4TH EDITION

ENERGY AFFORDABILITY REPORT

A Snapshot of Electricity Prices and Energy Policies by State

ALEC

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INTRODUCTION

There is very little more important to modern society than energy and electricity. It is an essential aspect of virtually every part of our daily lives. However, throughout the United States, electricity prices vary greatly, depending on the way it is generated, delivered to consumers, and regulated. The policies that result in regulation vary widely, balancing the needs of consumers with the push to tackle the environmental challenges of today.

While some states rely on free market principles and innovation to limit manmade emissions into the atmosphere, others use a more heavy-handed approach by implementing standards, mandates, and pricing schemes that benefit specific types of technologies. Whether it is mandates, subsidies, or some combination of both, when the government inserts itself into the energy markets, taxpayers wind up footing the bill.

While these policies directly impact the supply, an emerging factor in the price of electricity is the increased demand due to government-backed policies pushing for electrification. Governments in many states are showing an increased hostility to gas-powered stoves, water heaters, and heat, as well as traditional combustion-powered vehicles. As a result, demand for electricity has skyrocketed and will continue to increase.

Inefficient government mandates driven by political interests often pick winners and losers in individual energy markets. It takes away a state's ability to choose the best method that would be needed for their population and takes away the sovereignty that they are entitled to.

METHODOLOGY

For the purposes of this report, electricity prices and energy policies in the states were evaluated. First, pricing for each state was evaluated in cents per kilowatt-hour (kWh) for the year 2023 with data from the U.S. Energy Information Administration (EIA).[2] This included residential, commercial, industrial, and transportation sectors. The weighted average price of electricity across all sectors was calculated, and then the states were ranked from lowest to highest average electricity price. This data can be seen in Table 1 in the Appendix. Although the "total" price of electricity is the primary focus of this report, sector-specific prices are important because they are a factor that directly impacts a state's economic competitiveness. Electricity prices in these sectors serve as important business inputs, helping to determine how many and which types of businesses choose to operate in that state, particularly in high-tech industries.

After looking at the price, three primary energy policies were analyzed that have become common throughout the states. We examined the presence or absence of a Renewable Portfolio Standard (RPS), which dictates that a certain amount of a state's electricity generation comes from renewable sources, as well as whether the state is a part of the Regional Greenhouse Gas Initiative (RGGI), which is a CO_2 cap-and-trade program amongst 10 states in the mid-Atlantic and Northeast regions of the U.S. (or if they are a part of another cap-and-trade program, e.g., California). Finally, we examined whether a state has statutorily-mandated rules for utilities regarding net metering, which is a process in which utility companies pay consumers who own rooftop solar panels for any excess electricity generation that these panels push back onto the electric grid. While there are many factors that can and do impact electricity prices, state legislatures have a direct influence on these three policies.[3]

Additionally, in this year's report, we used Energy Information Administration data to look at the top five electrical generation sources for each state and how that impacted electricity prices. For the reliability of an electrical grid to be determined, it was seen how many major incidents, including large power outages, each had in 2022. This information was gathered by the U.S. Energy Information Administration (EIA).

ELECTRICITY PRICE RESULTS

The three states with the lowest prices were Wyoming (8.24 cents per kWh), North Dakota (8.42 cents per kWh), and Idaho (8.51 kWh). As a general trend, electricity prices rose over the previous year, and unlike last year's results, the average price for these three states rose above 8 cents per kWh. Meanwhile, California and Hawaii had the highest prices in the nation, with Californians paying more than 20 cents per kWH and Hawaiians paying more than 30 cents per kWH.

Although Alaska does not have the second highest average retail price (kWh), it still ranks 45th in the nation in average retail price affordability. Given their isolated geographic locations, it is unsurprising that Alaska and Hawaii have the highest electricity prices. Contiguous states have the advantage of being better able to share infrastructure, such as transmission lines, and have the capability to import or export electricity across state lines.

Outside of these two geographic outliers, the five states with the highest electricity prices are Hawaii, California, Massachusetts, Connecticut, and New Hampshire. All five of these states have in place Renewable Portfolio Standards and cap-and-trade programs. Additionally, each of these states imposes a mandated net metering policy on its utilities, which is where utility companies pay consumers who generate electricity from rooftop solar panels for any excess electricity these panels push back onto the electric grid.

In contrast, the three states with the lowest electricity prices—Idaho, Wyoming, and North Dakota—avoid RPS mandates and cap-and-trade programs. Utah, the 4th lowest average cent per kWh price, has a voluntary renewable goal of 20% by 2025, but it is not a mandate. Idaho does not have state-mandated net metering at all, while Utah does have a compensation program that is capped. Wyoming does have net metering.

The trend of associating government mandates with higher prices is evident throughout this report. Table 2 shows which states have Renewable Portfolio Standard mandates, which states are part of the Regional Greenhouse Gas Initiative (or another cap-and-trade program) and which states have net metering mandates.

STATES WITH THE LOWEST ELECTRICITY PRICES

WYOMING	NORTH DAKOTA	IDAHO
		
8.24 ¢ per kWh	**8.42 ¢** per kWh	**8.51 ¢** per kWh

ALABAMA

PRICE RANK: 28TH

AVERAGE RETAIL PRICE (CENTS/KWH):	11.59
PRICE RANK:	28th
TOTAL RETAIL SALES (MWH):	87,027,545

TOP GENERATION SOURCES

Natural Gas	43%
Nuclear	29%
Coal	18%
Hydroelectric	7%
Wood	2%

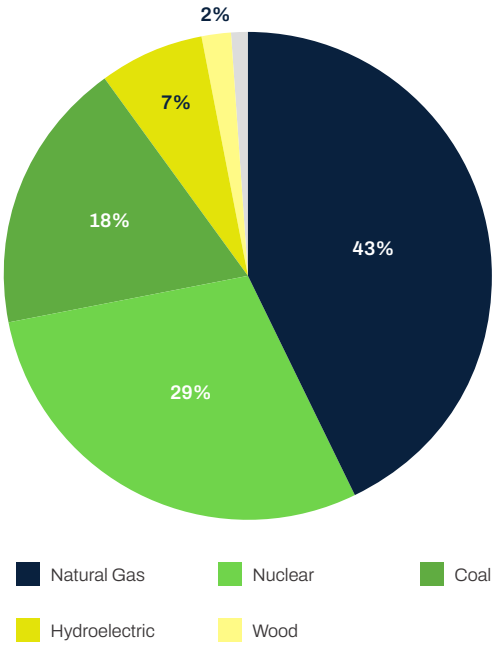
RELIABILITY: Five major incidents

RENEWABLE PORTFOLIO STANDARD: No

NET METERING: No

CAP-AND-TRADE: No

TOP ENERGY SOURCES FOR ALABAMA



SUMMARY

Alabama ranks near the middle of the states for electrical affordability thanks to its sensible policies. The state does not have a Renewable Portfolio Standard, does not require net metering, and does not participate in a carbon tax scheme.

The state has a good mix of electrical generation sources, including natural gas, nuclear, and coal portfolio. Each of these sources provides a method of generating on-demand, dispatchable power.

As a Gulf state, Alabama is subject to severe weather events such as hurricanes. The state had five major incidents in which over 50,000 customers lost power for more than one hour. Over the year, these incidents, which were all due to severe weather, resulted in loss of power for a combined 30 hours and 17 minutes.

ALASKA

PRICE RANK: 45TH

AVERAGE RETAIL PRICE (CENTS/KWH):	20.73
PRICE RANK:	45th
TOTAL RETAIL SALES (MWH):	6,002,080

TOP GENERATION SOURCES

Natural Gas	48%
Hydroelectric	26%
Petroleum	13%
Coal	11%
Wind	2%

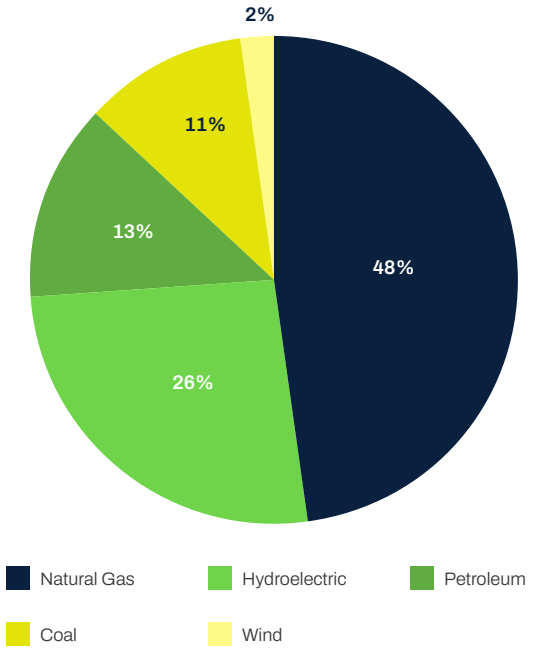
RELIABILITY: No major incidents reported

RENEWABLE PORTFOLIO STANDARD: No

NET METERING: Yes

CAP-AND-TRADE: No

TOP ENERGY SOURCES FOR ALASKA



SUMMARY

Alaska is one of the most expensive states for electricity in the nation due to its geographic isolation from the rest of the country. Although the state does have a net metering mandate, it does not participate in any cap-and-trade program or have a renewable portfolio standard.

The state's top generation sources are natural gas, hydroelectric, petroleum, coal, and wind, which reliably provide the state electricity with no major incidents reported to the Energy Information Agency for the year analyzed.

ARIZONA

PRICE RANK:

26TH

AVERAGE RETAIL PRICE (CENTS/KWH):	11.31
PRICE RANK:	26th
TOTAL RETAIL SALES (MWH):	84,196,517

TOP GENERATION SOURCES

Natural Gas	43%
Nuclear	31%
Coal	13%
Solar	7%
Hydroelectric	5%

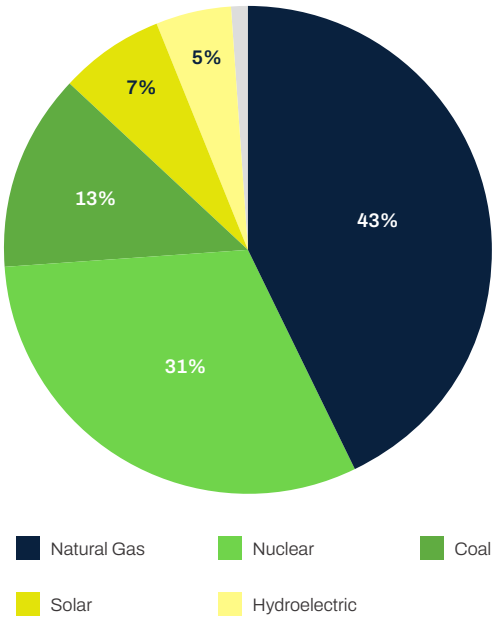
RELIABILITY: No major incidents reported

RENEWABLE PORTFOLIO STANDARD: Yes

NET METERING: No

CAP-AND-TRADE: No

TOP ENERGY SOURCES FOR ARIZONA



SUMMARY

Arizona ranks near the middle of the states for electrical affordability. The state does have a Renewable Portfolio Standard but does not participate in a carbon tax scheme. Arizona does have net metering, but today most rooftop solar is done through "net billing," in which energy is returned to the grid at a lower price than the retail rates.

The state has a good mix of electrical generation sources, including natural gas, nuclear, and coal portfolio. Each of these sources provides a method of generating on-demand, dispatchable power. Arizona has generally stable weather, and, as such, did not report any major outages.

ARKANSAS

PRICE RANK: 11TH

AVERAGE RETAIL PRICE (CENTS/KWH):	9.91
PRICE RANK:	11th
TOTAL RETAIL SALES (MWH):	48,997,663

TOP GENERATION SOURCES

Natural Gas	40%
Coal	31%
Nuclear	22%
Hydroelectric	5%
Wood	1%

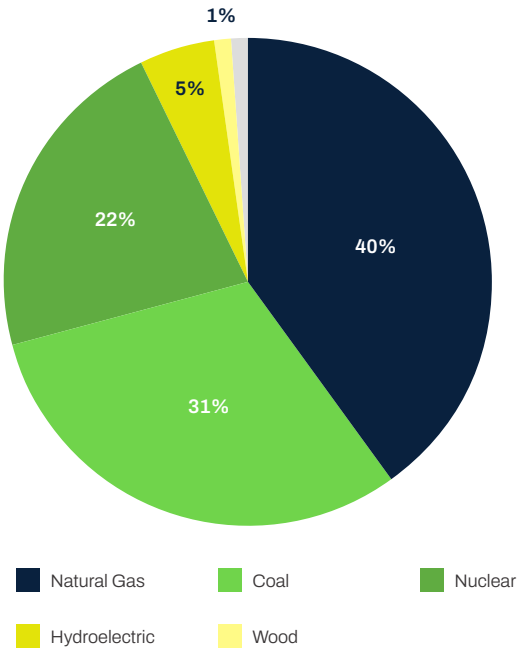
RELIABILITY: Four incidents reported

RENEWABLE PORTFOLIO STANDARD: No

NET METERING: Yes

CAP-AND-TRADE: No

TOP ENERGY SOURCES FOR ARKANSAS



SUMMARY

Arkansas has some of the least expensive electricity rates in the nation thanks to sensible energy policies and an excellent energy generation portfolio. The state has no Renewable Portfolio Standard or carbon tax, but it does require utilities to offer an uncapped net metering program.

The top generating sources for Arkansas' electricity are natural gas, coal, and nuclear. In the previous reported year, coal generated more electricity due to price shocks in the natural gas market, demonstrating how having a diverse portfolio of generation capabilities without government intervention helps keep prices consistently low.

Additionally, although the state did have four reliability incidents, the state's strong grid with significant backup options limited the impact. All told, power went off for customers for less than an hour over the entire year.

CALIFORNIA

PRICE RANK:

49TH

AVERAGE RETAIL PRICE (CENTS/KWH):	22.33
PRICE RANK:	49th
TOTAL RETAIL SALES (MWH):	251,869,136

TOP GENERATION SOURCES

Natural Gas	47%
Solar	19%
Hydroelectric	9%
Nuclear	9%
Wind	7%

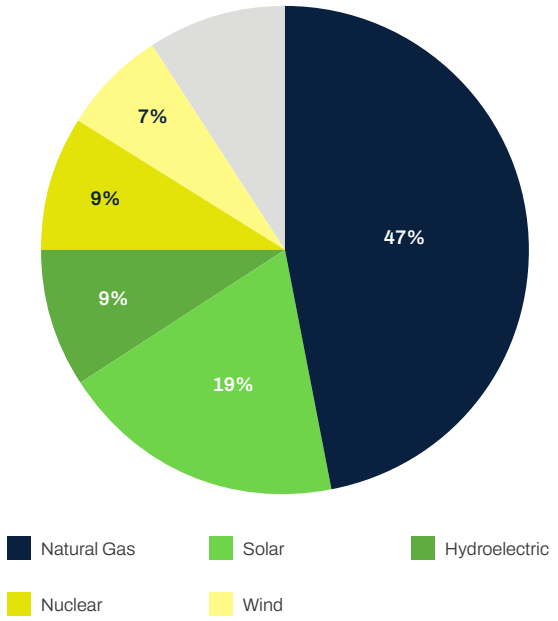
RELIABILITY: Sixteen major incidents reported

RENEWABLE PORTFOLIO STANDARD: Yes

NET METERING: Yes

CAP-AND-TRADE: Yes

TOP ENERGY SOURCES FOR CALIFORNIA



SUMMARY

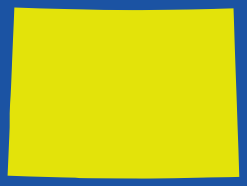
California has the second most expensive electricity in the nation. The state has a Renewable Portfolio Standard, net metering regulation, and a cap-and-trade tax on electricity producers.

As a result of California's RPS mandates, outside of natural gas and nuclear, the state relies on solar, hydroelectric, and wind to produce most of its electricity. These three generation methods are subject to reliability issues based on the weather. Solar only works for, on average, half of the day, while turbines rely on the direction the wind blows. Hydroelectric is usually a reliable source of electricity, but the state has been in drought conditions for the better part of a decade.

Meanwhile, natural gas, the state's primary base-load power generation source, is heavily taxed due to California's carbon pricing scheme, driving up costs for consumers. Additionally, the state's sole nuclear power plant was scheduled to be taken offline until emergency intervention by the governor in response to spikes in natural gas prices and environmental catastrophes caused by wildfires. The effects of the wildfires were exacerbated by the state's crumbling electrical infrastructure, which was, in turn, caused by the state's mandates that utilities prioritize fulfilling the RPS mandates over widespread basic repairs.

In addition to high prices, California also had more reliability incidents than any other state, with hundreds of thousands affected over the year. Parts of the grid were down due to major incidents for over 82 hours over the year.

COLORADO



PRICE RANK: 30TH

AVERAGE RETAIL PRICE (CENTS/KWH):	11.75
PRICE RANK:	30th
TOTAL RETAIL SALES (MWH):	56,763,041

TOP GENERATION SOURCES

Coal	37%
Wind	29%
Natural Gas	27%
Solar	4%
Hydroelectric	2%

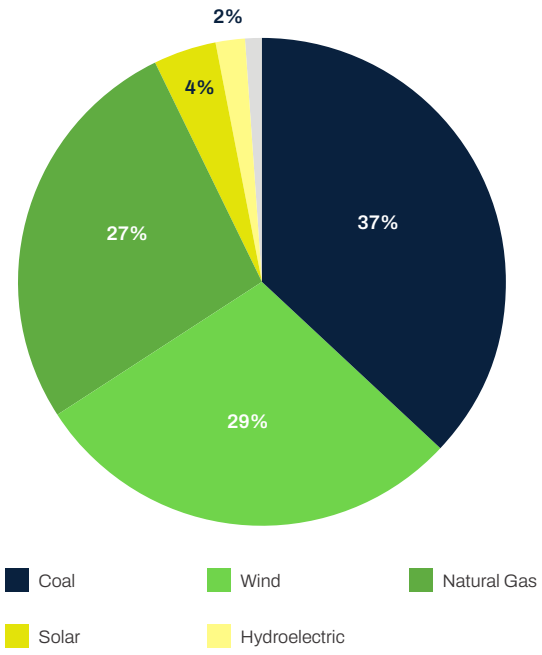
RELIABILITY: One major incident reported

RENEWABLE PORTFOLIO STANDARD: Yes

NET METERING: Yes

CAP-AND-TRADE: No

TOP ENERGY SOURCES FOR COLORADO



SUMMARY

With one of the oldest renewable portfolio standards in the country now updated to mandate so-called "net zero" by 2050, as well as significant intermittent targets such as 65% by 2035, 75% by 2040, and 90% by 2045, Colorado's utility costs soared. Although the state has a formidable energy mix, with coal, wind, natural gas, solar, and hydroelectric taking the top five spots for generation, the state's reliance on traditional hydrocarbons for reliable, dispatchable power will make this transition even more painful for taxpayers.

