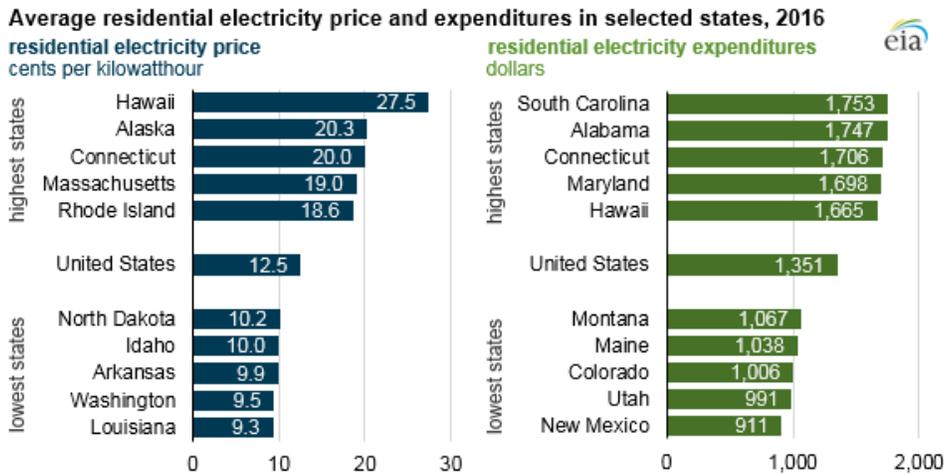


Mississippi Renewable Energy and Energy Efficiency Update

EIA Data Looks at Residential Electricity Prices and Expenditures

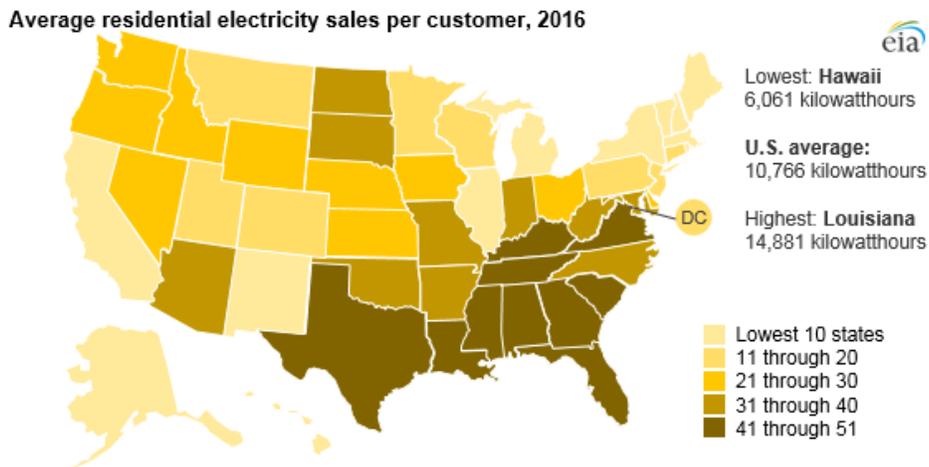
A new analysis from the Energy Information Administration (EIA) calculates the average residential electricity price and average residential electricity expenditures per customer in the states using the most recent annual data (2016). The national average residential electricity price is 12.9 cents/kWh. **Mississippi** had the 7th lowest average residential electricity price at 10.5 cent/kWh. [However, the most recent [Electric Power Monthly data for 2017](#) shows the average price of electricity to residential **Mississippi** customers is 11.44 cents/kWh.]

The average residential electricity customer in the U.S. spent \$1,351 for electricity in 2016. The average **Mississippi** residential customer spent \$1,511.



