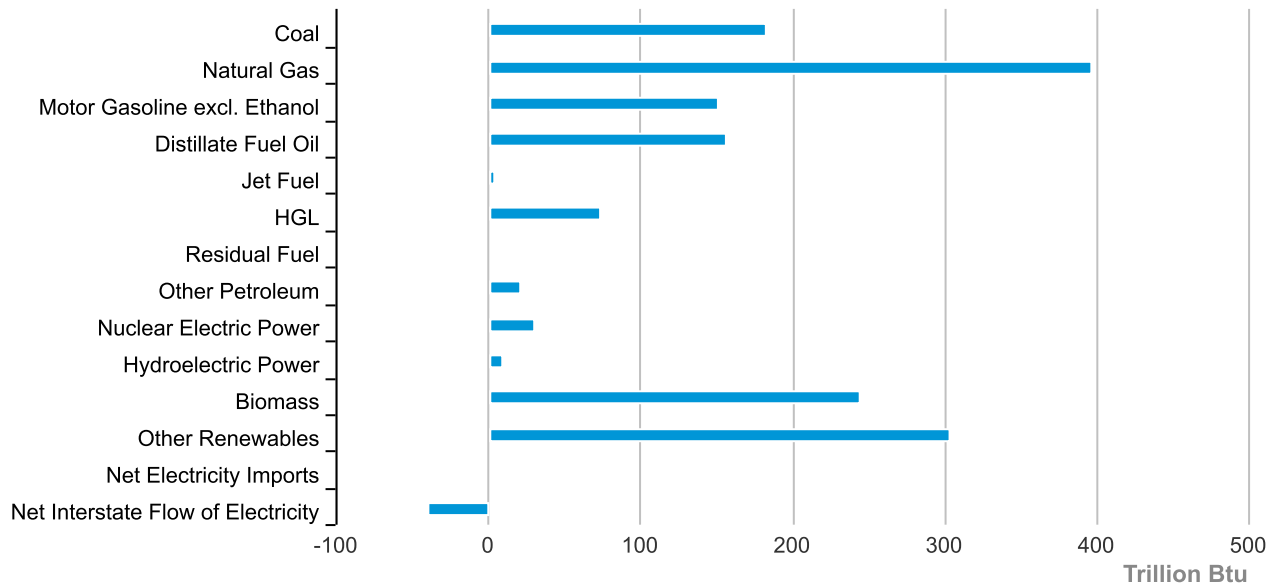
Iowa State Energy Profile

Iowa Quick Facts

- Iowa is the nation's largest fuel ethanol and biodiesel producer, and it accounts for about one-fourth of U.S. fuel ethanol production capacity and almost one-fifth of biodiesel production capacity.
- In 2021, wind turbines generated 58% of Iowa's electricity, the highest wind power share for any state.
- Iowa is among the top 10 states in electricity sales per capita, and about one in four Iowa households rely on electricity for home heating.
- Iowa's industrial sector, which includes agriculture and biofuels production, ranks among the top 10 states in industrial sector total energy consumption.
- Iowa is the fourth-largest consumer of hydrocarbon gas liquids, mostly propane--which is used for drying the state's large harvested corn crop and for heating one in eight Iowa households.

Last Updated: July 21, 2022

Iowa Energy Consumption Estimates, 2020



Source: Energy Information Administration, State Energy Data System

Data

Last Update: January 19, 2022 | Next Update: February 16, 2023

Energy Indicators

Demography	Iowa	Share of U.S.	Period
Population	3.2 million	1.0%	2021
Civilian Labor Force	1.7 million	1.0%	Nov-22
Economy	Iowa	U.S. Rank	Period
Gross Domestic Product	\$ 219.8 billion	30	2021
Gross Domestic Product for the Manufacturing Sector	\$ 37,687 million	24	2021
Per Capita Personal Income	\$ 56,973	31	2021
Vehicle Miles Traveled	29,751 million miles	33	2020
Land in Farms	30.6 million acres	10	2017
Climate	Iowa	U.S. Rank	Period
Average Temperature	50.0 degrees Fahrenheit	33	2021
Precipitation	31.1 inches	32	2021