As one of the top coal and natural gas producing states in the country, Colorado residents should have some of the least expensive electricity in the nation. However, between costly government mandates and the state's recent population boom, Colorado ranks below average for cost.

Colorado residents have the advantage of a reliable grid with only one major reliability incident.

CONNECTICUT

PRICE RANK:

47TH

AVERAGE RETAIL PRICE (CENTS/KWH):	21.08
PRICE RANK:	47th
TOTAL RETAIL SALES (MWH):	27,767,146

TOP GENERATION SOURCES

Natural Gas	57%
Nuclear	38%
Solar	1%
Other Biomass	1%
Petroleum	1%

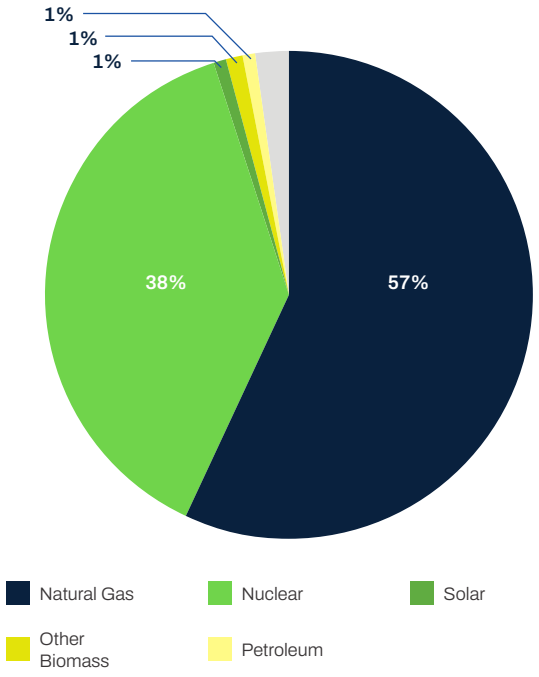
RELIABILITY: Five major incidents reported

RENEWABLE PORTFOLIO STANDARD: Yes

NET METERING: Yes

CAP-AND-TRADE: Yes

TOP ENERGY SOURCES FOR CONNECTICUT



SUMMARY

Connecticut consistently ranks as one of the highest costs states in the nation for the cost of electricity due to its participation in the Regional Greenhouse Gas Initiative, a carbon tax, as well as its stringent net metering and renewable portfolio standards regulation. The state also has a very limited mix of generation sources, subjecting residents to volatile natural gas pricing.

Five major incidents resulting in over 24 hours of electricity loss for over 50,000 residents also demonstrate Connecticut's poor resiliency and reliability.

With some of the highest prices, significant reliability issues, and a lack of diversity for generating dispatchable power, Connecticut is a case study in how an over-regulated market harms the people they are supposed to protect.

DELAWARE

PRICE RANK: 31ST

AVERAGE RETAIL PRICE (CENTS/KWH):	11.83
PRICE RANK:	31st
TOTAL RETAIL SALES (MWH):	5,308,370

TOP GENERATION SOURCES

Natural Gas	89%
Other Gases	4%
Petroleum	2%
Coal	2%
Other Biomass	1%

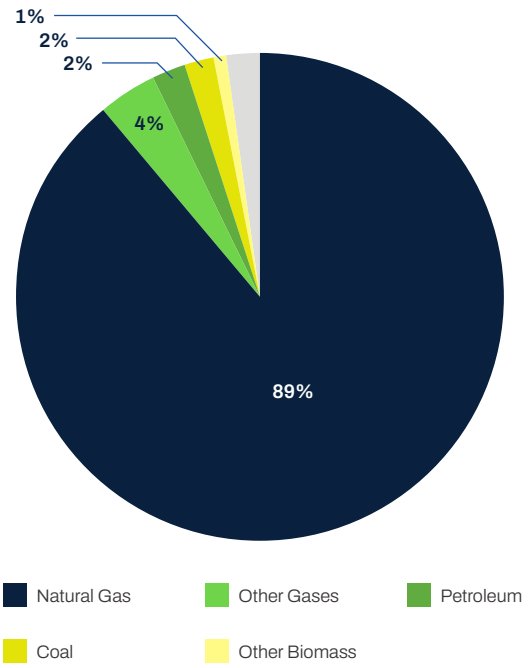
RELIABILITY: One major incident reported

RENEWABLE PORTFOLIO STANDARD: Yes

NET METERING: Yes

CAP-AND-TRADE: Yes

TOP ENERGY SOURCES FOR DELAWARE



SUMMARY

Although not quite as bad in terms of affordability when compared to Connecticut, Delaware regularly ranks as one of the more expensive states for electricity. The state participates in the Regional Greenhouse Gas Initiative carbon tax scheme and has net metering and renewable portfolio standards. The state also has a very limited mix of generation sources, subjecting residents to volatile natural gas pricing.

Delaware consumes less electricity than all but five states, but most of the state's power is imported from other locales. Only 41% of the state's electricity was generated in Delaware, with the rest coming from out-of-state power producers.

Meanwhile, the state began a push in 2008 to develop offshore wind farms in order to meet its mandated goal of 40% renewable energy by 2035. Over the last sixteen years, each attempt to develop offshore wind collapsed before making any meaningful progress.

FLORIDA

PRICE RANK: 37TH

AVERAGE RETAIL PRICE (CENTS/KWH):	12.51
PRICE RANK:	37th
TOTAL RETAIL SALES (MWH):	248,820,803

TOP GENERATION SOURCES

Natural Gas	75%
Nuclear	12%
Coal	6%
Solar	4%
Other	1%

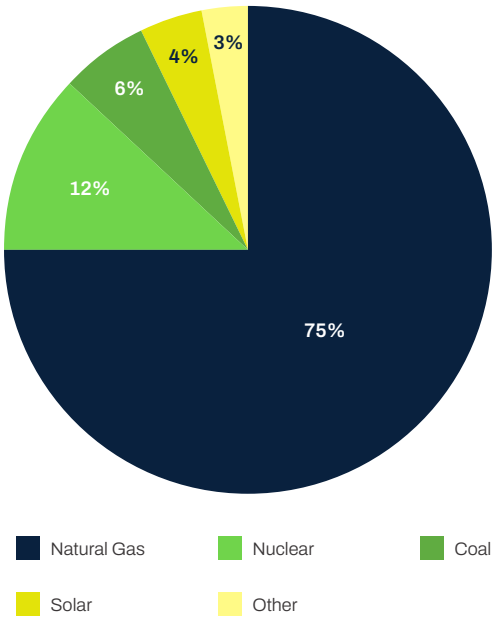
RELIABILITY: Thirteen major incidents reported

RENEWABLE PORTFOLIO STANDARD: No

NET METERING: Yes

CAP-AND-TRADE: No

TOP ENERGY SOURCES FOR FLORIDA



SUMMARY

Despite not having a renewable portfolio standard or participating in a cap-and-trade scheme, Florida ranks near the bottom in terms of energy affordability in large part due to an over-reliance on one fuel for electrical generation. Three quarters of the state's electricity was generated using natural gas, leaving ratepayers on the hook for increased utility bills when the cost of natural gas rose due to international instability.

Additionally, state-mandated net metering requires energy companies to buy excess generation at full retail price, with utilities required to front the initial cost of connecting solar systems to the grid. Ultimately, this leaves residents on the hook for subsidizing their neighbor's solar energy generation.

Due to the state's geography, Florida experiences more hurricanes than most states. During the reporting period used for this study, the state had a particularly bad year resulting in significant power outages.

GEORGIA

PRICE RANK: 35TH

AVERAGE RETAIL PRICE (CENTS/KWH):	12.00
PRICE RANK:	35th
TOTAL RETAIL SALES (MWH):	145,035,204

TOP GENERATION SOURCES

Natural Gas	47%
Nuclear	27%
Coal	13%
Solar	5%
Hydroelectric	3%

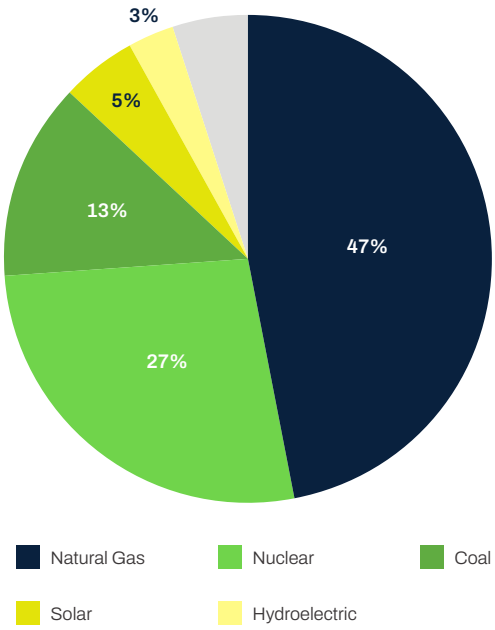
RELIABILITY: Ten incidents reported

RENEWABLE PORTFOLIO STANDARD: No

NET METERING: Yes

CAP-AND-TRADE: No

TOP ENERGY SOURCES FOR GEORGIA



SUMMARY

Although Georgia does not have a renewable portfolio standard nor is the state participating in a cap-and-trade scheme, Georgia ranks near the bottom in terms of energy affordability in large part due to an over-reliance on one fuel for electrical generation. With almost half of the state's electricity generated using natural gas, ratepayers are on the hook for higher bills when the cost of natural gas rises.

While prices could have been lower if Georgia's Vogtle nuclear generators had come online on schedule, the project slowed, and costs rose.

Like Florida, due to the state's geography, Georgia experiences more hurricanes than most states. During the reporting period used for this study, Georgia had a particularly bad year resulting in significant power outages.

HAWAII

PRICE RANK:

50TH

AVERAGE RETAIL PRICE (CENTS/KWH):	39.72
PRICE RANK:	50th
TOTAL RETAIL SALES (MWH):	9,039,115

TOP GENERATION SOURCES

Petroleum	71%
Coal	7%
Wind	7%
Solar	6%
Other	3%

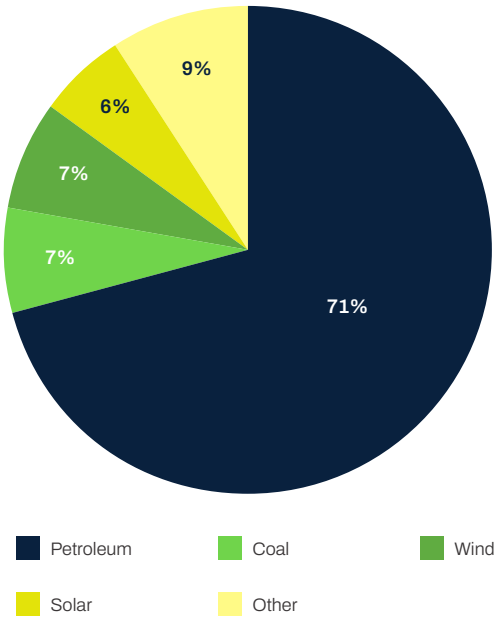
RELIABILITY: No incidents reported

RENEWABLE PORTFOLIO STANDARD: Yes

NET METERING: Yes

CAP-AND-TRADE: No

TOP ENERGY SOURCES FOR HAWAII



SUMMARY

Hawaii has the unfortunate distinction of being home to the highest electricity prices in the nation during the study period for this publication, an average of 39.72 cents per kWh. Because it is geographically isolated from the contiguous United States, the Aloha State heavily relies on petroleum for nearly three-quarters of its energy mix, with a combination of coal, wind, and solar also contributing to the state's power supply.

Although Hawaii does not have a cap-and-trade program, policymakers did implement net metering and a Renewable Portfolio Standard. No reliability incidents were reported within the scope of this report.

IDAHO

PRICE RANK: 3RD

AVERAGE RETAIL PRICE (CENTS/KWH):	8.51
PRICE RANK:	3rd
TOTAL RETAIL SALES (MWH):	26,201,131

TOP GENERATION SOURCES

Hydroelectric	52%
Natural Gas	27%
Wind	15%
Solar	4%
Wood	2%

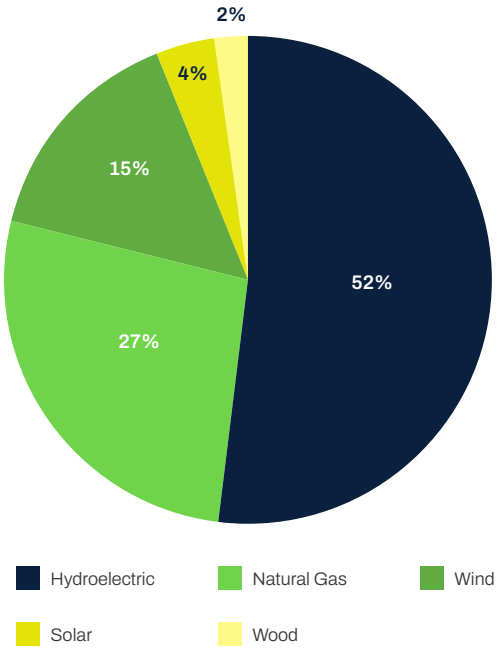
RELIABILITY: No incidents reported

RENEWABLE PORTFOLIO STANDARD: No

NET METERING: No

CAP-AND-TRADE: No

TOP ENERGY SOURCES FOR IDAHO



SUMMARY

Idaho is ranked third in the country in energy affordability, avoiding problematic policies such as cap-and-trade, net metering, or a renewable portfolio standard. This allows the state's population to not worry about the government implanting extra charges or taxes on various forms of energy.

Without any of these schemes to promote lower-emission power in place, Idaho uses conventional hydroelectric energy to meet more than half of the state's demand for electricity. With over a thousand bodies of running water throughout Idaho, hydroelectric is easily utilized to generate the bulk of the state's power.

Meanwhile, Idaho also enjoys a diverse portfolio, including natural gas and wind, to keep prices low. This mix provides reliable generation, and there were no major outage events reported to the federal government.

ILLINOIS

PRICE RANK: 33RD

AVERAGE RETAIL PRICE (CENTS/KWH):	11.94
PRICE RANK:	33rd
TOTAL RETAIL SALES (MWH):	135,871,580

TOP GENERATION SOURCES

Nuclear	53%
Coal	22%
Wind	13%
Natural Gas	11%
Solar	1%

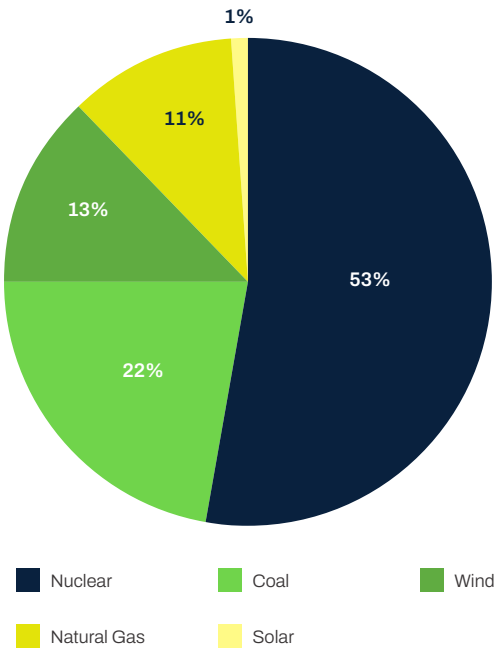
RELIABILITY: Five reported incidents

RENEWABLE PORTFOLIO STANDARD: Yes

NET METERING: Yes

CAP-AND-TRADE: No

TOP ENERGY SOURCES FOR ILLINOIS



SUMMARY

Over a third of the state of Illinois is still reliant on fossil fuels (coal and natural gas), all while the state utilized both net metering and a renewable portfolio standard. This means that many residents are feeling pressure from the government to transition to new forms of energy to match their green energy plan, ultimately boosting prices for residents and industries in the state. As a result, the average energy price in the state is relatively high, ranked 33rd in the country.

As the home of the world's first nuclear reactor, Illinois was an early adopter of significant nuclear energy. It is home to eleven nuclear power plants. Despite this, the state had a nearly 36-year-long ban on building new nuclear reactors, which was eliminated by the legislature in 2023.

INDIANA

PRICE RANK:

29TH

AVERAGE RETAIL PRICE (CENTS/KWH):	11.66
PRICE RANK:	29th
TOTAL RETAIL SALES (MWH):	100,044,365

TOP GENERATION SOURCES

Coal	53%
Natural	33%
Wind	11%
Other Gases	2%
Solar	1%

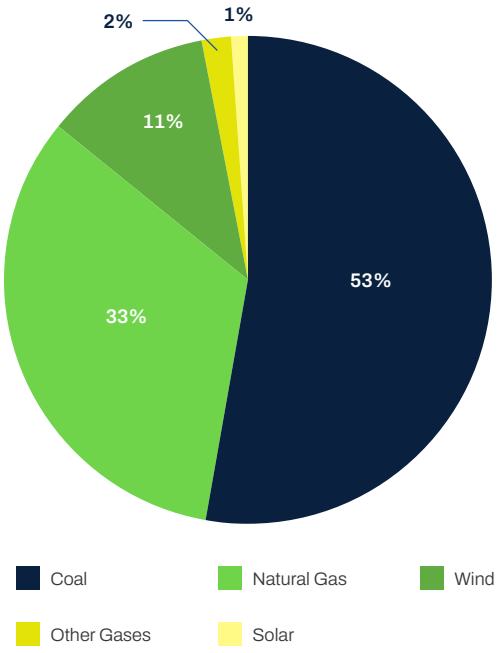
RELIABILITY: Four reported incidents

RENEWABLE PORTFOLIO STANDARD: Yes

NET METERING: Yes

CAP-AND-TRADE: No

TOP ENERGY SOURCES FOR INDIANA



SUMMARY

The residents of Indiana could have some of the lowest energy prices in the country, with over 80% of the generation fulfilled by coal and natural gas. However, the state ranked in the bottom half for price affordability because of policies including net metering and renewable portfolio standard schemes, as well as expensive mandates by the federal government designed to make fossil fuel generators more expensive.