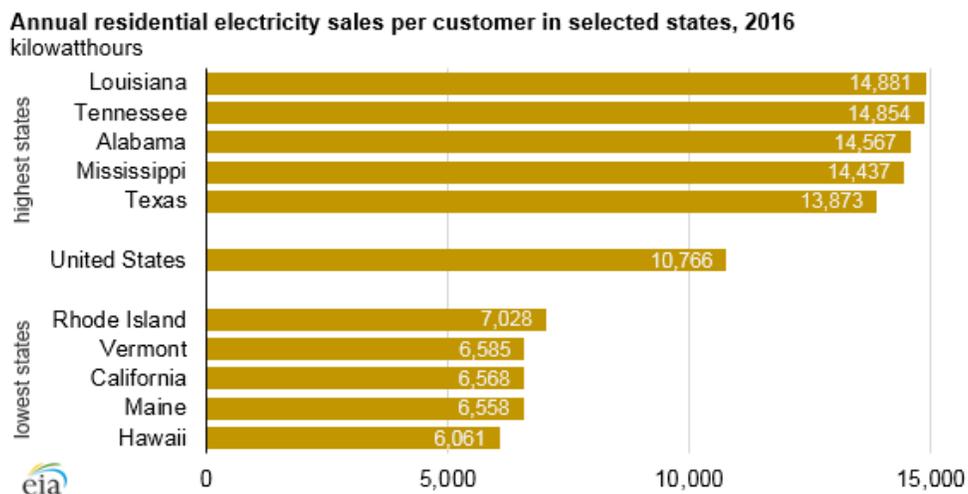
Source: U.S. Energy Information Administration, [State Energy Data System](#) and [Electric Power Annual](#)

Overall, the average U.S. residential electricity customer purchased about 10,800 kWh over 12 months in 2016. Residential customers in the southeastern part of the country use the most electricity on average because of intensive use of air-conditioning and the majority use electrical appliances. Mississippi has the 4th highest electrical sales per customer at 14,437 kWh. The top ten states for residential electricity purchased (kWh) are in the South.



Source: U.S. Energy Information Administration, [State Energy Data System](#) and [Electric Power Annual](#)

States with the least residential electricity usage generally have mild climates that do not require significant space heating or air conditioning. Hawaii and California in particular have also had high adoption levels of solar photovoltaic systems in the residential sector, lowering the amount of electricity sold to homes.



These illustrations demonstrate the difference between rates and bills. While there has been a lot of focus at the regulatory level on keeping rates low, it is equally important to focus on measures to keep bills low. Utilities can help by aggressively promoting energy efficiency programs. County and local jurisdictions can also help by implementing and enforcing building energy codes.

MPSC Regular Meeting and Docket Call – February 6

The MPSC met on **February 6, 2018, at 10 am** in the MPSC Hearing Room for the [Open Meeting Agenda](#). Among the items of interest to energy and consumer stakeholders:

Docket No. 2017-UA- 078, Entergy Mississippi, Inc. - [Application](#) for Approval of Continued Modernization Improvements Through Investment in Advanced Communication Infrastructure: This docket represents a partnership between Entergy Mississippi (EMI) and Cspire to expand fiber optic communication options to customers and support EMI’s emerging communications upgrades. Cspire will own the fiber and EMI will cover some costs on maintenance to be recovered in the Grid Modernization Rider. Approximately 300 miles of new fiber optics lines across 22 towns in 15 counties will expand broadband access in Mississippi. MPSC [adopted](#) the program.

Docket No. 2017-UN- 198, Entergy Mississippi, Inc. – [Notice of Intent](#) for Recovery of Electric Grid Modernization and Rural Fiber Costs: This docket creates the Grid Modernization Rider (GMR-1) for the purpose of recovering costs associated with 1) expansion of fiber optic network; 2) economic development and reliability measures per MISO; and 3) pilot programs. The GMR-1 will eventually be rolled into the Formula Rate Plan as the level of investments become more predictable. The MPSC [adopted](#) the rider.

Docket No. 2017-UN- 218, Entergy Mississippi, Inc. - [Application](#) of Entergy Mississippi, Inc. to Amend Its Service Policy: This docket revises how EMI will finalize accounts and perform last readings of a specific location should service be terminated do to customer moving, etc. As EMI moves towards its

'smart meter' technology, this change in service policy will allow for adaptation to new system. MPSC [approved](#) the change.

Docket No. 2017-UA- 115, Atmos Energy Corporation - [Application](#) of Atmos Energy Corporation for Approval and Authorization of Natural Gas Infrastructure Expansion Initiative: Under this initiative, Atmos plans to invest \$5 million/year over the next 5 years to expand natural gas service to areas previously unserved. The averaged investment per new customer is \$5,000. MPSC [approved](#) the plan.