Prices

Petroleum	Iowa	U.S. Average	Period	find more
Domestic Crude Oil First Purchase	--	\$ 86.62 /barrel	Oct-22	
Natural Gas	Iowa	U.S. Average	Period	find more
City Gate	\$ 6.80 /thousand cu ft	\$ 6.83 /thousand cu ft	Oct-22	find more
Residential	\$ 12.83 /thousand cu ft	\$ 18.63 /thousand cu ft	Oct-22	find more
Coal	Iowa	U.S. Average	Period	find more
Average Sales Price	--	\$ 36.50 /short ton	2021	
Delivered to Electric Power Sector	\$ 1.82 /million Btu	\$ 2.46 /million Btu	Oct-22	
Electricity	Iowa	U.S. Average	Period	find more
Residential	13.36 cents/kWh	16.09 cents/kWh	Oct-22	find more
Commercial	9.89 cents/kWh	13.04 cents/kWh	Oct-22	find more
Industrial	6.28 cents/kWh	8.61 cents/kWh	Oct-22	find more

Reserves

Reserves	Iowa	Share of U.S.	Period	find more
Crude Oil (as of Dec. 31)	--	--	2020	find more
Expected Future Production of Dry Natural Gas (as of Dec. 31)	--	--	2020	find more
Expected Future Production of Natural Gas Plant Liquids	--	--	2020	find more
Recoverable Coal at Producing Mines	--	--	2021	find more
Rotary Rigs & Wells	Iowa	Share of U.S.	Period	find more
Natural Gas Producing Wells	--	--	2020	find more
Capacity	Iowa	Share of U.S.	Period	
Crude Oil Refinery Capacity (as of Jan. 1)	--	--	2022	
Electric Power Industry Net Summer Capacity	22,396 MW	1.9%	Oct-22	

Supply & Distribution

Production	Iowa	Share of U.S.	Period	find more
Total Energy	930 trillion Btu	1.0%	2020	find more
Crude Oil	--	--	Oct-22	find more
Natural Gas - Marketed	--	--	2021	find more
Coal	--	--	2021	find more
Total Utility-Scale Net Electricity Generation	Iowa	Share of U.S.	Period	find more
Total Net Electricity Generation	5,314 thousand MWh	1.7%	Oct-22	
Utility-Scale Net Electricity Generation (share of total)	Iowa	U.S. Average	Period	
Petroleum-Fired	0.2 %	0.3 %	Oct-22	find more
Natural Gas-Fired	8.9 %	42.4 %	Oct-22	find more
Coal-Fired	21.1 %	17.2 %	Oct-22	find more
Nuclear	0 %	18.8 %	Oct-22	find more
Renewables	69.8 %	20.7 %	Oct-22	

Supply & Distribution

Stocks	Iowa	Share of U.S.	Period	find more
Motor Gasoline (Excludes Pipelines)	42 thousand barrels	0.3%	Oct-22	
Distillate Fuel Oil (Excludes Pipelines)	1,347 thousand barrels	1.7%	Oct-22	find more
Natural Gas in Underground Storage	272,048 million cu ft	3.4%	Oct-22	find more
Petroleum Stocks at Electric Power Producers	76 thousand barrels	0.3%	Oct-22	find more
Coal Stocks at Electric Power Producers	3,747 thousand tons	4.3%	Oct-22	find more
Fueling Stations	Iowa	Share of U.S.	Period	
Motor Gasoline	1,729 stations	1.5%	2019	
Propane	36 stations	1.4%	2022	
Electricity	263 stations	0.6%	2022	
E85	334 stations	8.1%	2022	
Compressed Natural Gas and Other Alternative Fuels	29 stations	2.2%	2022	

Consumption & Expenditures

Summary	Iowa	U.S. Rank	Period	
Total Consumption	1,526 trillion Btu	24	2020	find more
Total Consumption per Capita	479 million Btu	5	2020	find more
Total Expenditures	\$ 12,694 million	28	2020	find more
Total Expenditures per Capita	\$ 3,981	7	2020	find more
by End-Use Sector	Iowa	Share of U.S.	Period	
Consumption				
» Residential	233 trillion Btu	1.1%	2020	find more
» Commercial	181 trillion Btu	1.1%	2020	find more
» Industrial	834 trillion Btu	2.7%	2020	find more
» Transportation	278 trillion Btu	1.1%	2020	find more
Expenditures				
» Residential	\$ 2,631 million	1.0%	2020	find more