With a relatively stable population, the burden of costly federal mandates to modify fossil fuel power plants is spread amongst the current residents. When coupled with the increased price of natural gas, spurred by international instability, as well as the increased price of coal due to harmful domestic policies, Hoosiers are, quite literally, paying the price.

Renewable portfolio standards are also increasing Indiana's electricity rates. As these mandates come into effect, consumers are seeing their rates increase in order to cover the government-mandated transition to new technologies.

IOWA

PRICE RANK: 8TH

AVERAGE RETAIL PRICE (CENTS/KWH):	9.57
PRICE RANK:	8th
TOTAL RETAIL SALES (MWH):	54,203,955

TOP GENERATION SOURCES

Coal	63%
Hydroelectric	25%
Natural Gas	10%
Other	1%
Petroleum	1%

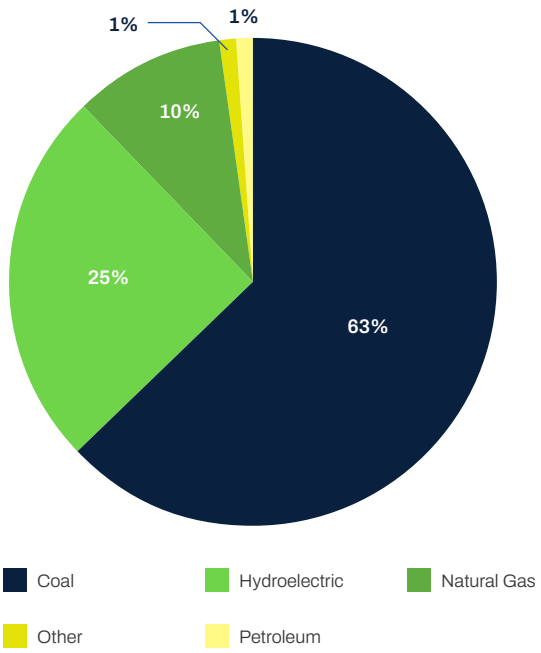
RELIABILITY: Two reported incidents

RENEWABLE PORTFOLIO STANDARD: Yes

NET METERING: Yes

CAP-AND-TRADE: No

TOP ENERGY SOURCES FOR IOWA



SUMMARY

Iowa's reliance on coal, which powers over 60% of the state, has helped it maintain some of the lowest energy prices in the country. With an additional 10% of the state using natural gas, nearly 75% of Iowa's energy comes from fossil fuels.

However, these affordable energy prices are at risk due to potentially ineffective programs like net metering and renewable portfolio standards. In states similarly dependent on fossil fuels, energy costs have risen as a result of these green initiatives.

Given that three energy sources account for 98% of the state's energy use, implementing effective green measures is challenging. This difficulty in transitioning could lead to higher prices, with taxpayers ultimately bearing the burden.

KANSAS

PRICE RANK: 27TH

AVERAGE RETAIL PRICE (CENTS/KWH):	11.47
PRICE RANK:	27th
TOTAL RETAIL SALES (MWH):	41,961,065

TOP GENERATION SOURCES

Wind	48%
Coal	33%
Nuclear	14%
Natural Gas	5%

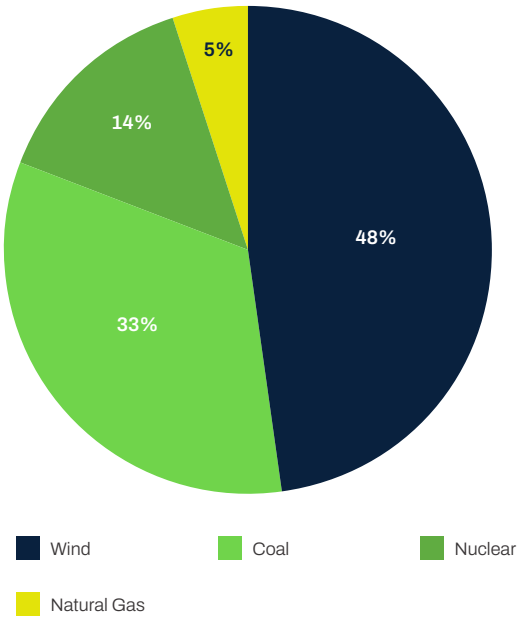
RELIABILITY: Two reported incidents

RENEWABLE PORTFOLIO STANDARD: Yes

NET METERING: Yes

CAP-AND-TRADE: No

TOP ENERGY SOURCES FOR KANSAS



SUMMARY

Kansas ranks in the middle of the pack in energy price affordability with a healthy mix in its energy portfolio, including wind, coal, natural gas, and nuclear. Despite having a net metering policy, little of the state's energy production comes from solar.

With much of its geography being open fields, the state is susceptible to tornadoes and the destruction that they cause. In 2023, Kansas had around 40 tornadoes, less than half of its annual average of 87. This is an indication that half of the state dependent on wind power could experience hardships if the right conditions are not present.

KENTUCKY

PRICE RANK:

20TH

AVERAGE RETAIL PRICE (CENTS/KWH):	10.51
PRICE RANK:	20th
TOTAL RETAIL SALES (MWH):	75,338,742

TOP GENERATION SOURCES

Coal	68%
Hydroelectric	25%
Natural Gas	7%

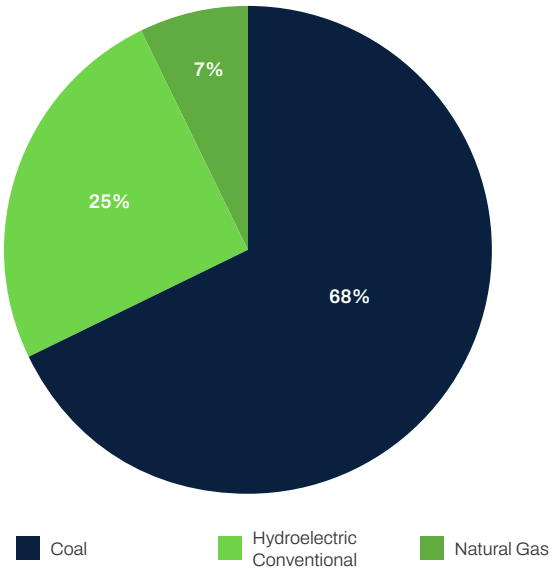
RELIABILITY: Five reported incidents

RENEWABLE PORTFOLIO STANDARD: No

NET METERING: Yes

CAP-AND-TRADE: No

TOP ENERGY SOURCES FOR KENTUCKY



SUMMARY

Kentucky is in the top five in the nation for coal production, with coal meeting about 68% of the state's electricity demand. This reliance on coal has historically allowed Kentucky to maintain relatively low energy prices. However, despite this advantage, Kentucky's energy affordability rank is only 20th in the country, primarily due to federal mandates that have increased the costs of coal generation.

Federal regulations aimed at reducing emissions and encouraging cleaner energy sources have imposed significant costs on coal-fired power plants. Compliance with these mandates often requires expensive upgrades to facilities, such as adding pollution control technologies, which raise operational costs. Utilities, in turn, pass these higher costs on to consumers through increased electricity rates. While Kentucky's heavy reliance on coal once meant some of the lowest energy prices in the nation, these regulations have made it more expensive to generate power from coal, pushing Kentucky down the energy affordability rankings.

Moreover, the lack of diversification in Kentucky's energy mix has made it vulnerable to fluctuations in coal prices and regulatory changes. Unlike states that have invested in a broader range of energy sources, Kentucky's dependence on coal leaves it exposed to the rising costs associated with stricter environmental policies. As a result, the state's electricity prices, though still relatively low, are not as competitive as they could be, highlighting the impact of federal mandates on coal-dependent states like Kentucky.

LOUISIANA

PRICE RANK:

18TH

AVERAGE RETAIL PRICE (CENTS/KWH):	10.41
PRICE RANK:	18th
TOTAL RETAIL SALES (MWH):	95,138,998

TOP GENERATION SOURCES

Natural Gas	71%
Nuclear	16%
Coal	8%
Petroleum	3%
Wood	2%

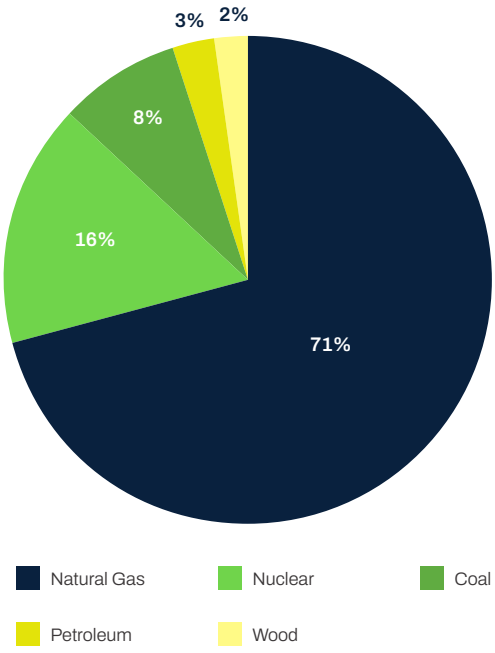
RELIABILITY: Four reported incidents

RENEWABLE PORTFOLIO STANDARD: No

NET METERING: Yes

CAP-AND-TRADE: No

TOP ENERGY SOURCES FOR LOUISIANA



SUMMARY

Louisiana's electricity prices are relatively low, with an average retail price of 10.41 cents per kWh, placing it 18th in the nation. The state's energy mix is dominated by natural gas, which accounts for 71% of electricity generation, followed by nuclear at 16%, coal at 8%, and small contributions from petroleum, wood, and wood-derived fuels. The heavy reliance on natural gas, a relatively affordable and abundant resource in the region, helps keep electricity prices in Louisiana competitive.

In terms of reliability, Louisiana has experienced only four reported incidents, indicating a stable and resilient power grid. The state's energy policy landscape, characterized by the absence of a Renewable Portfolio Standard and a Cap-and-Trade program, reflects a focus on maintaining affordable energy through traditional fuel sources. However, the presence of net metering suggests some support for distributed generation, though it is not a major driver of the state's energy strategy.

Louisiana's approach to energy has helped maintain both affordability and reliability, but its reliance on natural gas and the lack of diversification into renewable energy could pose challenges in the future. As federal and market pressures push for cleaner energy sources, the state may face increased costs if it does not adapt its energy portfolio. For now, however, Louisiana continues to benefit from low electricity prices and a reliable grid, largely due to its natural gas infrastructure.

MAINE

PRICE RANK:

42ND

AVERAGE RETAIL PRICE (CENTS/KWH):	17.44
PRICE RANK:	42nd
TOTAL RETAIL SALES (MWH):	11,875,708

TOP GENERATION SOURCES

Natural Gas	34%
Hydroelectric	25%
Wind	23%
Wood	14%
Solar	4%

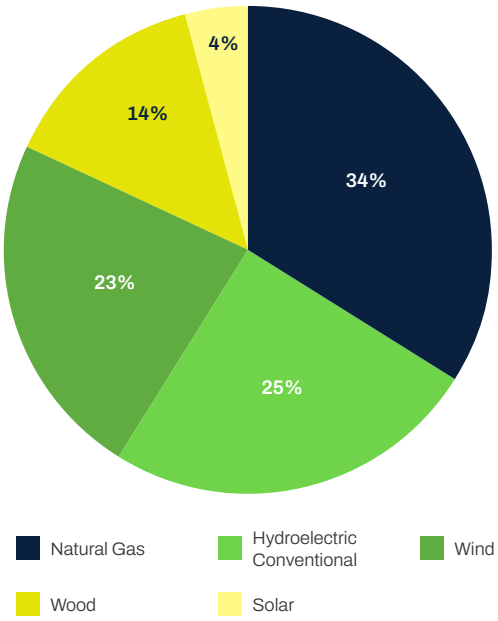
RELIABILITY: Seven reported incidents

RENEWABLE PORTFOLIO STANDARD: Yes

NET METERING: Yes

CAP-AND-TRADE: Yes

TOP ENERGY SOURCES FOR MAINE



SUMMARY

Maine's electricity prices are among the highest in the country, with an average retail price of 17.44 cents per kWh, ranking 42nd nationally. Several factors contribute to these high prices, including the state's energy mix and policy landscape. Although Maine has a diverse energy portfolio, with natural gas (34%), hydroelectric (25%), wind (23%), wood (14%), and solar (4%) as its top generation sources, this reliance on renewable energy sources and natural gas drives up costs. Renewable energy often requires significant upfront investments and can have higher per-unit generation costs compared to fossil fuels, particularly when factoring in the variability and intermittency of sources like wind and solar.

Maine's energy policies also play a role in its high electricity prices. The state has implemented a Renewable Portfolio Standard (RPS), increasing costs as utilities invest in more expensive renewable infrastructure or purchase renewable energy credits to meet these requirements. Additionally, Maine's participation in the Regional Greenhouse Gas Initiative adds another layer of cost by requiring utilities to pay for carbon allowances, further driving up electricity prices. Meanwhile, net metering policies shift costs onto non-participating customers, exacerbating the price burden for the general population.

In terms of reliability, Maine has reported seven incidents, indicating some challenges in maintaining consistent service. This, combined with the state's policy-driven emphasis on renewables, suggests that while Maine is committed to a cleaner energy future, the transition has come at a cost to consumers. The combination of expensive renewable energy mandates, carbon pricing mechanisms, and the inherent costs of integrating renewables into the grid has made electricity less affordable for Maine's residents, contributing to the state's relatively low energy affordability rank.

MARYLAND

PRICE RANK: 39TH

AVERAGE RETAIL PRICE (CENTS/KWH):	13.32
PRICE RANK:	39th
TOTAL RETAIL SALES (MWH):	59,682,719

TOP GENERATION SOURCES

Nuclear	41%
Natural Gas	39%
Coal	13%
Hydroelectric	5%
Solar	2%

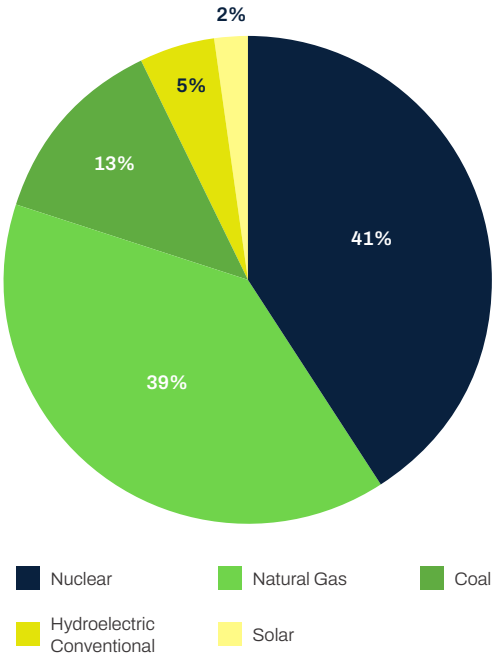
RELIABILITY: Five incidents reported

RENEWABLE PORTFOLIO STANDARD: Yes

NET METERING: Yes

CAP-AND-TRADE: Yes

TOP ENERGY SOURCES FOR MARYLAND



SUMMARY

Maryland's electricity prices rank as some of the worst in the nation, with an average retail price of 13.32 cents per kWh. The state's energy generation is predominantly sourced from nuclear power (41%) and natural gas (39%), with coal contributing 13%, hydroelectric 5%, and solar 2%. Despite a relatively diverse energy mix, Maryland's energy prices are relatively high.

One of the primary reasons for Maryland's elevated electricity prices is its policy landscape. Maryland has implemented a Renewable Portfolio Standard (RPS), which mandates that utilities generate a specific percentage of their electricity from renewable sources, requiring significant investments that are not optimized to best serve consumers. The state's participation in the Regional Greenhouse Gas Initiative, a Cap-and-Trade program, adds further costs by requiring utilities to purchase carbon allowances, driving up the price of electricity generated from fossil fuels. Additionally, net metering policies, while beneficial for small-scale renewable producers, can shift costs onto non-participating consumers, contributing to the overall increase in electricity prices.

Maryland's reliability is relatively stable, with five incidents reported, indicating a reasonably resilient grid. However, the combination of high infrastructure costs, regulatory mandates, and participating in a cap-and-trade scheme leads to elevated electricity prices.