Docket No. 2017-UN- 147, Spire Mississippi Inc. - [Notice of Intent](#) to Change Rates by Adopting a Fixed Customer Charge and Uniform Volumetric Rate and **Docket No. 2017-UN- 148, Spire Mississippi Inc. - [Notice of Intent](#)** to Adopt a Weather Normalization Adjustment Rider (WNA): Spire (formerly known as Wilmut Gas Company) is adjusting its rate schedules to spread out cost of service charges (volumetric and fixed charges) as well adjust it Weather Normalization Rider to help smooth out the large swings in rate impacts caused by weather extremes and other variations that could drastically increase bills at certain times of the year. (Atmos has a similar rate structure.) The change will be revenue neutral. MPSC approved the [change in charges](#) and [rider adjustment](#).

[Next Meeting of the MPSC](#) will take place on March 6, 2018, at 10 am in the Woolfolk Building.

Kemper Update – Order on Settlement Stipulation

Docket No. 2017-AD- 112, Mississippi Power Company - Encouraging Stipulation of Matters in Connection with the Kemper County IGCC Project: Last summer, the MPSC created a Rate Stipulation Docket to develop a remedy to the Kemper Project situation. The Commission [requested](#) that 1) no rate increase to customers 2) remove financial risk of the lignite gasification process from ratepayers, and; 3) amend facility certification to allow for only operation of natural gas generation assets. Most parties agreed to the terms of the final [Stipulation](#) that (when including savings from Federal Tax Reform Act) met all the requirements outlined by the MPSC. In fact, rates will decrease by approximately \$3. Also, any land sales revenues associated to Kemper will be credited back to the customer. The MPSC [unanimously approved](#) the Stipulation. The Commission issued a [press release](#) in regards to the final decision. For nearly 10 years, the Kemper saga has gone from a \$1.8 billion “vision of 21st century clean coal electricity” to the most expensive utility project in Mississippi history at \$7.5 billion that never functioned as intended. Southern Company has had to write of \$6.4 billion in losses. Utilities and regulators around the nation (as well as Wall Street investors) have been watching how the MPSC has stood strong to protect ratepayers. This should be a lesson in transparency, due diligence and scaling of first-kind technologies.

See Associated Press article: <https://www.sunherald.com/news/business/article198585764.html>

See Mississippi Today article: <https://mississippitoday.org/2018/02/06/closing-book-kemper-power-plant/>

See Mississippi Business Journal article: <http://msbusiness.com/2018/02/psc-brings-kemper-plant-saga-end/>

Utility Rates and the Tax Cuts and Jobs Act: How are Customers Impacted?

Shortly after President Trump signed the federal Tax Cuts and Jobs Act, the MPSC ordered all regulated utilities (electric and natural gas) to submit plans on how they will credit reduced corporate tax rates (35% to 21%) to their customers. Investor-owned utilities pass their federal income tax charges along to their customers as a cost of providing service. Per its [initial plan](#), Entergy Mississippi expects residential customer bills to drop more than \$30 per month during July, August and September, from a

combination of lower-rates and short-term bill credits. Bill adjustments could change as the full impact of the tax legislation is understood.

Mississippi Legislature Update

The Legislature continues its march to final adjournment, or Sine Die. Chairs for key energy-related committees are:

[Senate Energy Committee](#) - Sally Doty, Chairman; Josh Harkins, Vice-Chairman

[House Energy Committee](#) - Angela Cockerham, Chairman; Gary V. Staples, Vice-Chairman

[House Public Utilities Committee](#) - Charles Jim Beckett, Chairman; Jody Steverson, Vice-Chairman

Feb. 8 was the deadline for floor action on general bills originating in that chamber. Feb. 27 was the deadline for committee action on bill originating in the other chamber. Bills in **red** have died.