Consumption & Expenditures

» Commercial	\$ 1,629 million	0.9%	2020	find more
» Industrial	\$ 3,832 million	2.3%	2020	find more
» Transportation	\$ 4,602 million	1.1%	2020	find more
by Source	Iowa	Share of U.S.	Period	
Consumption				
» Petroleum	86 million barrels	1.3%	2020	find more
» Natural Gas	390 billion cu ft	1.3%	2021	find more
» Coal	10 million short tons	2.2%	2020	find more
Expenditures				
» Petroleum	\$ 6,343 million	1.3%	2020	find more
» Natural Gas	\$ 2,853 million	1.5%	2021	find more
» Coal	\$ 294 million	1.5%	2020	find more
Consumption for Electricity Generation	Iowa	Share of U.S.	Period	find more
Petroleum	26 thousand barrels	1.4%	Oct-22	find more
Natural Gas	3,570 million cu ft	0.4%	Oct-22	find more
Coal	658 thousand short tons	2.1%	Oct-22	find more
Energy Source Used for Home Heating (share of households)	Iowa	U.S. Average	Period	
Natural Gas	60.3 %	46.5 %	2021	
Fuel Oil	0.4 %	4.1 %	2021	
Electricity	24.2 %	41.0 %	2021	
Propane	12.7 %	5.0 %	2021	
Other/None	2.4 %	3.5 %	2021	

Environment

Renewable Energy Capacity	Iowa	Share of U.S.	Period	find more
Total Renewable Energy Electricity Net Summer Capacity	12,698 MW	4.2%	Oct-22	
Ethanol Plant Nameplate Capacity	4,694 million gal/year	27.0%	2022	
Renewable Energy Production	Iowa	Share of U.S.	Period	find more

Environment

Utility-Scale Hydroelectric Net Electricity Generation	51 thousand MWh	0.3%	Oct-22
Utility-Scale Solar, Wind, and Geothermal Net Electricity Generation	3,642 thousand MWh	7.9%	Oct-22
Utility-Scale Biomass Net Electricity Generation	16 thousand MWh	0.4%	Oct-22
Small-Scale Solar Photovoltaic Generation	24 thousand MWh	0.5%	Oct-22
Fuel Ethanol Production	92,137 thousand barrels	27.8%	2020
Renewable Energy Consumption	Iowa	U.S. Rank	Period find more
Renewable Energy Consumption as a Share of State Total	36.5 %	5	2020
Fuel Ethanol Consumption	3,768 thousand barrels	28	2020
Total Emissions	Iowa	Share of U.S.	Period find more
Carbon Dioxide	77.3 million metric tons	1.5%	2019
Electric Power Industry Emissions	Iowa	Share of U.S.	Period find more
Carbon Dioxide	28,923 thousand metric tons	1.8%	2021
Sulfur Dioxide	27 thousand metric tons	2.3%	2021
Nitrogen Oxide	24 thousand metric tons	1.9%	2021

Analysis

Last Updated: July 21, 2022

Overview

Located between the Mississippi and Missouri rivers, Iowa's gently rolling plains have some of the richest farmland in the nation and significant renewable energy resources. The state's climate, with rainfall in the growing season and dry air at harvest, together with Iowa's deep topsoil, produce abundant grain crops.¹ The state leads the nation in the production of both corn and ethanol.^{2,3} Unobstructed winds blow across Iowa's open prairie, giving the state significant wind energy resources.⁴ With many days of sunshine each year, Iowa has solar energy potential as well.^{5,6} However, the state has few economically recoverable fossil energy reserves and no crude oil, natural gas, or coal production.^{7,8,9,10}

Iowa is the only non-crude oil-producing state among the top five states in total energy consumption per capita. Iowa ranks fifth in the nation in energy use per capita, mainly because of the state's small population and its large industrial sector.¹¹ The industrial sector leads Iowa's end-use energy consumption, accounting for slightly more than half of the state total.¹² Iowa ranks among the

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10 states in total*

top 10 states in total industrial sector energy use.¹³ Agriculture, food production, biofuels production, and manufacturing are key Iowa industries.¹⁴ The state's major manufactured products include chemicals; computers and electronics; food and beverages; motor vehicles and parts; other transportation equipment; and machinery.¹⁵ The transportation sector is the second-largest energy user, accounting for almost one-fifth of the state's total. The residential sector makes up about one-seventh of the state's energy consumption and the commercial sector accounts for about one-eighth.¹⁶

industrial sector energy use.