MASSACHUSETTS

PRICE RANK:

48TH

AVERAGE RETAIL PRICE (CENTS/KWH):	21.27
PRICE RANK:	48th
TOTAL RETAIL SALES (MWH):	50,983,440

TOP GENERATION SOURCES

Natural Gas	77%
Solar	10%
Other	5%
Biomass	4%
Hydroelectric	4%

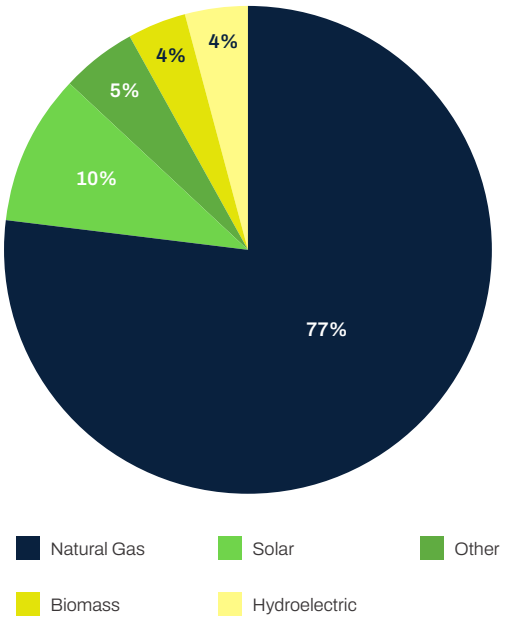
RELIABILITY: Eight reported incidents

RENEWABLE PORTFOLIO STANDARD: Yes

NET METERING: Yes

CAP-AND-TRADE: Yes

TOP ENERGY SOURCES FOR MASSACHUSETTS



SUMMARY

Massachusetts has some of the least affordable electricity in the nation, largely due to the state's aggressive policy framework. The state has implemented a Renewable Portfolio Standard (RPS) that mandates increasing amounts of electricity to be generated from renewable sources, driving up costs to consumers as utilities must invest in expensive renewable infrastructure. Additionally, the state's participation in the Regional Greenhouse Gas Initiative adds additional costs by requiring utilities to pay for carbon emissions, further increasing the price of electricity. Net metering policies, while encouraging distributed solar generation, shift some of the cost burden onto other consumers, exacerbating the overall price challenge.

The combination of high infrastructure costs, the need to meet stringent renewable energy mandates, and reliance on a single dominant fuel source has made electricity in Massachusetts among the most expensive in the country. As the state continues to push a top-down, mandate-heavy agenda, the associated costs will likely keep its electricity prices at the higher end of the spectrum, impacting the overall affordability for residents and businesses alike.

In terms of reliability, Massachusetts has reported eight incidents, reflecting some grid challenges.

MICHIGAN

PRICE RANK: 38TH

AVERAGE RETAIL PRICE (CENTS/KWH):	13.20
PRICE RANK:	38th
TOTAL RETAIL SALES (MWH):	100,639,262

TOP GENERATION SOURCES

Natural Gas	37%
Coal	31%
Nuclear	23%
Wind	8%
Petroleum	1%

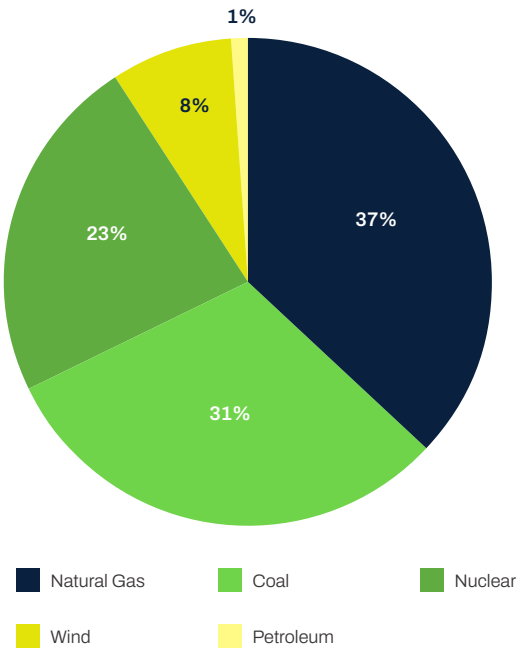
RELIABILITY: Nine reported incidents

RENEWABLE PORTFOLIO STANDARD: Yes

NET METERING: Yes

CAP-AND-TRADE: No

TOP ENERGY SOURCES FOR MICHIGAN



SUMMARY

Michigan's electricity prices are higher than the national average, with an average retail price of 13.2 cents per kWh, ranking 38th in affordability. The state's electricity generation is diversified across natural gas (37%), coal (31%), and nuclear (23%), with wind contributing 8% and petroleum just 1%. This diverse energy mix provides stability, but Michigan's reliance on older coal plants heavily burdened by federal regulation significantly drives up energy costs.

One of the primary factors driving Michigan's high electricity prices is the state's energy policy. Michigan has implemented a Renewable Portfolio Standard (RPS) that requires a growing share of electricity to come from renewable sources, which has led to significant investments in wind energy and other renewables. While these investments align with the state's progressive environmental goals, they also contribute to higher current electricity prices as utilities pass on the costs of developing new infrastructure to consumers. Moreover, Michigan's net metering policy, which incentivizes small-scale renewable generation, can shift some of the cost burden onto other ratepayers, adding to the overall price.

Michigan's reliability has been challenged, with nine reported incidents reflecting some grid instability. The combination of high costs associated with federally required upgrades to coal and nuclear plants, the financial burden of meeting renewable energy mandates, and the costs of ensuring grid reliability contribute to Michigan's high electricity prices. As the state continues its transition toward a cleaner energy future, these challenges will likely persist, making it difficult for Michigan to significantly lower its electricity costs in the near term.

MINNESOTA

PRICE RANK: 36TH

AVERAGE RETAIL PRICE (CENTS/KWH):	12.04
PRICE RANK:	36th
TOTAL RETAIL SALES (MWH):	66,635,430

TOP GENERATION SOURCES

Coal	29%
Wind	27%
Nuclear	26%
Natural Gas	15%
Solar	3%

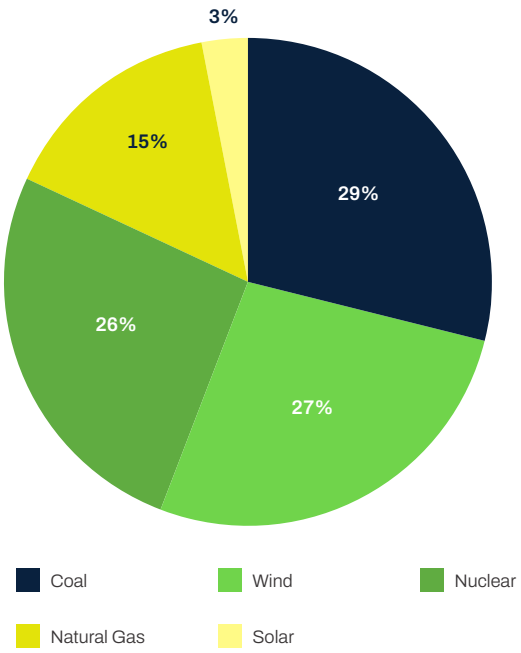
RELIABILITY: Three reported incidents

RENEWABLE PORTFOLIO STANDARD: Yes

NET METERING: Yes

CAP-AND-TRADE: No

TOP ENERGY SOURCES FOR MINNESOTA



SUMMARY

Minnesota's electricity prices rank 36th in the nation, with an average retail price of 12.04 cents per kWh, slightly above the national average. The state's energy generation is split among coal (29%), wind (27%), nuclear (26%), natural gas (15%), and solar (3%). While this diverse energy mix should ideally offer price stability, the state's increasing reliance on wind and solar—driven by policy mandates—has added significant costs. Coal and nuclear, traditionally stable and cost-effective energy sources are being phased out in favor of renewables, which require expensive infrastructure investments and ongoing subsidies, ultimately driving up costs for consumers.

Minnesota's Renewable Portfolio Standard (RPS) and net metering policies have accelerated the shift toward renewable energy but at a steep price for consumers. The RPS forces utilities to invest heavily in wind and solar projects, passing these costs onto ratepayers. Additionally, net metering policies, designed to incentivize small-scale renewable generation, disproportionately shift grid maintenance costs onto consumers who do not participate in these programs. These policies, while well-intentioned, have led to higher electricity prices, undermining affordability for Minnesota residents and businesses.

Despite having only three reported reliability incidents, Minnesota's push for renewables poses risks to both price stability and grid reliability. The transition away from reliable baseload energy sources like coal and nuclear toward more variable and less predictable wind and solar has increased the financial burden on consumers. As the state continues down this path, the harmful impact of rising electricity costs will be felt more acutely, challenging Minnesota's ability to maintain affordable energy in the long term.

MISSISSIPPI

PRICE RANK:

17TH

AVERAGE RETAIL PRICE (CENTS/KWH):	10.36
PRICE RANK:	17th
TOTAL RETAIL SALES (MWH):	48,979, 533

TOP GENERATION SOURCES

Natural Gas	76%
Nuclear	13%
Coal	8%
Wood	2%
Solar	1%

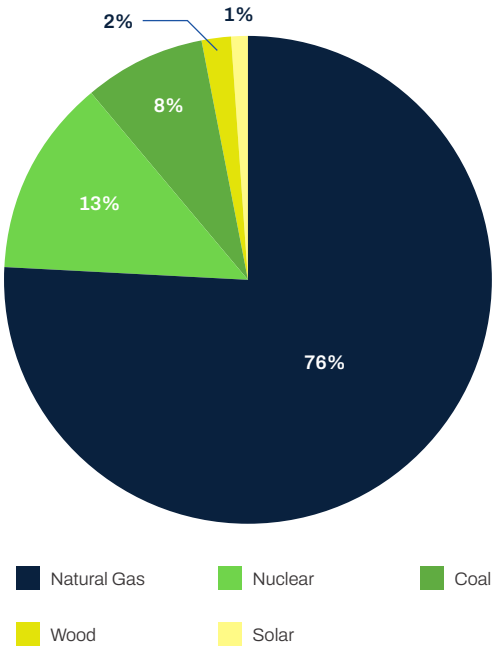
RELIABILITY: Nine reported incidents

RENEWABLE PORTFOLIO STANDARD: No

NET METERING: Yes

CAP-AND-TRADE: No

TOP ENERGY SOURCES FOR MISSISSIPPI



SUMMARY

Mississippi ranks 17th in the nation for electricity affordability, with an average retail price of 10.36 cents per kWh. The state's energy generation is overwhelmingly dependent on natural gas, which accounts for 76% of its electricity mix, followed by nuclear (13%) and coal (8%). This reliance on natural gas, combined with a relatively small contribution from renewables, has kept electricity prices low for Mississippi consumers. Unlike many other states, Mississippi has avoided aggressive renewable energy mandates, allowing it to maintain affordable energy prices without the added financial burden of transitioning to costlier, less reliable renewable sources.

Mississippi's cautious approach to renewable energy has shielded consumers from the price increases seen in other states that have implemented Renewable Portfolio Standards (RPS) and Cap-and-Trade programs. Although the state has a net metering policy, its limited adoption of solar energy—just 1% of its generation mix—means that Mississippi has largely avoided the cost-shifting problems associated with these policies. By focusing on natural gas and maintaining a balanced mix that includes nuclear and coal, Mississippi has kept electricity prices stable and avoided the financial pitfalls that come with heavy investments in renewable infrastructure.

However, Mississippi faces reliability challenges, with nine reported incidents. This is largely due to the state's location along the Gulf of America, which exposes the grid to hurricanes.

MISSOURI

PRICE RANK: 16TH

AVERAGE RETAIL PRICE (CENTS/KWH):	10.26
PRICE RANK:	16th
TOTAL RETAIL SALES (MWH):	80,306,260

TOP GENERATION SOURCES

Coal	67%
Nuclear	11%
Natural Gas	10%
Wind	10%
Hydroelectric	2%

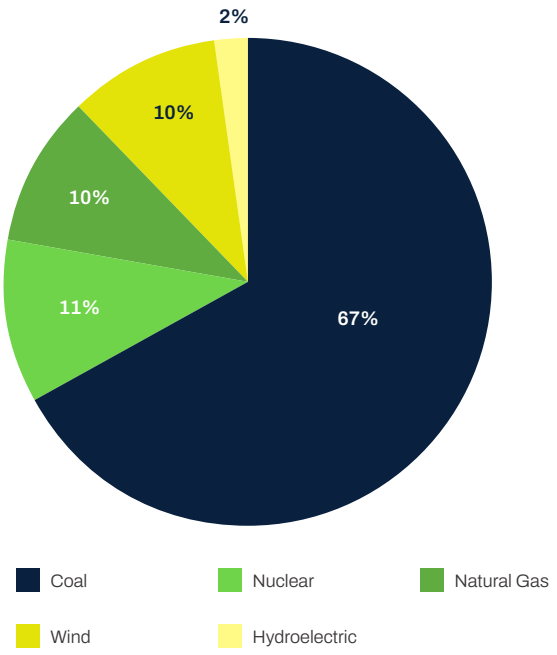
RELIABILITY: Six reported incidents

RENEWABLE PORTFOLIO STANDARD: Yes

NET METERING: Yes

CAP-AND-TRADE: No

TOP ENERGY SOURCES FOR MISSOURI



SUMMARY

Missouri ranks 16th in the nation for electricity affordability, with an average retail price of 10.26 cents per kWh. The state's reliance on coal, which generates 67% of its electricity, plays a crucial role in keeping energy costs low. In addition to coal, Missouri's energy mix includes nuclear (11%), natural gas (10%), wind (10%), and hydroelectric power (2%). This diverse mix, particularly the use of low-cost coal, has helped maintain affordable electricity for Missouri residents.

However, Missouri's implementation of a Renewable Portfolio Standard (RPS) and net metering policies has the potential to increase costs for consumers. Mandates forcing utilities to invest in renewable energy sources like wind come with higher costs. As these expenses are passed on to consumers, they risk driving up electricity prices, potentially undermining the affordability that Missouri has long enjoyed.

Missouri reported six reliability incidents, underscoring the need for a stable energy mix. The state must carefully balance its energy policies to ensure that the shift toward renewables does not compromise the affordability and reliability that residents currently benefit from. Missouri's energy laws and diverse generation sources are key factors in maintaining its position as a leader in electricity affordability.

MONTANA

PRICE RANK:

12TH

AVERAGE RETAIL PRICE (CENTS/KWH):	9.97
PRICE RANK:	12th
TOTAL RETAIL SALES (MWH):	15,583, 260

TOP GENERATION SOURCES

Coal	43%
Hydroelectric	37%
Wind	15%
Natural Gas	3%
Petroleum	2%

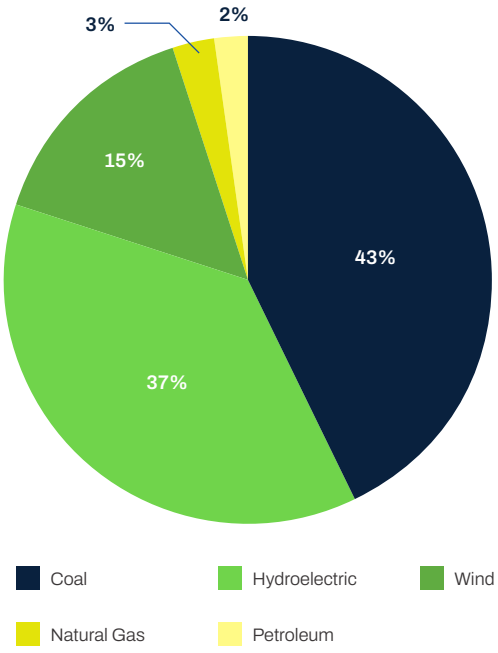
RELIABILITY: Three incidents reported

RENEWABLE PORTFOLIO STANDARD: Yes

NET METERING: Yes

CAP-AND-TRADE: No

TOP ENERGY SOURCES FOR MONTANA



SUMMARY

Montana's relatively low electricity prices, ranking 12th in the nation, reflect a strong balance between affordability and energy reliability. The state's energy mix is notably diverse, with coal providing 43% of the total electricity generation. This reliance on coal, a cost-effective and stable energy source, is a key factor in keeping costs low for consumers. While Montana does have a Renewable Portfolio Standard (RPS) and net metering laws, these mandates have not significantly driven up costs due to the state's prudent energy mix, which includes substantial contributions from hydroelectric power.

In addition to coal, hydroelectric power accounts for 37% of Montana's energy generation, leveraging the state's natural water resources to produce low-cost electricity. Wind power, while contributing 15% to the overall generation as part of the RPS, is effectively balanced by the larger shares of coal and hydro, ensuring that the RPS does not overly burden consumers with higher costs.

Montana's energy infrastructure is relatively resilient, with only three reported incidents affecting reliability throughout the year. This solid performance underscores the effectiveness of the state's diverse energy mix in maintaining both affordability and reliability, even under the pressures of state-mandated renewable energy requirements. Montana's energy policies and resource management offer a model of how to keep energy prices low while navigating the complexities of modern energy demands.

NEBRASKA

PRICE RANK:

5TH

AVERAGE RETAIL PRICE (CENTS/KWH):	8.83
PRICE RANK:	5th
TOTAL RETAIL SALES (MWH):	33,844,105

TOP GENERATION SOURCES

Coal	49%
Wind	31%
Nuclear	14%
Natural Gas	3%
Hydroelectric	3%

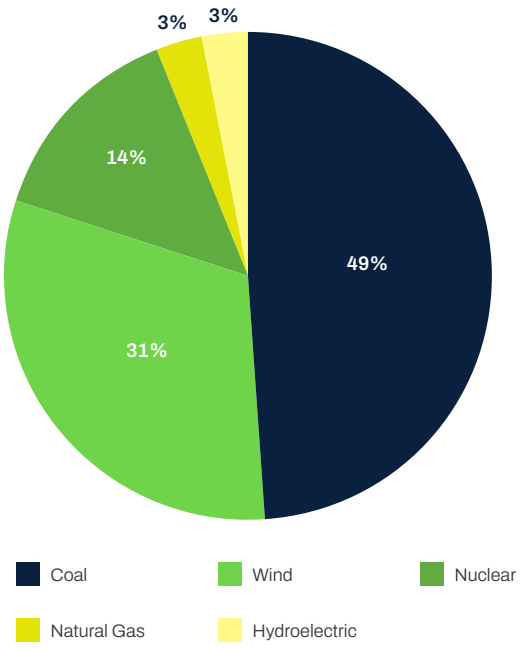
RELIABILITY: Three reported incidents

RENEWABLE PORTFOLIO STANDARD: No

NET METERING: Yes

CAP-AND-TRADE: No

TOP ENERGY SOURCES FOR NEBRASKA



SUMMARY

Nebraska boasts some of the lowest electricity prices in the nation, ranking 5th overall, thanks to its strategic approach to energy policy. The state's reliance on traditional energy sources like coal, which accounts for 49% of its electricity generation, combined with wind energy at 31% and nuclear power at 14%, helps maintain affordable energy for consumers. This diverse energy mix, focused on cost-effective and reliable sources, ensures that Nebraska remains a leader in energy affordability.