[House Bill 377](#) - Bonds; authorize issuance to assist Sunflower County in researching wind energy as a viable source of power for the county (Died in Committee)

[House Bill 745](#) - Residential builders/remodelers and residential solar contractors; revise licensing law (Died in Committee)

[House Bill 768](#) - "Distributed Energy Resource Program" and "Net Energy Metering Program"; create (Died in Committee)

[House Bill 882](#) - Public Service Commission; extend repealers on its creation and authority to hire attorneys for certain proceedings (Passed out of Committee; Passed House; Transferred to Senate; Died in Committee)

[House Bill 1108](#) - Office of Residential and Small Business Advocate; establish (Died in Committee)

[House Bill 1152](#) - Residential minimum building standards; adopt statewide (Passed out of Committee as Amended). The amendments to the bill make adoption of building standards voluntary. (Died on House Calendar)

[House Bill 1179](#) - Public Utilities Staff; limit powers to supporting PSC and PSC staff (Died in Committee)

[Senate Bill 2030](#) - Income and franchise tax; allow refundable credit for costs of purchasing/installing solar energy system or energy efficiency services (Died in Committee)

[Senate Bill 2295](#) - Public Service Commission; extend repealers on its creation and authority to hire attorneys for certain proceedings (Passed out of Energy Committee as Amended). The amendments to the bill would restrict who could challenge utility filings and alter the process by which entities can engage in proceedings. (Passed Senate; Transferred to House; Passed House as Amended; Returned for Concurrence).

[Senate Bill 2562](#) - Office of Residential and Small Business Advocate; establish (Died in Committee)

[Senate Bill 2572](#) - Residential builders/remodelers and residential solar contractors; revise licensing law (Passed out of Committee as Amended; Passed Senate; Transferred to House; Passed Committee as Amended)

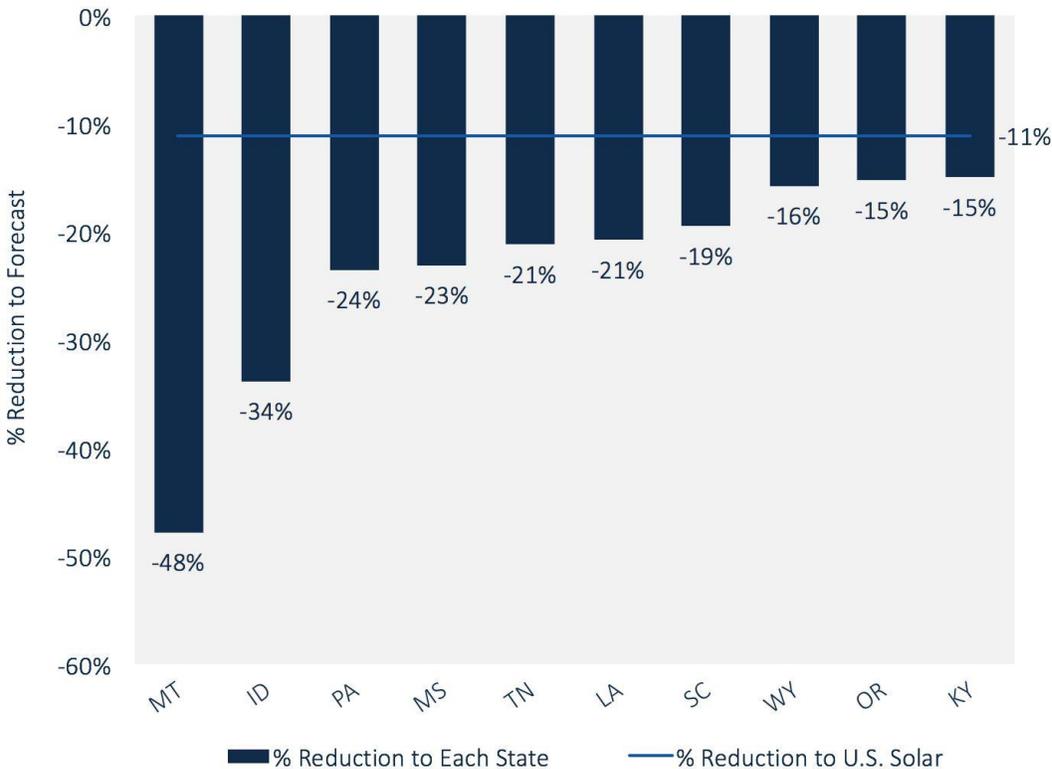
[Senate Bill 2838](#) - Public Service Commission; increase membership of and establish authority over Public Utilities Staff (Died in Committee)

2018 State Solar Power Rankings – Mississippi is #50

SolarPowerRocks.com has released its [2018 rankings of individual states'](#) support for residential solar energy development. The organization evaluated twelve different factors in three different categories (policy, incentives, and outcomes) and ranked the 50 states and the District of Columbia, from best to worst, based on their solar-friendliness. This year, **Mississippi** moved up to #50 in the ranking! Things are looking up!!