Renewable energy

Iowa is the top fuel ethanol-producing state in the nation and has about one-fourth of total U.S. fuel ethanol production capacity. The state's ethanol plants can produce nearly 4.7 billion gallons per year, which is 30 times more than the 158 million gallons of ethanol consumed annually in the state. Iowa's fertile cornfields provide the feedstock for most of the state's 43 ethanol plants.^{17,18,19,20} Iowa also leads the nation in biodiesel production. Its 10 biodiesel plants have a combined production capacity of 459 million gallons per year, which is almost one-fifth of the nation's total capacity and the largest biodiesel production capacity of any state. Iowa's biodiesel production is about five times larger than the state's biodiesel use of 66.7 million gallons a year.^{21,22,23}

Iowa produces more fuel ethanol and biodiesel than any other state in the nation.

In 2021, nearly three-fifths of Iowa's total electricity net generation came from renewable resources, almost all of it from wind.²⁴ The state was the second-largest wind power producer, after Texas. Wind energy powered 58% of Iowa's net generation, the highest share of any state. Iowa's wind power is expected to increase, as about 1,000 megawatts of new wind power generating capacity are scheduled to come online in 2022.^{25,26} The strongest winds occur in northwestern Iowa, and although there are wind power farms across the state, most are in the state's northern and western areas.^{27,28}

In 2021, 58% of Iowa's total electricity net generation came from wind, the largest wind power share of any state.

About 2% of Iowa's in-state electricity generation in 2021 came from renewable energy resources other than wind, with hydroelectric power, solar energy, and biomass each contributing a small amount of the state's electricity.²⁹ The largest of Iowa's four hydroelectric power plants—the Keokuk plant with 15 turbine generators and 146 megawatts of generating capacity—is almost 110 years old. It is the largest privately-owned and operated dam and hydroelectric plant on the Mississippi River.^{30,31} The state's small, but growing, solar power supply is provided almost equally from customer-sited, small-scale generating systems (less than 1 megawatt each) and utility-scale (1 megawatt or larger) solar arrays.³² The state's largest solar generating facility, the 100-megawatt Wapello Solar Farm, came online in 2021. Another 100-megawatt solar farm is scheduled to begin operating in 2022.³³ Iowa's best solar power resource potential is found in the southwestern corner of the state.³⁴ The state's biomass resources include landfill gas and agricultural biodigesters that produce methane gas, and they both fuel electricity generating facilities. Iowa's biomass resources also provide feedstock to the state's one wood pellet plant, which can process wood waste into 15,000 tons of pellets annually.^{35,36,37}

In 1983, Iowa became the first state in the nation to adopt a renewable portfolio standard (RPS). State regulators required Iowa's two investor-owned electric utilities to own or to contract for a combined 105 megawatts of total renewable generating capacity.³⁸ Capacity from eligible renewable resources has far exceeded the RPS goals. At the beginning of 2022, Iowa had about 12,300 megawatts of generating capacity fueled by renewable energy sources at utility-scale power facilities.³⁹

In 2008, state regulators also established energy efficiency standards for each regulated electric and natural gas utility in the state. Municipal and cooperative utilities were required to set their own energy efficiency goals. The utilities were

allowed to increase efficiency and reduce consumption with improved infrastructure or through customer programs.⁴⁰

Electricity

In 2019, wind turbines in Iowa generated more electricity than the state's coal-fired power plants for the first time. In 2021, coal provided 33% of the state's electricity net generation, which was up from 24% in 2020 but down from 46% five years earlier. During the same five-year period, wind power grew from 37% of the state's net generation to 58% in 2021. However, 5 of Iowa's 10 largest power plants by generating capacity are coal-fired, and only 2 wind farms are in the top 10. When ranked by generation, 4 of the top 10 plants are wind-powered and 3 are coal-fired.^{41,42}

Natural gas-fired power plants contributed 9% of Iowa's in-state generation in 2021, with total generation from natural gas the lowest since 2017 after natural gas prices recently increased in 2021. Nuclear power accounted for nearly 5% of Iowa's electricity generation in 2020, but none in 2021, as the state's one nuclear plant is no longer operating.^{43,44,45} The state's 601-megawatt Duane Arnold power plant closed in August 2020 when storm winds damaged the power station's cooling towers. The plant's owner plans to build a 200-megawatt solar power farm at the site by the end of 2024.^{46,47,48} The state's remaining 2% of electricity generation came from hydropower, solar, biomass, and petroleum.⁴⁹