A key factor in Nebraska's low electricity costs is the absence of a Renewable Portfolio Standard (RPS) and cap-and-trade schemes, which are often implemented in other states as top-down mandates that can drive up energy costs. Nebraska's decision to forgo these policies has allowed the state to avoid the additional financial burdens associated with forced renewable energy adoption and carbon trading markets. Instead, the state has maintained a balanced energy portfolio that prioritizes affordability and reliability without the constraints of excessive regulation.

While Nebraska does have limited net metering, which allows some consumers to offset their energy costs by generating their own electricity, this policy has not significantly impacted the overall affordability of energy in the state. By avoiding more extensive net metering schemes and resisting the push for costly renewable mandates, Nebraska has managed to keep electricity prices low, providing a significant advantage to its residents and businesses.

NEVADA

PRICE RANK: 25TH

AVERAGE RETAIL PRICE (CENTS/KWH):	10.94
PRICE RANK:	25th
TOTAL RETAIL SALES (MWH):	39,320,007

TOP GENERATION SOURCES

Natural Gas	59%
Solar	21%
Geothermal	9%
Coal	7%
Hydroelectric	4%

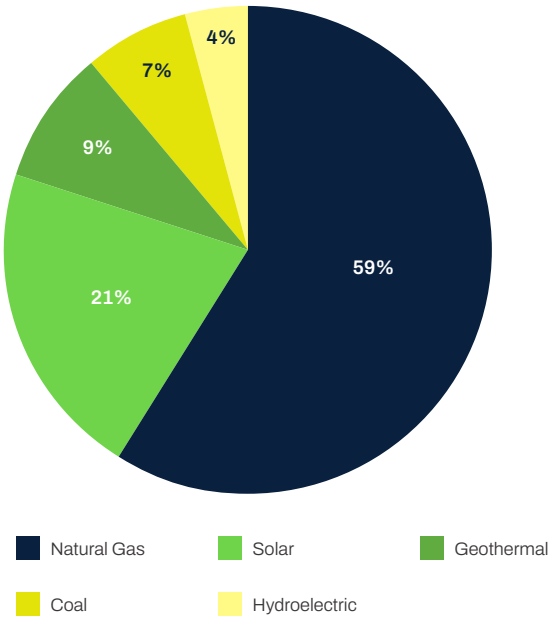
RELIABILITY: One reported incident

RENEWABLE PORTFOLIO STANDARD: Yes

NET METERING: Yes

CAP-AND-TRADE: No

TOP ENERGY SOURCES FOR NEVADA



SUMMARY

Nevada's electricity prices, ranked 25th in the nation, reflect a balance between affordability and the costs associated with its energy policies. The state's energy mix is heavily reliant on natural gas, which accounts for 59% of electricity generation. This dependence on natural gas helps to moderate prices, as it is generally a more cost-effective energy source compared to renewables. However, Nevada's participation in net metering schemes and a state-mandated Renewable Portfolio Standard (RPS) introduces significant costs that ultimately burden consumers.

The state's RPS and net metering policies have driven substantial investment in renewable energy sources, particularly solar, which now makes up 21% of Nevada's energy mix. This shift towards renewables imposes higher costs on the state's energy infrastructure. Solar and geothermal energy, though increasingly prominent, require substantial upfront investments. The top-down nature of the RPS, which mandates a specific percentage of energy from renewable sources, forces utilities to incorporate these higher-cost energy sources, further driving up costs for consumers.

Despite these advancements, Nevada faces challenges in balancing its energy mix, particularly with the gradual phase-out of coal, which still accounts for 7% of generation. The state reported one incident affecting energy reliability, indicating that while Nevada's energy infrastructure is generally robust, it is not without its vulnerabilities. Fortunately, Nevada does not have a Cap-and-Trade program.

NEW HAMPSHIRE

PRICE RANK: 46TH

AVERAGE RETAIL PRICE (CENTS/KWH):	21.07
PRICE RANK:	46th
TOTAL RETAIL SALES (MWH):	10,818,130

TOP GENERATION SOURCES

Nuclear	61%
Natural Gas	25%
Hydroelectric	7%
Wood	4%
Wind	3%

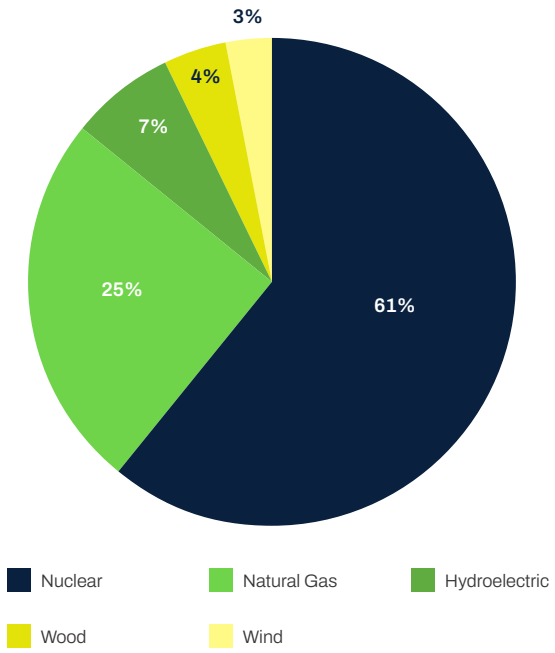
RELIABILITY: Seven reported incidents

RENEWABLE PORTFOLIO STANDARD: Yes

NET METERING: Yes

CAP-AND-TRADE: Yes

TOP ENERGY SOURCES FOR NEW HAMPSHIRE



SUMMARY

New Hampshire's electricity prices are among the highest in the nation, ranking 46th in affordability. This is largely due to the state's participation in the Regional Greenhouse Gas Initiative (RGGI), a cap-and-trade program that imposes costs on power plants for their carbon emissions. These costs are inevitably passed down to consumers, driving up electricity prices. Additionally, the state's Renewable Portfolio Standard (RPS) mandates that a certain percentage of electricity must come from renewable sources, further inflating prices as utilities are forced to invest in more expensive energy sources like wind and solar, regardless of their cost-effectiveness.

Net metering schemes in New Hampshire also contribute to higher electricity rates. By allowing consumers with solar panels to sell excess electricity back to the grid at retail rates, utilities are forced to buy power at a higher cost than they would otherwise. This financial burden is then shifted to other consumers who do not participate in net metering, resulting in increased electricity bills for the average household. The combination of RGGI, the RPS, and net metering creates a significant cost burden on consumers, making electricity far more expensive than in states that avoid such top-down mandates.

Despite the state's reliance on nuclear and natural gas, which together account for 86% of its energy generation, the added costs from these regulatory programs are inescapable. New Hampshire's energy policies not only fail to deliver on the promise of affordable and reliable energy, but they also make consumers bear the brunt of these misguided efforts. With seven reported incidents affecting energy reliability, it's clear that these policies are not even delivering on the goal of a stable grid, instead imposing heavy financial burdens on New Hampshire residents while providing little in return.

NEW JERSEY

PRICE RANK:

40TH

AVERAGE RETAIL PRICE (CENTS/KWH):	14.8
PRICE RANK:	40th
TOTAL RETAIL SALES (MWH):	74,442,735

TOP GENERATION SOURCES

Natural Gas	52%
Nuclear	44%
Solar	2%
Other Biomass	1%
Other	1%

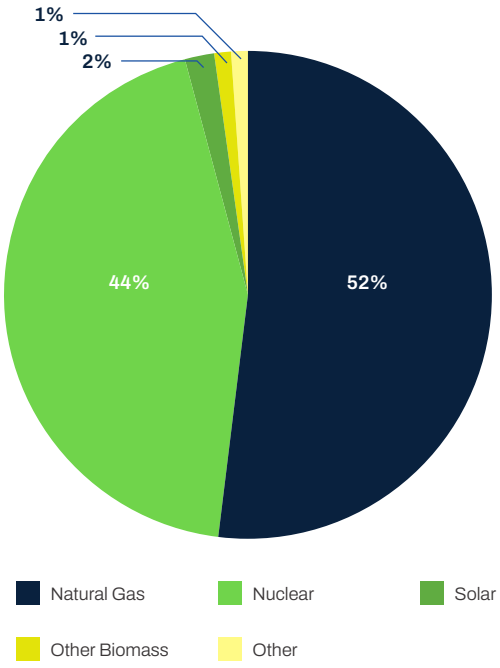
RELIABILITY: One incident reported

RENEWABLE PORTFOLIO STANDARD: Yes

NET METERING: Yes

CAP-AND-TRADE: Yes

TOP ENERGY SOURCES FOR NEW JERSEY



SUMMARY

New Jersey's electricity prices rank among the highest in the nation, with consumers paying a steep 14.8 cents per kilowatt-hour. A significant factor driving these high costs is the state's aggressive energy policies, including its participation in the Regional Greenhouse Gas Initiative (RGGI), its Renewable Portfolio Standard (RPS), and net metering schemes. These mandates drive up electricity prices, leaving consumers to shoulder the financial burden of the state's push toward renewable energy.

New Jersey's energy generation mix is dominated by natural gas and nuclear power, which together account for 96% of the state's electricity. Despite the stable and reliable output from these sources, the state's energy policies still lead to inflated costs. The RGGI, a cap-and-trade program, adds another layer of expense by forcing power plants to buy emissions allowances, costs that are ultimately passed down to consumers. This program, combined with the RPS, places additional strain on an energy market that would otherwise benefit from its existing natural gas and nuclear capacity. Instead of capitalizing on these low-cost, reliable sources, New Jersey's top-down energy policies contribute to its high electricity prices, harming consumers who already face one of the most expensive energy markets in the country.

Although New Jersey reported only one reliability incident, the state's focus on costly renewable mandates and participation in RGGI poses long-term risks. As the state continues to impose burdensome regulations and mandates, energy prices are likely to remain high, putting even more pressure on consumers. The state's current path threatens to undermine the affordability and reliability of its energy supply, with consumers bearing the brunt of policies that prioritize environmental goals over economic realities.

NEW MEXICO

PRICE RANK:

13TH

AVERAGE RETAIL PRICE (CENTS/KWH):	10.02
PRICE RANK:	13th
TOTAL RETAIL SALES (MWH):	27,156,178

TOP GENERATION SOURCES

Wind	35%
Coal	33%
Natural Gas	27%
Solar	5%

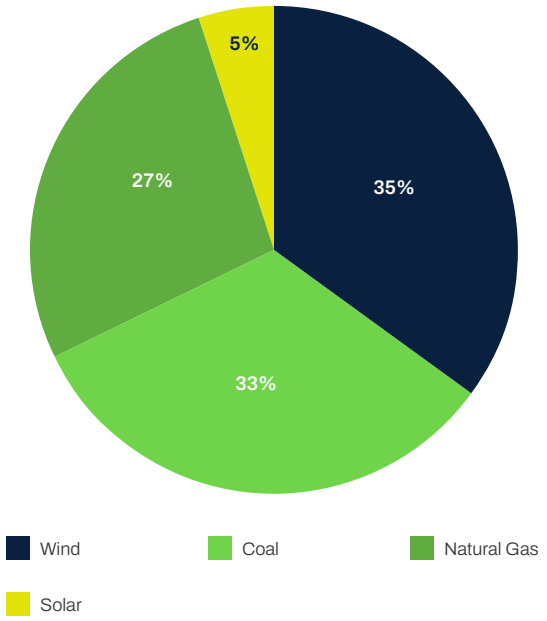
RELIABILITY: Three reported incidents

RENEWABLE PORTFOLIO STANDARD: Yes

NET METERING: Yes

CAP-AND-TRADE: No

TOP ENERGY SOURCES FOR NEW MEXICO



SUMMARY

New Mexico ranks 13th in energy affordability, with its energy generation being notably diverse. Wind power is the leading source of electricity in New Mexico, contributing 35% of the state's total generation. Coal and natural gas also play substantial roles, accounting for 33% and 27% of the energy mix, respectively. Solar energy, while a much smaller portion, contributes 5%, reflecting New Mexico's abundant solar resources.

Despite its progress in renewable energy adoption, New Mexico faces some challenges in energy reliability. The state reported three incidents affecting reliability during the study period, which suggests that while New Mexico is advancing in renewable energy, maintaining grid stability and reliability is an ongoing concern. The state's reliance on both renewable and traditional energy sources requires a balanced approach to ensure that the energy transition does not compromise service reliability. As New Mexico continues to navigate the future of energy policy, balancing affordability, sustainability, and reliability while diversifying its portfolio will be crucial to its long-term success in the energy sector.

NEW YORK

PRICE RANK:

43RD

AVERAGE RETAIL PRICE (CENTS/KWH):	18.33
PRICE RANK:	43rd
TOTAL RETAIL SALES (MWH):	143,210,517

TOP GENERATION SOURCES

Natural Gas	50%
Hydroelectric	23%
Nuclear	22%
Wind	4%
Petroleum	1%

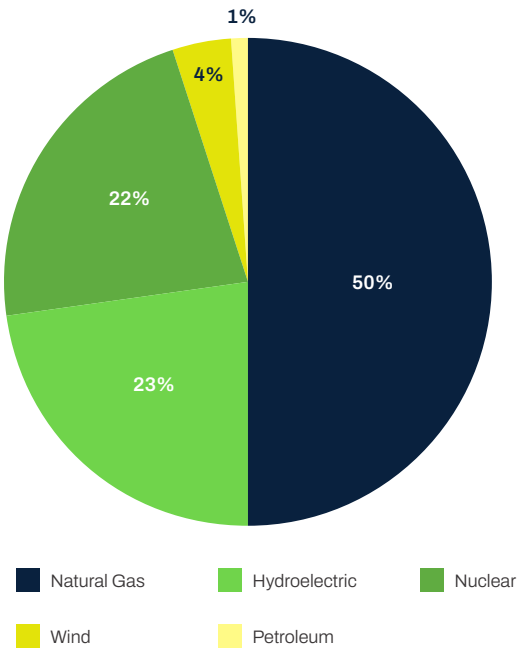
RELIABILITY: Six incidents reported

RENEWABLE PORTFOLIO STANDARD: Yes

NET METERING: Yes

CAP-AND-TRADE: Yes

TOP ENERGY SOURCES FOR NEW YORK



SUMMARY

New York's electricity prices are among the highest in the nation, ranking 43rd in affordability with an average retail price of 18.33 cents per kWh. A significant factor behind these elevated costs is the state's aggressive energy policies, including its participation in the Regional Greenhouse Gas Initiative (RGGI), net metering schemes, and a stringent Renewable Portfolio Standard (RPS). These top-down mandates force utilities to prioritize expensive renewable energy sources, such as wind and solar, over more affordable and reliable options like natural gas and nuclear. This shift drives up the cost of electricity for consumers, who ultimately bear the financial burden of these policies.

The impact of these policies is compounded by the state's heavy reliance on natural gas, which makes up 50% of New York's energy mix, followed by hydroelectric (23%) and nuclear (22%). While these sources are more stable and cost-effective, the state's insistence on integrating less reliable and more costly renewable energy options, such as wind power, which only contributes 4%, further strains the system. The added costs of complying with RGGI's carbon trading scheme, along with the financial incentives provided to small-scale renewable projects through net metering, have only exacerbated the price hikes. These measures may align with certain environmental goals, but they place an unnecessary burden on consumers, who are already grappling with high living costs.

Furthermore, New York's energy infrastructure has proven vulnerable, with six reported incidents affecting reliability. This is indicative of the challenges posed by the state's energy policies, which prioritize environmental objectives over the needs of everyday consumers. As New York continues to push forward with its costly and ambitious energy agenda, the result is a combination of high prices and questionable reliability, leaving residents to pay more for less dependable electricity.

NORTH CAROLINA

PRICE RANK: 9TH

AVERAGE RETAIL PRICE (CENTS/KWH):	9.6
PRICE RANK:	9th
TOTAL RETAIL SALES (MWH):	139,206,781

TOP GENERATION SOURCES

Natural Gas	44%
Nuclear	32%
Coal	11%
Solar	9%
Hydroelectric	4%

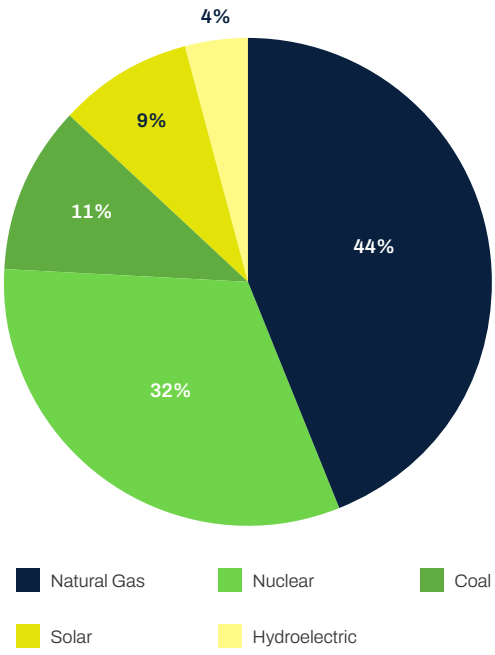
RELIABILITY: Fourteen incidents were reported

RENEWABLE PORTFOLIO STANDARD: Yes

NET METERING: Yes

CAP-AND-TRADE: No

TOP ENERGY SOURCES FOR NORTH CAROLINA



SUMMARY

North Carolina ranks 9th in energy affordability, largely due to its diverse energy mix. Natural gas is the state's largest electricity source, accounting for 44% of energy production, followed by nuclear power at 32%. This blend of natural gas and nuclear power has been instrumental in keeping energy costs relatively low while providing a stable supply of electricity. Although solar power contributes 9% and hydroelectric sources 4%, coal, once a major player, now only makes up 11% of the state's generation, signaling a move away from fossil fuels.