Forecast Shows How Tariffs Will Hurt Solar Growth, State by State

As reported in the January Update, the White House slapped tariffs of 30% on the importation of solar panels and modules in an effort to protect and stimulate domestic manufacturing of solar panels. Most analyses show a net loss of jobs from the tariffs due to a reduction in solar installations and reduction in affiliated systems (inverters, racking, wiring, etc.) Because many southern states are emerging solar markets, these states will be some of the most adversely impacted. From the chart below, it is estimated that **Mississippi**, Tennessee, Louisiana, South Carolina and Kentucky will see significant reductions in projected solar growth.



National Solar Jobs Census Released – Jobs Increased in MS Despite Barriers

The Solar Foundation's [National Solar Jobs Census](#) reports the first decline in solar jobs since it began keeping statistics 8 years ago. As of November 2017, the solar industry employs 250,271 workers in the United States, a 3.8% decline from 2016. This decrease is largely due to a record year of installations in 2016 on the heels of the extension of the federal Investment Tax Credit, as well as delays and postponed projects due to uncertainty around the newly implemented solar import tariffs. However, the 2017 trends for solar jobs [varied widely state by state](#) with solar jobs increasing in 29 states – including **Mississippi**. **Mississippi** saw an increase of 4% in solar jobs from 2016 to 2017. While Mississippi may be one of the least solar-friendly states in the nation, solar-related businesses continue to grow in the face of strong regulatory, financial and policy challenges. See the report [infographic](#) to get more information about solar employment trends in the U.S.

MS Recycling Coalition Recognizes Recycling Programs and Organizations

The [Mississippi Recycling Coalition](#) (MRC) has announce the 2017 Environmental Hero Award recipients honoring outstanding recycling programs and organizations in the state. MRC promotes and encourages responsible solid waste management through various methods such as source reduction, reuse, recycling, and composting programs. This year's awardees are:

City of Hattiesburg - 2017 "Local Government Recycler of the Year" Award

University of Mississippi - 2017 "Educational Institution Recycler of the Year" Award

PACCAR Engine Company - 2017 "Business and Industry Recycler of the Year" Award

Mississippi Department of Environmental Quality - 2017 "State Agency Recycler of the Year" Award

Keep Ridgeland Beautiful - 2017 "Non-Profit Organization Recycler of the Year" Award

City of Winona - 2017 "New Program Recycler of the Year" Award

Congratulations to the award recipients! We all know the benefits of recycling: reduce landfill use, conserve natural resources, create new jobs, provide cash benefits, reduces litter, etc. Did you know recycling also helps to save energy? When you recycle aluminum cans, you can save 95% of the energy required to produce those cans from raw materials. And the energy saved from recycling one glass bottle is enough to light a light bulb for four hours. Lots of energy can be saved if recycling is taken to a larger scale. Please get involved in your local community.

Regional Issues

Solar in the Southeast 2017: Report Highlights Data and Trends

The Southern Alliance for Clean Energy has released its [Solar in the Southeast 2017 Annual Report](#) highlighting solar data and trends throughout the region, including Alabama, Georgia, Florida, **Mississippi**, North Carolina, South Carolina, and Tennessee. Using the metric "watts per customer," SACE looks at the amount of installed solar relative to the total number of customers served with detailed information at the regional, state, and utility level. Mississippi continues to function in a clean energy policy vacuum, and thus the installed solar watts-per-customer is far below the southeast average although **Mississippi** has some of the best locations to develop solar.