Since 2008, Iowa has generated more electricity each year than the state consumed. The excess power is sent to other states over the regional electric grid.⁵⁰ Iowa ranks in the top 10 states in total electricity sales per capita.⁵¹ Almost half of electricity retail sales in Iowa go to the industrial sector, nearly three-tenths go to the residential sector, and the commercial sector accounts for slightly less than one-fourth.⁵² Iowa's average electricity retail price is below the U.S. average and less than in two-thirds of the states.⁵³ About one in four Iowa households rely on electricity for home heating.⁵⁴

Petroleum

Iowa is not a crude oil-producing state and does not have any proved oil reserves.^{55,56} Of more than 100 exploratory wells drilled in the state, only a handful ever produced oil. Those wells no longer produce, and their combined production was less than 500 barrels of crude oil.^{57,58} Iowa does not have any oil refineries and relies on pipelines to bring petroleum products from other states.⁵⁹ Nearly 12,000 miles of petroleum product pipelines cross the state.⁶⁰

In 2020, the transportation sector accounts for 58% of Iowa's petroleum use.⁶¹ About two-fifths of the petroleum consumed in Iowa is used as motor gasoline, three-tenths is diesel fuel, and one-fourth is propane.⁶² Conventional motor gasoline without ethanol can be sold statewide in Iowa, although almost all U.S. gasoline is blended with at least 10% ethanol.^{63,64} About 340 fueling stations in the state dispense E85, a blend of motor gasoline with 85% ethanol.^{65,66} Iowa's industrial sector makes up 31% of the state's petroleum consumption, the residential sector accounts for 7%, and the commercial sector uses 3%.⁶⁷ The state's petroleum consumption includes hydrocarbon gas liquids (HGL), mostly propane and ethane. Iowa ranks fourth among the states in HGL consumption.

The industrial sector consumes two-thirds of the HGLs, where farmers use propane to dry their corn after harvest in wet years.^{68,69,70} About one in eight Iowa households heats with propane, almost triple the national rate.⁷¹

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Natural gas

Iowa does not have any natural gas reserves or production, but the state is crossed by several interstate natural gas pipeline systems and has four natural gas storage fields that together account for about 3% of U.S. gas storage capacity by volume.^{72,73,74,75} Natural gas enters Iowa by pipelines primarily from Minnesota, Nebraska, and Missouri. About three-fourths of the natural gas that enters Iowa exits the state and continues on to Illinois and Minnesota on its way to markets in those states and farther east.^{76,77,78}

Natural gas accounts for slightly more than one-fourth of the total energy consumed in Iowa.⁷⁹ In 2021, the industrial sector accounted for 60% of the natural gas consumed in the state. Iowa's residential sector, where 6 out of 10 households use natural gas as their primary heating fuel, accounted for about 16% of the natural gas delivered to consumers. The commercial sector used 13%, and the electric power sector used 10%.^{80,81}

Coal

Coal mining began in Iowa in the 1840s and continued until the 1990s. Most of the coal mines were located in the southern half of the state and supplied coal to run the railroads that first reached Iowa in the 1860s.⁸² Today, there are no active coal mines in Iowa, but the state still has about 1.1 billion tons of estimated recoverable coal reserves, located primarily in south-central Iowa.^{83,84}

Almost all of the coal consumed in Iowa is subbituminous coal brought by rail from Wyoming and delivered to power plants. A few small coal shipments from Wyoming and several other states are also delivered to Iowa's industrial, commercial, and institutional users.^{85,86} In 2021, Iowa ranked 16th among the states in coal used for electricity generation.⁸⁷

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⁷⁴ U.S. EIA, Iowa Profile Overview, Map, Layers/Legend: Natural Gas Inter/Intrastate Pipeline, accessed June 16, 2022.

⁷⁵ U.S. EIA, Underground Natural Gas Storage Capacity, Total Number of Existing Fields, 2015-20 and Total Storage Capacity, Annual, 2015-20.

⁷⁶ U.S. EIA, International and Interstate Movements of Natural Gas by State, Iowa, Annual, 2015-20.