Despite its diverse energy portfolio, North Carolina's energy policies, including a Renewable Portfolio Standard (RPS) and net metering, have introduced higher costs to consumers. The RPS has driven investments in solar energy, but these policies have also added financial burdens to the energy sector that are ultimately passed on to consumers.

North Carolina also faces significant challenges in energy reliability, with fourteen incidents reported. The state's geographic location makes it particularly vulnerable to hurricanes, which can wreak havoc on the energy grid. These incidents highlight the vulnerabilities in North Carolina's energy infrastructure, underscoring the need for enhanced resilience.

NORTH DAKOTA

PRICE RANK: 2ND

AVERAGE RETAIL PRICE (CENTS/KWH):	8.42
PRICE RANK:	2nd
TOTAL RETAIL SALES (MWH):	25,392, 877

TOP GENERATION SOURCES

Coal	56%
Wind	37%
Hydroelectric	4%
Natural Gas	3%
Other Gases	0%

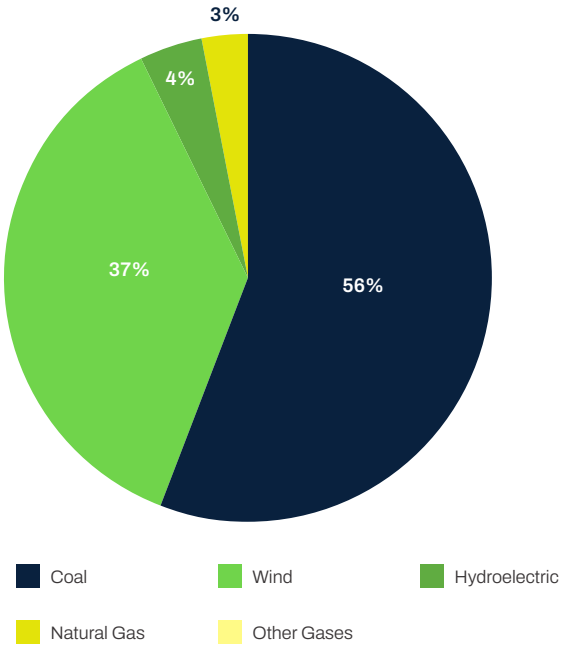
RELIABILITY: Three incidents reported

RENEWABLE PORTFOLIO STANDARD: Yes

NET METERING: Yes

CAP-AND-TRADE: No

TOP ENERGY SOURCES FOR NORTH DAKOTA



SUMMARY

North Dakota's energy affordability is a standout success, ranking as the second lowest in the nation with an average retail price of just 8.42 cents per kilowatt-hour. This remarkable achievement is largely due to the state's abundant energy resources, particularly its vast lignite coal reserves and natural wind energy potential. Coal-fired power plants generate 56% of the state's electricity, while wind energy contributes a significant 37%, showcasing a well-balanced energy mix that keeps prices low. North Dakota has effectively leveraged its natural resources to ensure affordable energy for its residents while maintaining a reliable supply with only three reported incidents.

Despite the increased costs typically associated with renewable energy mandates, North Dakota has managed to keep electricity prices low while adhering to a Renewable Portfolio Standard (RPS) and supporting net metering policies. These initiatives encourage the growth of renewable energy and promote small-scale energy generation, particularly from wind power. North Dakota's ability to balance these progressive policies with its traditional energy sources demonstrates a model of how states can pursue renewable energy goals without sacrificing affordability.

North Dakota's success in maintaining low electricity prices, despite the added costs from RPS and net metering, highlights the importance of resource management and energy diversity. By avoiding carbon taxes and other costly mandates while still supporting renewable energy, the state has created an energy landscape that is both economically and environmentally sustainable.

OHIO

PRICE RANK:

21ST

AVERAGE RETAIL PRICE (CENTS/KWH):	10.64
PRICE RANK:	21st
TOTAL RETAIL SALES (MWH):	149,499,783

TOP GENERATION SOURCES

Natural Gas	52%
Coal	32%
Nuclear	13%
Wind	2%
Petroleum	1%

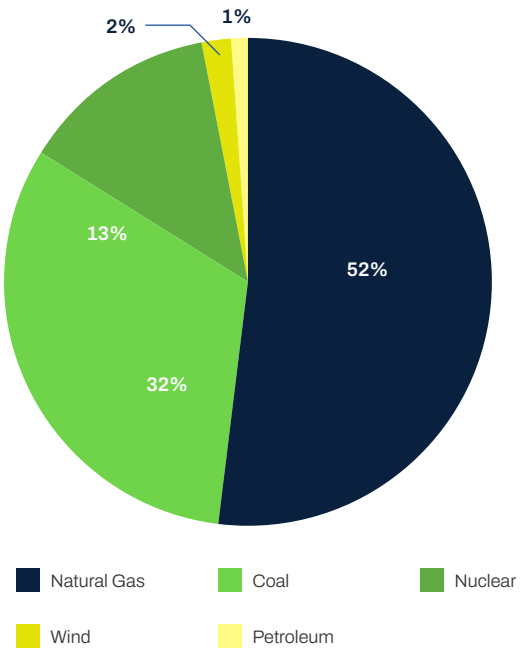
RELIABILITY: Nine reported incidents

RENEWABLE PORTFOLIO STANDARD: Yes

NET METERING: Yes

CAP-AND-TRADE: No

TOP ENERGY SOURCES FOR OHIO



SUMMARY

Ohio's energy generation is primarily fueled by natural gas, which accounts for 52% of its electricity production. Coal, historically a dominant source, still makes up 32% of the state's energy mix, reflecting a significant reliance on fossil fuels. Nuclear energy contributes 13%, providing a stable alternative. Renewable energy sources play a much smaller role, with wind accounting for 2% and petroleum for 1% of the state's energy generation.

However, Ohio faces significant challenges in maintaining reliability, as evidenced by the nine reported incidents during the study period. This relatively high number of incidents indicates potential weaknesses in the state's energy infrastructure, which may be exacerbated by the transition away from coal to more variable renewable sources.

As Ohio continues to navigate its energy future, balancing the need for affordable, reliable energy while managing the diversification of its energy portfolio will be key to the state's long-term success in the energy sector.

OKLAHOMA

PRICE RANK:

14TH

AVERAGE RETAIL PRICE (CENTS/KWH):	10.05
PRICE RANK:	14th
TOTAL RETAIL SALES (MWH):	69,486,942

TOP GENERATION SOURCES

Wind	44%
Natural Gas	43%
Coal	11%
Hydroelectric	2%

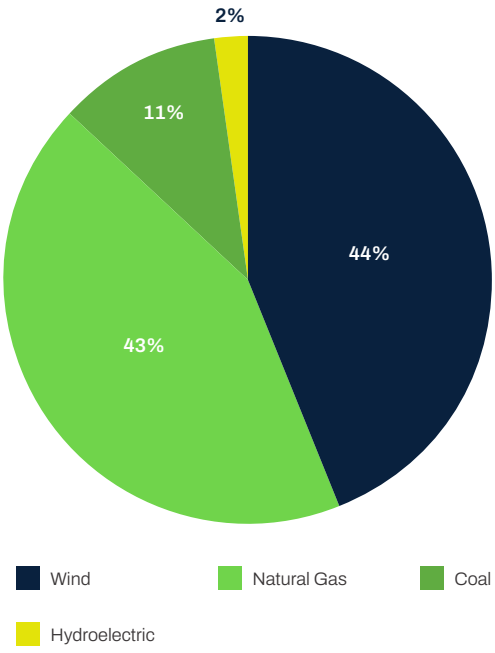
RELIABILITY: No incidents reported

RENEWABLE PORTFOLIO STANDARD: Yes

NET METERING: Yes

CAP-AND-TRADE: No

TOP ENERGY SOURCES FOR OKLAHOMA



SUMMARY

Oklahoma's electricity prices are notably low, making it the 14th most affordable in the nation. This affordability is driven by the state's relatively diverse energy mix, including wind and natural gas, which together account for over 80% of its electricity generation.

Oklahoma's Renewable Portfolio Standard and net metering policies have not done much to increase the state's use of solar or hydroelectric electricity generation.

Despite being a major producer of crude oil and natural gas—ranked 6th and 5th in the country, respectively—Oklahoma only consumes about a third of its own natural gas production for electricity generation. This underutilization suggests there is potential for Oklahoma to further stabilize its energy prices by increasing the use of locally produced resources. However, the state's commitment to wind energy, driven by its RPS, has kept natural gas from playing a more dominant role in its electricity mix, which could offer greater price stability in times of market volatility.

Geography also plays a significant role in Oklahoma's energy challenges. The state's flat, open terrain is prone to extreme weather, particularly tornadoes, which can disrupt energy infrastructure and contribute to reliability issues. In 2023, Oklahoma experienced more than twenty additional tornadoes compared to its yearly average, highlighting the ongoing risk of weather-related disruptions. While the state's energy prices remain low, these geographic and resource-related vulnerabilities underscore the importance of strategic planning to maintain affordability in the long term.

OREGON

PRICE RANK: 7TH

AVERAGE RETAIL PRICE (CENTS/KWH):	9.26
PRICE RANK:	7th
TOTAL RETAIL SALES (MWH):	56,326,896

TOP GENERATION SOURCES

Hydroelectric	51%
Natural Gas	31%
Wind	13%
Solar	3%
Wood	1%

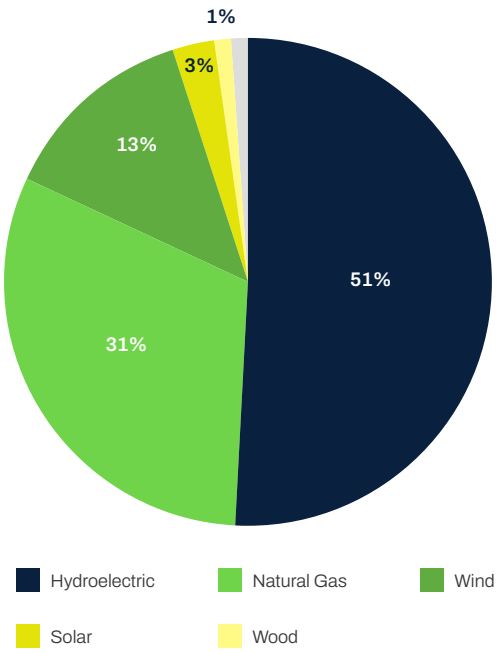
RELIABILITY: Two incidents reported

RENEWABLE PORTFOLIO STANDARD: Yes

NET METERING: Yes

CAP-AND-TRADE: Yes

TOP ENERGY SOURCES FOR OREGON



SUMMARY

Oregon still ranks as one of the top states in energy affordability. Its energy landscape is distinctively led by its significant reliance on renewable energy sources, particularly hydroelectric power, which accounts for 51% of its electricity generation. Oregon's natural heavy rainfall allows hydroelectric power to be utilized most efficiently. Natural gas is the second-largest source of electricity, contributing 31%, followed by wind power at 13%.

Unsurprisingly, Oregon's energy policies are progressive, with the state implementing a Renewable Portfolio Standard, net metering, and a Cap-and-Trade program. Without Oregon's cap-and-trade program, a combination of the state's abundant natural resources, relatively stable weather, and somewhat diverse energy mix could allow Oregon to take the top spot in energy affordability rankings.

With only two large-scale reliability incidents, the grid shows remarkable resiliency.

PENNSYLVANIA

PRICE RANK: 32ND

AVERAGE RETAIL PRICE (CENTS/KWH):	11.86
PRICE RANK:	32nd
TOTAL RETAIL SALES (MWH):	145,044,592

TOP GENERATION SOURCES

Natural Gas	55%
Nuclear	32%
Coal	10%
Wind	2%
Hydroelectric	1%

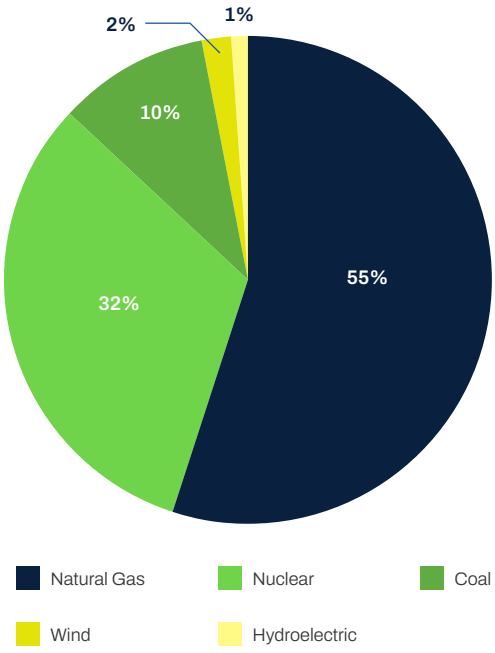
RELIABILITY: Five reported incidents

RENEWABLE PORTFOLIO STANDARD: Yes

NET METERING: Yes

CAP-AND-TRADE: No

TOP ENERGY SOURCES FOR PENNSYLVANIA



SUMMARY

Pennsylvania ranks 32nd in energy affordability. The state's energy generation is primarily driven by natural gas, which accounts for 55% of its electricity production. This reliance on natural gas has been a key factor in Pennsylvania's relatively moderate energy costs, especially as natural gas prices have remained competitive in recent years.

Nuclear energy also plays a significant role, contributing 32% to the state's energy mix, providing a stable and low-carbon source of electricity. Notably, coal, which once was a dominant force in Pennsylvania's energy landscape, now only contributes 10% of the state's generation. Renewable sources like wind and hydroelectric contribute a minute 3% in total.

Pennsylvania's energy policy includes a Renewable Portfolio Standard and net metering, both of which encourage the transition away from fossil fuels. This is reflected in Pennsylvania's gradual shift away from coal as a main electricity generator. The fact that Pennsylvania is one of the most prolific harvesters of fossil fuels yet has above-average electricity prices underscores the harm RPS and net metering bring to consumers.

RHODE ISLAND

PRICE RANK:

44TH

AVERAGE RETAIL PRICE (CENTS/KWH):	19.30
PRICE RANK:	44th
TOTAL RETAIL SALES (MWH):	7,576,284

TOP GENERATION SOURCES

Natural Gas	89%
Solar	4%
Other Biomass	3%
Wind	3%
Petroleum	1%

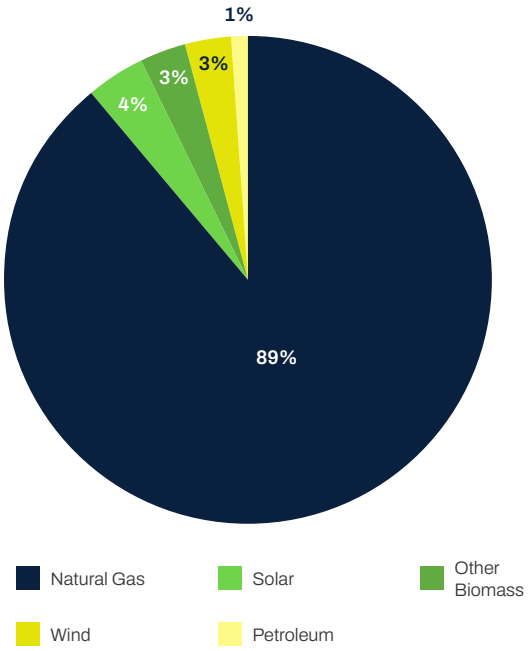
RELIABILITY: Six reported Incidents

RENEWABLE PORTFOLIO STANDARD: Yes

NET METERING: Yes

CAP-AND-TRADE: Yes

TOP ENERGY SOURCES FOR RHODE ISLAND



SUMMARY

Rhode Island ranks near the bottom at 44th place. It is among the states with the highest energy costs due to its overwhelming reliance on natural gas, which accounts for 89% of its electricity production. This heavy dependence on a single fuel source leaves Rhode Island vulnerable to price fluctuations in the natural gas market, which can significantly impact electricity costs for consumers. The remaining 11% of the energy mix is composed of renewable sources, which have a notoriously high cost of maintenance and implementation.

The Ocean State's energy policies are heavily shaped by its aggressive commitment to renewable energy and carbon reduction, with a Renewable Portfolio Standard (RPS), net metering, and participation in a Cap-and-Trade program. The RPS, net metering, and Cap-and-Trade program have increased the cost of electricity without achieving a substantial shift toward renewable energy. Instead, they have imposed significant costs on ratepayers, as utilities are forced to invest in more expensive and less reliable renewable infrastructure while still depending on natural gas to meet demand.

The state's energy reliability has faced challenges, with six reported incidents during the study period, indicating potential weaknesses in the state's energy infrastructure. High retail electricity prices, combined with reliability concerns, highlight the complexities of balancing grand renewable energy goals with the need for affordable and dependable power. As Rhode Island continues to pursue its aggressive renewable energy policies, addressing the underlying issues that contribute to high energy costs and detrimental infrastructure vulnerabilities will be essential. The state's future energy strategy will need to carefully manage these trade-offs to ensure that the transition to a more sustainable energy system does not come at the expense of affordability and reliability for its residents.

SOUTH CAROLINA

PRICE RANK:

22ND

AVERAGE RETAIL PRICE (CENTS/KWH):	10.74
PRICE RANK:	22nd
TOTAL RETAIL SALES (MWH):	82,758,432

TOP GENERATION SOURCES

Nuclear	56%
Natural Gas	25%
Coal	15%
Solar	2%
Hydroelectric	2%

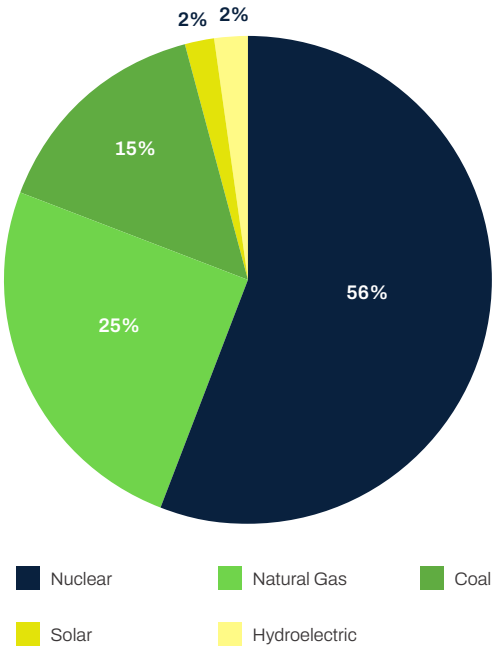
RELIABILITY: Fifteen reported incidents

RENEWABLE PORTFOLIO STANDARD: Yes

NET METERING: Yes

CAP-AND-TRADE: No

TOP ENERGY SOURCES FOR SOUTH CAROLINA



SUMMARY

South Carolina ranks 22nd in energy affordability, primarily due to its heavy reliance on nuclear power, which accounts for 56% of the state's electricity generation. This dependence on nuclear energy provides a stable and secure power source that helps to moderate prices. Natural gas contributes 25% of the energy mix, while coal adds 15%, and renewable sources like solar and hydroelectric round out the remaining 2%. Although the presence of renewables is relatively small, it highlights South Carolina's efforts to diversify its energy portfolio.