⁷⁷ U.S. EIA, About U.S. Natural Gas Pipelines, Natural Gas Pipelines in the Midwest Region, accessed June 16, 2022.

⁷⁸ U.S. EIA, About U.S. Natural Gas Pipelines, Natural Gas Pipelines in the Central Region, accessed June 16, 2022.

⁷⁹ U.S. EIA, State Energy Data System, Table C1, Energy Consumption Overview: Estimates by Energy Source and End-Use Sector, 2020.

⁸⁰ U.S. Census Bureau, House Heating Fuel, Table B25040, 2019 ACS 1-Year Estimates Detailed Tables, Iowa.

⁸¹ U.S. EIA, Natural Gas Consumption by End Use, Iowa, Annual, 2016-21.

⁸² Types of Business and Industry, Iowa Pathways, accessed June 16, 2022.

⁸³ U.S. EIA, Annual Coal Report 2020 (October 4, 2021), Table 1, Coal Production and Number of Mines by State and Mine Type, 2020 and 2019; Table 15, Recoverable Coal Reserves at Producing Mines, Estimated Recoverable Reserves, and Demonstrated Reserve Base by Mining Method, 2020.

⁸⁴ U.S. EIA, Iowa Profile Overview, Map, Legends/Layers: Coal Field, accessed June 16, 2022.

⁸⁵ U.S. EIA, Annual Coal Distribution Report 2020 (October 4, 2021), Domestic Distribution of U.S. coal by: Destination

State, consumer, destination and method of transportation, Iowa, Table DS-14, Domestic Coal Distribution, by Destination State, 2020.

⁸⁶ U.S. EIA, Annual Coal Report 2020 (October 4, 2021), Table 6, Coal Production and Number of Mines by State and Coal Rank, 2020.

⁸⁷ U.S. EIA, Electric Power Monthly (February 2022), Table 4.6.B.

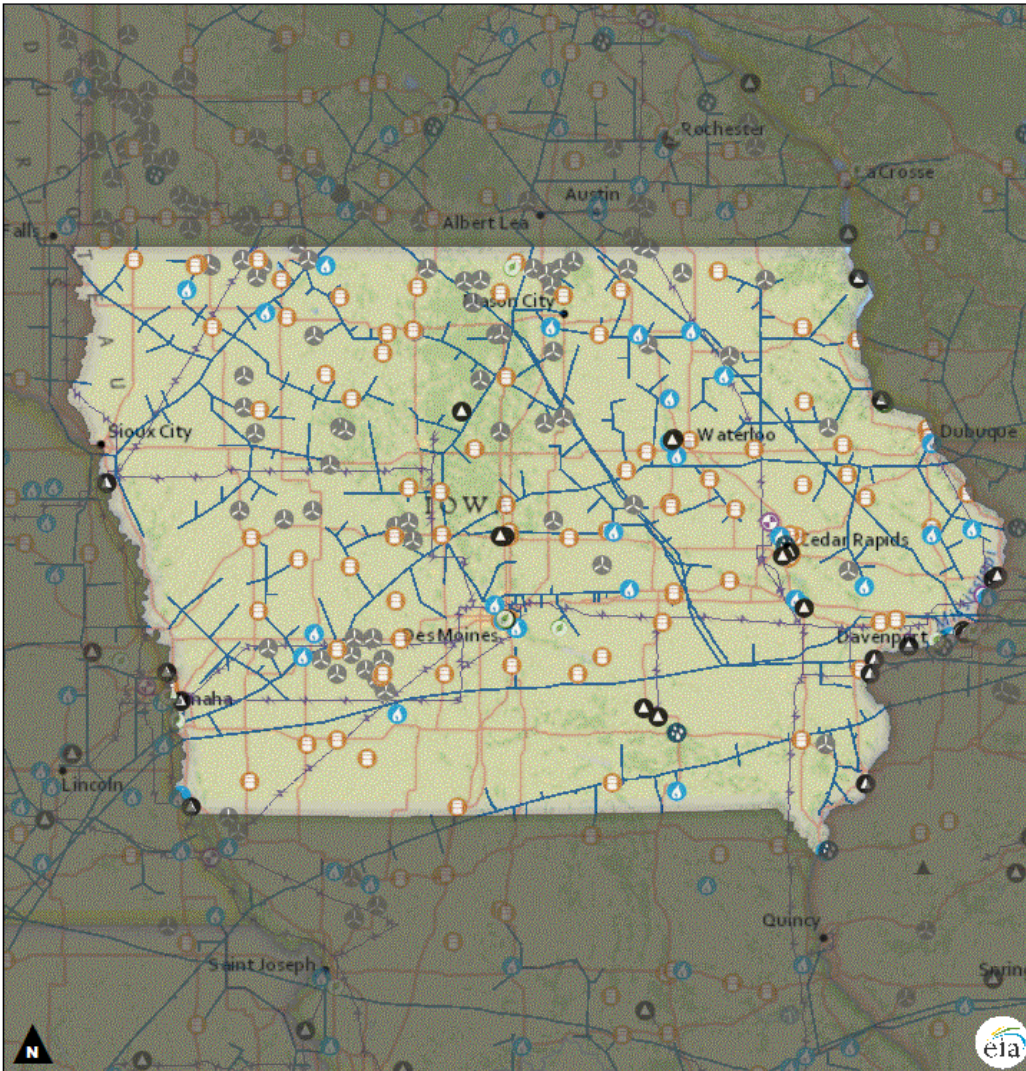
Other Resources

Energy-Related Regions and Organizations

- [Petroleum Administration for Defense District \(PADD\): 2](#)
- [Regional Transmission Organization \(RTO\) and Independent System Operator \(ISO\): Midcontinent Independent System Operator \(MISO\), Southwest Power Pool \(SPP\)](#)
- [North American Electric Reliability Corporation \(NERC\) ERO Enterprise: Regional Entities: Midwest Reliability Organization \(MRO\)](#)

Other Websites

- [Iowa Energy Office](#)
- [Iowa Utilities Board](#)
- [Iowa Department of Human Rights, Division of Community Action Agencies, Low-Income Home Energy Assistance \(LIHEAP\)](#)
- [Iowa Department of Human Rights, Division of Community Action Agencies, Weatherization Assistance Program](#)
- [Iowa Department of Agriculture and Land Stewardship, Iowa Renewable Fuels Infrastructure Program](#)
- [Iowa Department of Natural Resources, Underground Storage Tanks](#)
- [Iowa Department of Natural Resources, Oil, Gas and Metallic Mineral Regulatory Information](#)
- [Iowa Department of Agriculture and Land Stewardship, Iowa Mineral Program](#)
- [Iowa Energy Center Board](#)
- [EIA Iowa Flickr Album](#)
- [U.S. Department of Health and Human Services, Administration for Children and Families, Office of Community Services, Low Income Home Energy Assistance Program \(LIHEAP\)](#)
- [Alternative Fuels Data Center, Federal and State Laws and Incentives](#)
- [Benefits.Gov, Housing and Public Utilities](#)
- [NC Clean Energy Technology Center, Database of State Incentives for Renewables and Efficiency \(DSIRE\)](#)
- [National Association of Regulatory Utility Commissioners \(NARUC\)](#)
- [National Association of State Energy Officials \(NASEO\)](#)
- [National Conference of State Legislatures \(NCSL\), Energy](#)
- [National Renewable Energy Laboratory \(NREL\), Geospatial Data Science Data and Tools](#)
- [U.S. Geological Survey \(USGS\), Publications](#)
- [Western Area Power Administration](#)
- [U.S. Geological Survey, Maps](#)
- [Lawrence Livermore National Laboratory, Energy Flow Charts](#)
- [National Renewable Energy Laboratory, State and Local Planning for Energy \(SLOPE\)](#)
- [EIA Natural Gas Storage Dashboard](#)
- [EIA Energy Disruptions](#)



States:Electricity Transmission Lines - Ventyx, Velocity Suite;Grey Base:National

0 20 40 80 Miles

- | | | |
|--------------------------|----------------------------------|-------------------------------|
| ■ Mask | ⊕ Hydroelectric Power Plant | ⬆ Pumped Storage Power Plant |
| ▲ Surface Coal Mine | ⊕ Natural Gas Power Plant | ☀ Solar Power Plant |
| ▼ Underground Coal Mine | ⊕ Nuclear Power Plant | ⊕ Wind Power Plant |
| ⊕ Biomass Power Plant | ● Other Power Plant | ⊕ Wood Power Plant |
| ⊕ Coal Power Plant | ⊕ Other Fossil Gases Power Plant | ⊕ Petroleum Refinery |
| ⊕ Geothermal Power Plant | ⊕ Petroleum Power Plant | ⊕ Strategic Petroleum Reserve |

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

Appendix 2: Additional Sources of Energy Related Data

Weekly Fuel Report: The Iowa Department of Agriculture and Land Stewardship issues a weekly fuel report with data on current and trending prices of crude oil, motor fuels and heating fuels. To subscribe to the email release, contact Don McDowell at don.mcdowell@iowaagriculture.gov.