However, South Carolina's energy policies, including a Renewable Portfolio Standard (RPS) and net metering, have introduced significant costs to consumers. The RPS mandates increased investment in renewable energy, often leading to higher electricity prices as utilities pass the costs of new infrastructure and technology onto ratepayers. Similarly, net metering, while encouraging residential adoption of solar power, can result in higher rates for non-participating consumers, as the costs of grid maintenance and backup power are spread across all customers.

Despite implementing these progressive energy policies, South Carolina still faces considerable challenges in maintaining energy reliability, as indicated by the fifteen reported incidents during the study period. These reliability issues reflect vulnerabilities in the state's energy infrastructure, which may be further strained by the aging nuclear facilities and the moderate diversification of its energy mix. As South Carolina continues to navigate the balance between renewable energy growth and cost-effective, reliable power, the impact of its current policies on consumers should be carefully evaluated.

SOUTH DAKOTA

PRICE RANK:

19TH

AVERAGE RETAIL PRICE (CENTS/KWH):	10.44
PRICE RANK:	19th
TOTAL RETAIL SALES (MWH):	13,467,064

TOP GENERATION SOURCES

Wind	57.50%
Hydroelectric	23.80%
Coal	10.50%
Natural Gas	8%
Wood	0.10%

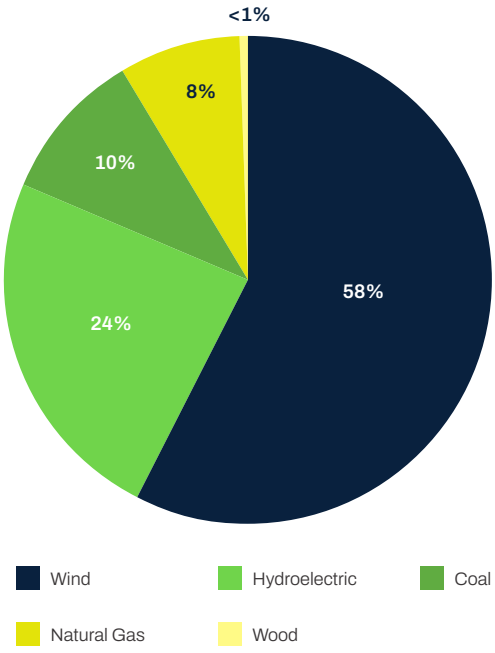
RELIABILITY: Two reported incidents

RENEWABLE PORTFOLIO STANDARD: Yes

NET METERING: No

CAP-AND-TRADE: No

TOP ENERGY SOURCES FOR SOUTH DAKOTA



SUMMARY

South Dakota falls near the middle of the pack in terms of energy costs compared to the rest of the nation. Despite not having a current renewable portfolio standard, the state's energy generation portfolio primarily relies on wind power for the bulk of its generation needs. Unfortunately, wind power relies on ideal environmental conditions and is not dispatchable, leading to mismatches between supply and demand, particularly during peak periods.

Despite the reliance on wind power, the state does have a diverse energy mix, including hydroelectric, coal, natural gas, and wood-derived fuels. Having this capability in the state's back pocket helps keep the lights on during high demand times.

Additionally, South Dakota has a strong record for reliability, with only two relatively minor incidents reported, indicating high grid resiliency.

TENNESSEE

PRICE RANK: 24TH

AVERAGE RETAIL PRICE (CENTS/KWH):	10.89
PRICE RANK:	24th
TOTAL RETAIL SALES (MWH):	102,112,051

TOP GENERATION SOURCES

Nuclear	46%
Natural Gas	21%
Coal	20%
Hydroelectric	12%
Solar	1%

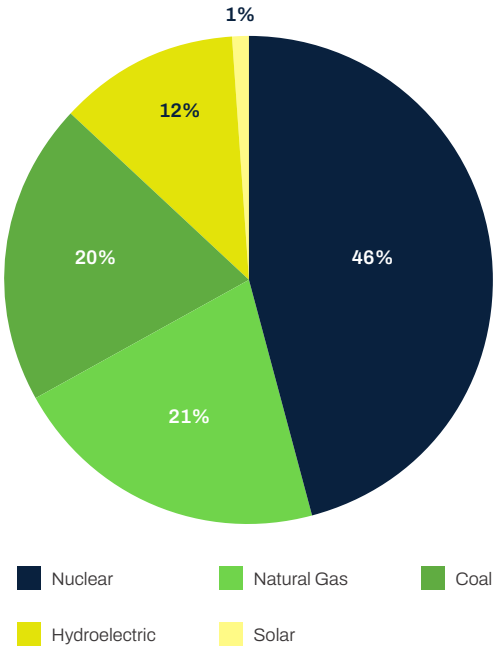
RELIABILITY: Four reported incidents

RENEWABLE PORTFOLIO STANDARD: No

NET METERING: No

CAP-AND-TRADE: No

TOP ENERGY SOURCES FOR TENNESSEE



SUMMARY

The Volunteer State ranks 24th in energy affordability, with its energy generation heavily influenced by a strong reliance on nuclear power which accounts for 46% of electricity produced. This significant share of nuclear energy provides a stable and low-carbon energy source, contributing to the state's relatively balanced energy costs. Natural gas and coal follow, contributing 21% and 20% of the energy mix, respectively, while hydroelectric power adds a notable 12%. There is limited investment in other renewable sources like solar and wind energy.

Tennessee's energy policy framework lacks some of the mechanisms commonly seen in states with more aggressive renewable energy goals. The absence of a Renewable Portfolio Standard means there is no state-mandated requirement for utilities to gradually increase their use of renewable energy sources. Additionally, Tennessee does not have net metering nor a Cap-and-Trade program, further indicating that Tennessee is not currently using these approaches to transition to alternative energy sources.

Reliability is a concern in Tennessee, with four reported incidents affecting the energy infrastructure during the study period. These incidents suggest challenges in maintaining a consistently reliable energy supply, which could be exacerbated by the state's aging infrastructure.

TEXAS

PRICE RANK:

15TH

AVERAGE RETAIL PRICE (CENTS/KWH):	10.16
PRICE RANK:	15th
TOTAL RETAIL SALES (MWH):	475,401,192

TOP GENERATION SOURCES

Natural Gas	49%
Wind	22%
Coal	16%
Nuclear	8%
Solar	4%

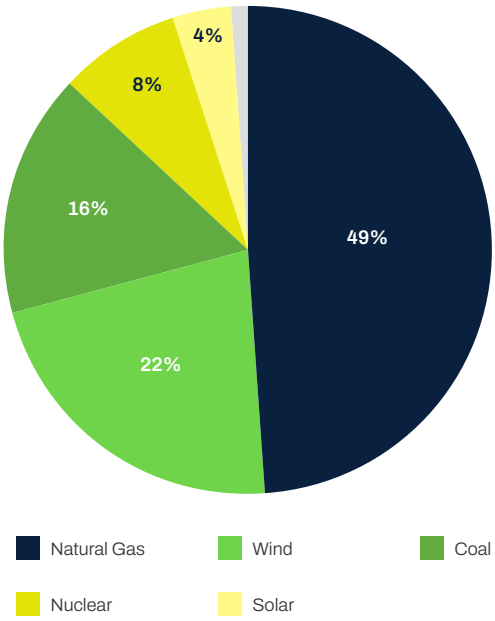
RELIABILITY: Twenty-five incidents reported

RENEWABLE PORTFOLIO STANDARD: Yes

NET METERING: No

CAP-AND-TRADE: No

TOP ENERGY SOURCES FOR TEXAS



SUMMARY

Texas ranks 15th in the nation for electricity affordability, with an average retail price of 10.16 cents per kilowatt-hour. This relatively low cost is largely due to the state's diverse energy mix, dominated by natural gas (49%), wind (22%), and coal (16%). Texas's vast, open landscape makes it ideal for wind power generation, which has become a significant part of its energy portfolio. However, the state's location along the Gulf of America also exposes it to severe weather events, such as hurricanes and tropical storms, that can severely impact its energy infrastructure.

Despite its affordability, Texas faces significant challenges with energy reliability, as evidenced by the twenty-five reported incidents affecting the grid. A considerable portion of these reliability issues can be attributed to the state's heavy reliance on wind power, which is intermittent and less predictable. Additionally, extreme weather events have repeatedly shown the vulnerability of Texas's energy infrastructure, leading to widespread outages that have left millions without power during critical times.

The state's energy strategy, which focuses on a mix of fossil fuels and renewables, has successfully kept electricity prices in check. However, the ongoing reliability concerns underscore the need for a more resilient energy grid.

UTAH

PRICE RANK: 4TH

AVERAGE RETAIL PRICE (CENTS/KWH):	8.80
PRICE RANK:	4th
TOTAL RETAIL SALES (MWH):	33,365,501

TOP GENERATION SOURCES

Coal	58%
Natural Gas	29%
Solar	10%
Wind	2%
Hydroelectric	1%

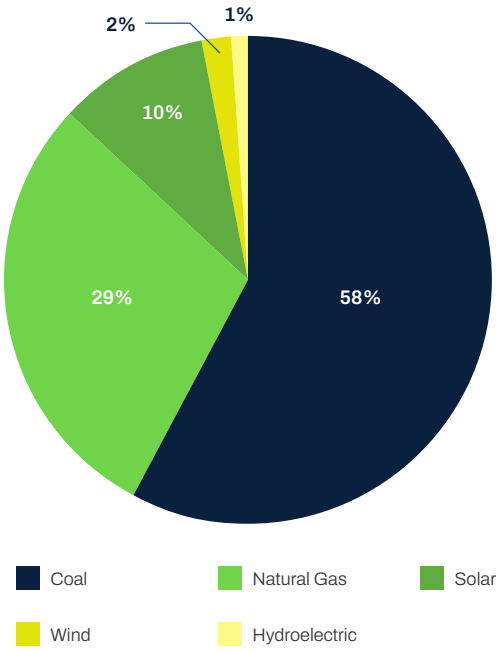
RELIABILITY: No incidents reported

RENEWABLE PORTFOLIO STANDARD: Yes

NET METERING: Yes

CAP-AND-TRADE: No

TOP ENERGY SOURCES FOR UTAH



SUMMARY

Utah's position as the fourth most affordable state for electricity, with an average retail price of just 8.8 cents per kilowatt-hour, can be attributed to its strong reliance on fossil fuels. Coal, which generates 58% of the state's electricity, and natural gas, which provides 29%, have been instrumental in keeping energy costs low. Despite having a Renewable Portfolio Standard (RPS) and net metering policies, which typically drive up costs in other states, Utah's commitment to fossil fuels has ensured that consumers benefit from some of the lowest electricity prices in the nation.

The continued use of coal and natural gas has allowed Utah to meet its energy demands efficiently and affordably, even as renewable energy sources like solar, which accounts for 10% of generation, gain a foothold. While the RPS and net metering encourage the growth of renewables, the dominance of fossil fuels in Utah's energy mix has prevented these policies from significantly increasing costs. This reliance on coal and natural gas provides a stable and cost-effective foundation for the state's energy system, ensuring that prices remain low for consumers.

As Utah looks to the future, its ability to maintain low electricity prices will depend heavily on the ongoing role of fossil fuels in its energy mix. This balanced approach has allowed the state to pursue its affordable energy goals without compromising on cost or reliability, making Utah a model for other states facing similar challenges.

VERMONT

PRICE RANK:

41ST

AVERAGE RETAIL PRICE (CENTS/KWH):	16.99
PRICE RANK:	41st
TOTAL RETAIL SALES (MWH):	5,470,471

TOP GENERATION SOURCES

Hydroelectric	52%
Wind	19%
Wood	17%
Solar	9%
Other Biomass	3%

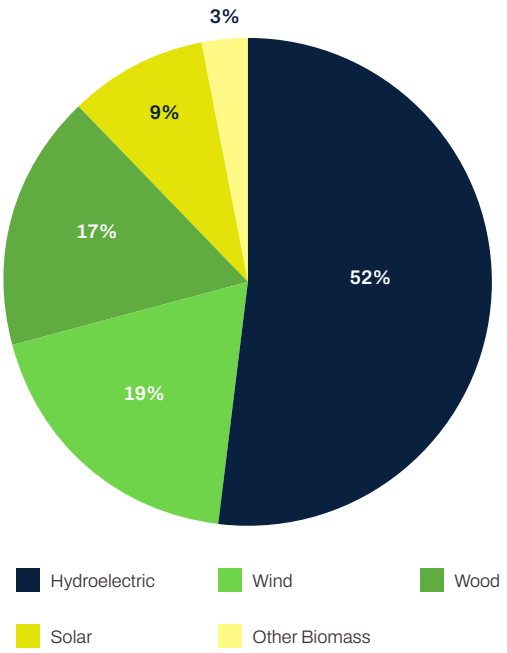
RELIABILITY: Seven reported incidents

RENEWABLE PORTFOLIO STANDARD: Yes

NET METERING: Yes

CAP-AND-TRADE: Yes

TOP ENERGY SOURCES FOR VERMONT



SUMMARY

Vermont ranks 41st in energy affordability, which can be attributed solely to the state's focus on renewable energy sources that come with higher production costs compared to fossil fuels. The state's energy generation mix is dominated by hydroelectric power, which makes up 52% of the total, followed by wind energy at 19%, wood at 17%, and solar at 9%. This diverse mix reflects Vermont's commitment to renewable energy and highlights the higher costs associated with maintaining and expanding these systems.

Vermont's energy policy framework includes the trifecta of a Renewable Portfolio Standard, a Cap-and-Trade program, and a net metering program. These policies underscore the state's dedication to promoting sustainable energy practices as well as Vermont's goals of reducing its carbon footprint and advancing clean energy.

Like the other states with these three energy policies, Vermont's energy reliability has faced challenges, with seven reported incidents in energy infrastructure. The state's significant reliance on renewable sources contributes heavily to higher energy prices and frequent reliability issues, particularly in rough weather conditions, cold fronts, or during system maintenance.

VIRGINIA

PRICE RANK:

23RD

AVERAGE RETAIL PRICE (CENTS/KWH):	10.75
PRICE RANK:	23rd
TOTAL RETAIL SALES (MWH):	132,264,617

TOP GENERATION SOURCES

Natural Gas	56%
Nuclear	32%
Solar	5%
Coal	4%
Wood	3%

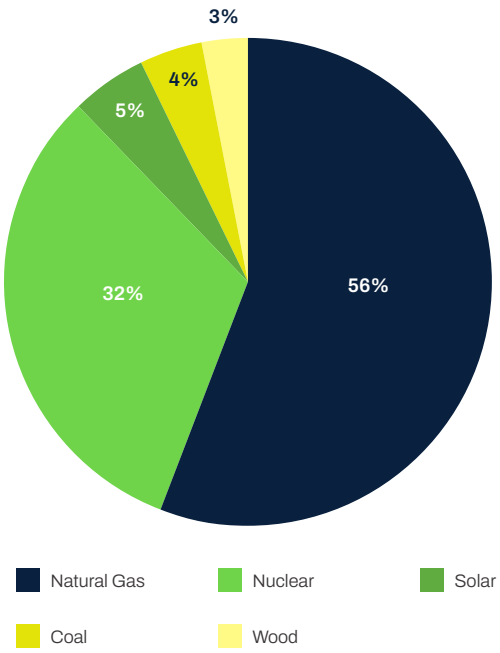
RELIABILITY: Three reported incidents

RENEWABLE PORTFOLIO STANDARD: Yes

NET METERING: Yes

CAP-AND-TRADE: Yes

TOP ENERGY SOURCES FOR VIRGINIA



SUMMARY

Virginia ranks 23rd in energy affordability, reflective of its diverse energy generation mix that relies heavily on natural gas and nuclear power. Natural gas is the dominant source, providing 56% of the state's electricity, while nuclear power contributes 32%, offering a stable and reliable alternative. Interestingly, while West Virginia generates 90% of its electricity from coal, Virginia generates just 4% of its electricity from the same source.

Virginia's energy policy framework includes a hat-trick of a Renewable Portfolio Standard, Cap-and-Trade policy, and a net metering policy. Despite these policies that encourage the adoption of solar energy by making it more economically viable for consumers, solar energy remains at only 5% of total electricity contribution.

In other states, these three programs significantly influence their energy market dynamics and can drive up the price of energy for consumers. But in Virginia, energy affordability remains high. Despite these proactive measures, the state reported three incidents affecting energy reliability, highlighting potential areas for improvement in the energy infrastructure.