Propane Dashboard: The Iowa Propane Trends and Statistics website provides access to interactive dashboards and statistics as a public resource to increase visibility into key metrics that impact the current state of the propane supply chain in Iowa. It is designed to support effective communication between public and private sector stakeholders, to help identify potential risks with the supply chain and take proactive action to mitigate those risks and/or avoid a potential emergency. The website was launched as a result of the [Iowa Propane Supply Chain Optimization Strategy and Industry Working Group](#), and made available in cooperation with Iowa Department of Transportation and Iowa Department of Agriculture and Land Stewardship. See www.iowapropanestats.com.

Iowa Utilities Board (IUB): The IUB has regulatory authority over investor-owned utility (IOU) rates and other service issues. IUB authority is mostly limited to service, safety, and engineering issues for the rural electric cooperative (REC) and the municipal electric (Muni) utilities in Iowa. The IUB has very limited authority for non-utility generators.

Iowa Utility Electric Profile (2020)

UTILITY TYPE	# OF UTILITIES	# OF CUSTOMERS	% CUSTOMERS	MWH SALES ¹	% SALES
IOU	2	1,209,421	72.33%	58,781,859	82.40%
Muni	136	223,719	13.38%	5,422,679	7.63%
REC ²	43	238,961	14.29%	7,115,971	9.97%
Total	181	1,672,101	100.00%	71,340,509	100.00%

Notes: (1) IOU, Muni and REC totals exclude sales for resale. (2) REC totals exclude sales to Generation & Transmission (G&T).

Amana Society Service Company is an investor-owned utility but it is not rate-regulated due to the number of customers it serves.

Source: 2021 Annual Report (IUB 24/7; Form IE-1, Form EC-1, & Form ME-1)

For more information, see <https://iub.iowa.gov/iowas-electric-profile>

Iowa Electric Profile (2021 - Including Non-Utility Generation)

TRIC GENERATION IN IOWA BY PRIMARY ENERGY SOURCE	2021 NAMEPLATE CAPACITY (MW) ¹	PERCENT OF NAMEPLATE CAPACITY	2021 GENERATION (MWH) ²	PERCENT OF GENERATION
Coal	5,754.7	25.13%	22,106,594	32.89%
Wind	11,804.1	51.54%	37,098,274	55.20%
Nuclear	0.0	0.0%	0	0.00%
Natural Gas	4,027.6	17.58%	6,463,644	9.62%
Hydro	184.4	0.81%	980,071	1.46%
Other & Other Renewables	24.5	0.11%	201,407	0.30%
Petroleum	990.3	4.32%	132,111	0.20%
Solar	118.4	0.52%	224,906	0.33%
Total	22,904.0	100.00% ³	67,207,008	100.00% ³

Notes:

(1) Generation capacity for units greater than 1 MW that are physically located in Iowa; includes non-utility generators such as merchant plants, hospitals, colleges/universities, and industrials.

(2) Generation from units greater than 1 MW that are physically located in Iowa; includes non-utility generators such as merchant plants, hospitals, colleges/universities, and industrials.

(3) The percentages above reflect each category's percentage of the total quantity, rounded to two decimal places. Any differences found by manually summing the percent column are due to rounding.

Sources:

(1) Capacity: [U.S. Energy Information Administration \(EIA\) Report 860](#) - Final Report 2021

(2) Generation: [U.S. Energy Information Administration \(EIA\) Report 923](#) - Final Report 2021

[Links to other data and information](#) on the electric utility industry.

Electric Service Map: A map of electric service territories in the state is available at [Iowa Utilities Board \(arcgis.com\)](#).

Database of State Incentives for Renewables and Efficiency: DSIRE is a comprehensive source of information on incentives and policies that support renewable energy and energy efficiency in the United States. See <https://programs.dsireusa.org/system/program/ia>.