WASHINGTON

PRICE RANK: 6TH

AVERAGE RETAIL PRICE (CENTS/KWH):	9.05
PRICE RANK:	6th
TOTAL RETAIL SALES (MWH):	90,897,320

TOP GENERATION SOURCES

Hydroelectric	69%
Natural Gas	13%
Nuclear	8%
Wind	7%
Coal	3%

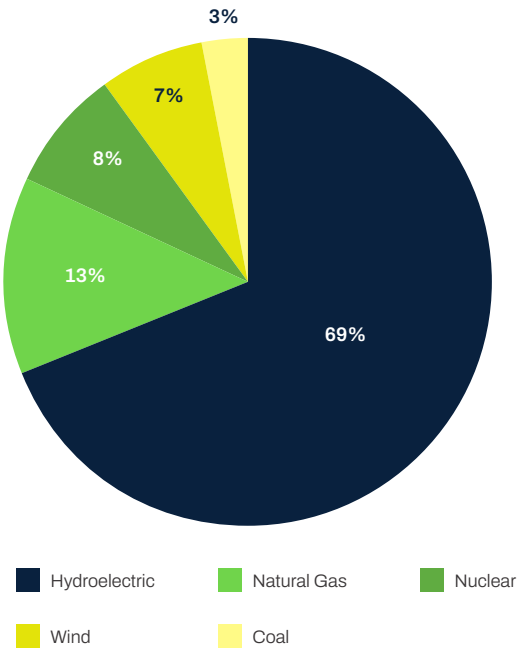
RELIABILITY: Four reported incidents

RENEWABLE PORTFOLIO STANDARD: Yes

NET METERING: Yes

CAP-AND-TRADE: No

TOP ENERGY SOURCES FOR WASHINGTON



SUMMARY

With 69% of its electricity generated from hydroelectric power, Washington has been able to maintain an average retail price of just 9.05 cents per kilowatt-hour, making it the sixth most affordable state for energy in the nation. This heavy reliance on hydropower provides reliable electricity to consumers.

However, the state's recent push to remove dams presents a significant threat to this affordability and reliability. The movement to dismantle hydroelectric dams, driven by environmental and ecological concerns, overlooks the crucial role these structures play in keeping energy costs down. Removing dams could severely limit the state's hydroelectric capacity, forcing a greater reliance on more expensive and less stable energy sources required under the state's Renewable Portfolio Standard

Moreover, the potential reduction in hydroelectric power poses a serious risk to energy reliability. While Washington currently enjoys a robust energy infrastructure, as evidenced by its relatively low number of reported reliability incidents, the loss of hydroelectric generation could strain the grid. With only 13% of electricity currently coming from natural gas and 8% from nuclear power, there is limited capacity to compensate for the reduction in hydroelectric output. This could lead to increased dependence on intermittent sources like wind, which already accounts for 7% of the state's electricity but lacks the consistency needed for baseline energy demands.

WEST VIRGINIA

PRICE RANK: 10TH

AVERAGE RETAIL PRICE (CENTS/KWH):	9.74
PRICE RANK:	10th
TOTAL RETAIL SALES (MWH):	32,986,288

TOP GENERATION SOURCES

Coal	90%
Natural Gas	4%
Wind	3%
Hydroelectric	3%

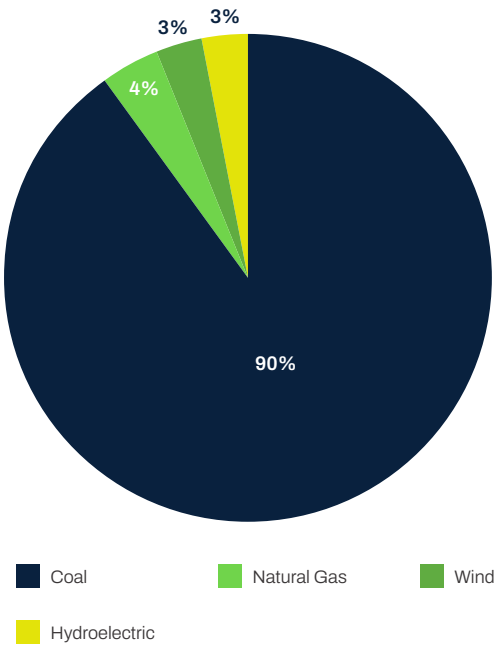
RELIABILITY: Two reported incidents

RENEWABLE PORTFOLIO STANDARD: No

NET METERING: Yes

CAP-AND-TRADE: No

TOP ENERGY SOURCES FOR WEST VIRGINIA



SUMMARY

West Virginia ranks 10th in energy affordability largely due to its heavy reliance on coal, which accounts for a dominant 90% of its electricity generation. This dependence on coal has historically kept energy prices low, but it also ties the state's economic and environmental future to a single energy source. Natural gas, wind, and hydroelectric power make up the remaining 10% of electricity generation.

West Virginia's energy policy is characterized by the absence of a Renewable Portfolio Standard (RPS) and a Cap-and-Trade program, which potentially could slow the diversification of its energy profile. However, West Virginia does support net metering, which encourages the adoption of small-scale alternative energy systems, although it is characterized entirely by credits against energy bills instead of cash payouts.

The state reported two incidents affecting energy reliability, suggesting that West Virginia's energy infrastructure is generally stable.

The reliance on coal poses a possible long-term risk as global energy markets and domestic policies threaten coal's dominance as an affordable energy source. West Virginia continues to balance the benefits of low-cost energy with the need for greater energy diversity.

WISCONSIN

PRICE RANK:

34TH

AVERAGE RETAIL PRICE (CENTS/KWH):	11.94
PRICE RANK:	34th
TOTAL RETAIL SALES (MWH):	69,875,871

TOP GENERATION SOURCES

Natural Gas	40%
Coal	37%
Nuclear	17%
Hydroelectric	3%
Wind	3%

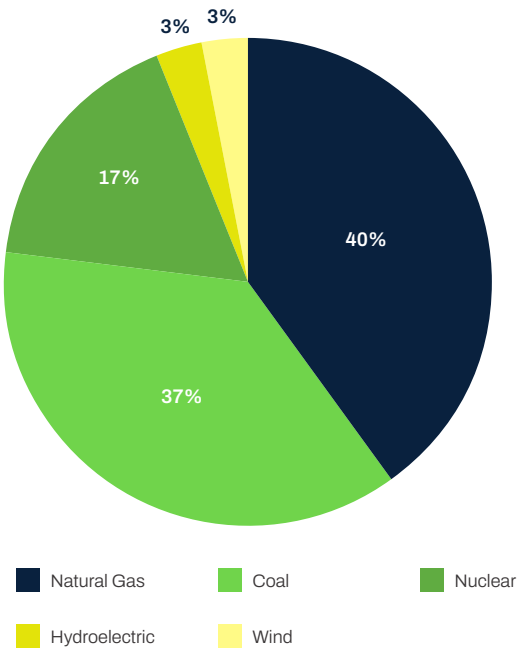
RELIABILITY: Three reported incidents

RENEWABLE PORTFOLIO STANDARD: Yes

NET METERING: Yes

CAP-AND-TRADE: No

TOP ENERGY SOURCES FOR WISCONSIN



SUMMARY

Wisconsin ranks 34th in energy affordability despite its relatively high energy costs. It demonstrates a diverse energy generation mix, which includes a significant reliance on both fossil fuels and nuclear power. Natural gas is the largest source of electricity, accounting for 40% of the state's energy production, while coal remains a close second at 37%. Nuclear energy provides a stable, low-carbon alternative to fossil fuels.

The state's Renewable Portfolio Standard (RPS) places a financial burden on non-solar customers who may end up subsidizing the costs of integrating distributed generation systems into the grid.

Wisconsin's energy policy faces significant challenges, particularly in maintaining reliability and managing costs. The state reported three incidents affecting reliability during the study period, indicating potential vulnerabilities in the energy infrastructure that must be addressed.

WYOMING

PRICE RANK: 1ST

AVERAGE RETAIL PRICE (CENTS/KWH):	8.21
PRICE RANK:	1st
TOTAL RETAIL SALES (MWH):	16,499,429

TOP GENERATION SOURCES

Coal	72%
Wind	21%
Natural Gas	4%
Hydroelectric	2%
Other Gases	1%

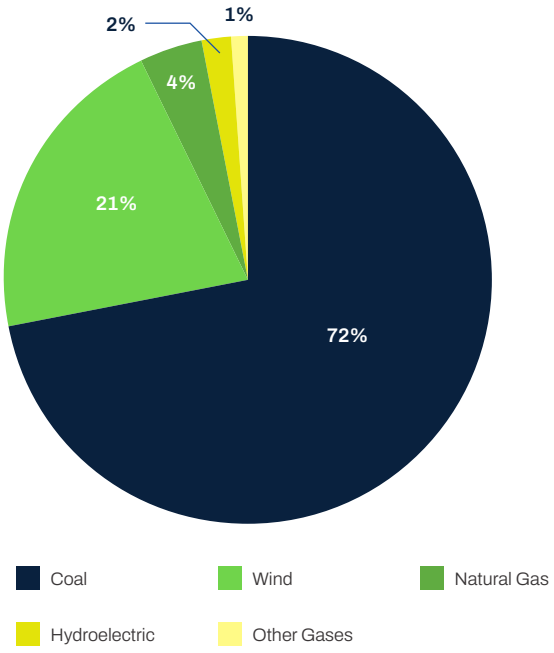
RELIABILITY: One incident reported

RENEWABLE PORTFOLIO STANDARD: No

NET METERING: Yes

CAP-AND-TRADE: No

TOP ENERGY SOURCES FOR WYOMING



SUMMARY

As the lowest-cost state for energy consumers in the nation, Wyoming stands out for its excellent affordability, reliability, and grid mix ratings. The state does not have a Renewable Portfolio Standard, nor does it participate in cap-and-trade carbon tax schemes that plague high-cost states. While Wyoming does have net metering laws, energy sold back to the grid is at the utility's avoided-cost rate.

Additionally, Wyoming takes advantage of a relatively diverse mix of energy generation technologies. In addition to coal and wind, which make up the bulk of generated electricity, the state also has natural gas and hydroelectric power that allow the market to respond to price fluctuations.

The state only had one noted power outage for the year, impacting less than 5,000 residents, demonstrating the grid's remarkable resiliency.

Wyoming's laws, regulations, mix of generation sources, and reliability serve as the gold standard for affordability in the United States.

CONCLUSION

There is a strong correlation between big government policies and higher electricity costs. When crafting energy and environmental policies, lawmakers should avoid imposing more government control and instead allow markets to adapt, innovate, and improve. This is the more efficient, effective, and cost-saving solution to the environmental challenges we face today.

Increased costs rarely lead to better results for consumers, especially low-income individuals and families. Market competition with reasonable regulatory environments focusing on protecting residents and empowering industries to make conscientious environmental decisions allows this vital sector of the economy to flourish.

As policymakers look to the future, it is important to keep in mind that humanity stands on the cusp of a new energy revolution. In the same way oil wells used to burn off natural gas in the early oil boom years because it was considered an incidental byproduct, advancements in power plant reclamation technology stand to turn what was once considered polluting waste products into commercially useful materials. From a new catalyst that has the potential to recycle carbon dioxide into synthetic, sustainable fuels on a commercial scale to small modular nuclear reactor technology under development by national laboratories, there is significant potential for new technologies to mature in ways beneficial to humanity and our planet.[4]

Market innovation and technological advancement are essential to keeping costs low for consumers and our environment healthy. Focusing on facilitating a flexible and innovation-friendly regulatory environment will pay enormous dividends to the states that choose that path.

APPENDIX

TABLE 1 | AVERAGE PRICE RANKING (CENTS/KWH) BY STATE AND SECTOR

AVERAGE PRICE RANKING (CENTS/KWH) BY STATE AND SECTOR						
RANKING	STATE	RESIDENTIAL	COMMERCIAL	INDUSTRIAL	TRANSPORTATION	TOTAL
1	WY	11.09	9.55	6.89	0	**8.24**
2	ND	10.92	8.45	7.28	0	**8.42**
3	ID	10.37	8.27	6.71	0	**8.51**
4	UT	10.84	8.39	6.84	10.69	**8.8**
5	NE	10.79	8.82	7.21	0	**8.83**
6	WA	10.26	9.49	6.17	10.05	**9.05**
7	OR	11.42	9.35	6.81	10.45	**9.26**
8	IA	13.15	10.55	7.06	12.38	**9.57**
9	NC	11.62	8.75	6.54	7.61	**9.6**
10	WV	13.23	10.42	6.74	0	**9.74**
11	AR	12.05	10.26	7.38	15.48	**9.91**
12	MT	11.33	10.68	7.49	0	**9.97**
13	NM	13.84	11.07	6.56	0	**10.02**
14	OK	12.44	10.34	6.96	0	**10.05**
15	TX	13.76	9.05	7.13	6.82	**10.16**
16	MO	11.74	9.55	7.67	8.97	**10.26**
17	MS	12.41	11.76	6.71	0	**10.36**
18	LA	12.93	11.93	7.54	12.45	**10.41**
19	SD	12.09	10.21	8.04	0	**10.44**
20	KY	12.91	11.78	7.41	0	**10.51**
21	OH	13.85	10.39	7.45	8.54	**10.64**
22	SC	13.59	10.86	7.13	0	**10.74**
23	VA	13.34	9.66	7.99	10.85	**10.75**
24	TN	12.25	12.02	6.55	0	**10.89**
25	NV	13.78	10.14	8.5	9.74	**10.94**
26	AZ	13.02	10.8	7.86	9.62	**11.31**
27	KS	13.99	11.51	8.3	0	**11.47**
28	AL	14.25	13.16	7.72	0	**11.59**
29	IN	14.59	12.86	8.65	13.03	**11.66**
30	CO	14.19	11.58	8.63	9.91	**11.75**
31	DE	13.71	10.98	8.79	0	**11.83**

TABLE 1 | AVERAGE PRICE RANKING (CENTS/KWH) BY STATE AND SECTOR

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RANKING	STATE	RESIDENTIAL	COMMERCIAL	INDUSTRIAL	TRANSPORTATION	TOTAL
32	PA	15.94	10.73	8.21	7.81	**11.86**
33	IL	15.65	11.32	8.57	7.21	**11.94**
34	WI	15.62	11.85	8.49	16.55	**11.95**
35	GA	13.8	12.1	8.65	9.33	**12**
36	MN	14.25	12.3	9.25	12.29	**12.04**
37	FL	13.9	11.19	9.16	10.19	**12.51**
38	MI	17.86	12.55	8.33	12.35	**13.20**
39	MD	14.46	12.65	10.01	9.45	**13.32**
40	NJ	16.74	13.75	12.12	12.9	**14.8**
41	VT	19.93	17.29	11.88	0	**16.99**
42	ME	22.44	15.4	11.03	0	**17.44**
43	NY	22.08	18.19	7.55	13,84	**18.33**
44	RI	23.21	16.23	17.96	17.52	**19.3**
45	AK	23.1	20.06	18.43	0	**20.73**
46	NH	25.46	18.69	15.15	0	**21.07**
47	CT	24.61	18.54	15.07	18.07	**21.08**
48	MA	25.97	18.67	17.06	7.08	**21.27**
49	CA	20.45	21.81	17.09	13.76	**22.33**
50	HI	43.03	40.18	36.71	0	**39.72**

Source: U.S. Energy Information Administration

TABLE 2 | AVERAGE PRICE RANKING AND POLICIES BY STATE

AVERAGE PRICE RANKING AND POLICIES BY STATE					
RANKING	STATE	TOTAL	RENEWABLE PORTFOLIO STANDARD (RPS)	REGIONAL GREENHOUSE GAS INITIATIVE (RGGI) / CAP-AND-TRADE	STATE-MANDATED NET METERING
1	WY	8.24	No	None	Yes
2	ND	8.42	No	None	Yes
3	ID	8.51	No	None	No
4	UT	8.8	Yes	None	No
5	NE	8.83	No	None	Yes
6	WA	9.05	Yes	None	Yes
7	OR	9.26	Yes	RGGI	Yes
8	IA	9.57	Yes	None	No
9	NC	9.6	Yes	None	Yes
10	WV	9.74	No	None	Yes
11	AR	9.91	No	None	Yes
12	MT	9.97	Yes	None	Yes
13	NM	10.02	Yes	None	Yes
14	OK	10.05	Yes	None	Yes
15	TX	10.16	Yes	RGGI	No
16	MO	10.26	Yes	None	Yes
17	MS	10.36	No	None	Yes
18	LA	10.41	No	None	Yes
19	SD	10.44	Yes	None	No
20	KY	10.51	No	None	Yes
21	OH	10.64	Yes	None	Yes
22	SC	10.74	Yes	None	Yes
23	VA	10.75	Yes	RGGI	Yes
24	TN	10.89	No	None	No
25	NV	10.94	Yes	None	Yes
26	AZ	11.31	Yes	None	Yes
27	KS	11.47	Yes	None	No
28	AL	11.59	No	None	No
29	IN	11.66	Yes	None	Yes
30	CO	11.75	Yes	None	Yes
31	DE	11.83	Yes	RGGI	Yes

TABLE 2 | AVERAGE PRICE RANKING AND POLICIES BY STATE

AVERAGE PRICE RANKING AND POLICIES BY STATE					
RANKING	STATE	TOTAL	RENEWABLE PORTFOLIO STANDARD (RPS)	REGIONAL GREENHOUSE GAS INITIATIVE (RGGI) / CAP-AND-TRADE	STATE-MANDATED NET METERING
32	PA	11.86	Yes	None	Yes
33	IL	11.94	Yes	None	Yes
34	WI	11.95	Yes	None	Yes
35	GA	12	No	None	Yes
36	MN	12.04	Yes	None	Yes
37	FL	12.51	No	None	Yes
38	MI	13.2	Yes	None	Yes
39	MD	13.32	Yes	RGGI	Yes
40	NJ	14.8	Yes	RGGI	Yes
41	VT	16.99	Yes	RGGI	Yes
42	ME	17.44	Yes	RGGI	Yes
43	NY	18.33	Yes	RGGI	Yes
44	RI	19.3	Yes	RGGI	Yes
45	AK	20.73	No	None	Yes
46	NH	21.07	Yes	RGGI	Yes
47	CT	21.08	Yes	RGGI	Yes
48	MA	21.27	Yes	RGGI & Other	Yes
49	CA	22.33	Yes	RGGI	Yes
50	HI	39.72	Yes	None	Yes

Source: U.S. Energy Information Administration

NOTES

Renewable Portfolio Standards: https://emp.lbl.gov/publications/us-state-renewables-portfolio-clean

Net Metering: https://spotforcleanenergy.org/state/alaska/net-metering/

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