Arkansas Electric Customers to Soon Enjoy Benefits of Wind Energy

Southwestern Electric Power Co. (SWEPCO), which serves customers in Arkansas, has announced it is purchasing 70% of the \$4.5 billion, 2,000 MW Wind Catcher wind farm project in Oklahoma and will build a 360-mile transmission line. The project will save money on fuel — \$4 billion over 25 years — and reduce purchased power costs. When completed, SWEPCO will increase the amount of renewable energy it produces from 8% to 26%. SWEPCO has agreed to provide a cap on costs and other stipulations, including component manufacturing jobs in Arkansas.

Southeast Utilities — and Customers — Embracing Community Solar

The [Southeast Energy News explores the various community solar programs in the region](#). Community solar programs generally offers residential customers "blocks" of solar-generated power for a set monthly price. Some programs also sell "subscriptions" to solar power before a project is built. Other programs allow customers to purchase and own panels and net the value of generation against their utility bill. Most southern states have sizeable programs in place. Alabama, Louisiana and **Mississippi** are the Southeast states with few, if any, community solar options whether through co-op, municipalities or investor-owned utilities. Coast Electric Power Association has a "[Cooperative Solar](#)

[Program](#)” that provides an [option for members](#) who are interested in pursuing the use of renewable energy resources but are unable to install a rooftop distributed generation solar system.

FPL Unveils Solar-Plus-Storage Project

The 840 acre, 74.5-MW FPL Citrus Solar Energy Center is believed to be the first in the country to fully integrate battery technology with a major solar power plant in a way that increases the plant's overall energy output. The new system features a 4,000-KW/16,000-KWh battery storage capacity. FPL expects to install a total of more than 10 million solar panels by 2013.

First Solar to Build Largest Solar Farm in Southeast U.S.

A 200 MW solar farm on 2000 acres near Warner Robins in central Georgia will break ground soon. Georgia Power will purchase the electricity and renewable attributes generated by the facility. The solar farm is expected to generate more than 450 GWh of electricity annually and employ up to 500 during construction. Completion is anticipated in late 2019.

TVA Begins 2019 Integrated Resource Planning Process

The Tennessee Valley Authority (TVA) is beginning work on the 2019 Integrated Resource Plan (IRP), a comprehensive study that provides direction on how to best meet future electricity demand in the region, including evaluating renewable and dispersed energy resources, over the next 20 years. You can [view the Federal Register notice here](#) (PDF). A 60-day public scoping period will run through Apr. 16, 2018. You can provide input on the IRP process at www.tva.gov/irp or send written comments to Ashley Pilakowski, Tennessee Valley Authority, 400 West Summit Hill Drive, WT 11D, Knoxville, Tenn., 37902. [Learn more about TVA's plan.](#) This is a great opportunity to voice your support for energy efficiency and renewables.

National Issues

Congress Passes Short-Term Funding Package; Includes Tax Extenders

On February 9, Congress approved a \$320 billion two-year budget deal that funds the government through March 23rd. The bill sets budgetary numbers for defense and non-defense spending for the next two years. The Bipartisan Budget Act of 2018 (H.R.1892) was approved by the Senate at 1:30AM by a vote of [71-28](#); and by the House of Representatives at 5:30AM by a vote of [240-186](#). This gives Congress some additional breathing room as they work to finalize an omnibus appropriations bill for both FY 2018 and FY 2019 (we are entering month six of FY2018).

The bill includes an \$89 billion disaster relief package for Puerto Rico, Florida and Texas for hurricane recovery. In addition, changes were made to dairy and cotton programs in the Farm Bill and tax credits for new nuclear power were extended beyond 2020.

The bill also includes short-term and retroactive extensions to certain business and individual tax provisions for clean energy investments not addressed in the recent tax reform legislation. Energy tax credits extended include:

- Tax credits for qualified residential solar, small wind, fuel cell and geothermal power generation systems are extended through 2021.
- Tax credits for commercial-scale hydropower, geothermal energy, biomass, and marine hydrokinetic tax credits are extended through 2017 only.
- Cellulosic biofuels tax credits was extended through Jan 1, 2018.
- Biodiesel and renewable diesel tax credits are extended through 2017.

Many clean energy organizations expressed dismay that the uneven application of tax incentives continues to pick winners and losers in energy and puts clean energy technologies at an economic disadvantage, stifling clean energy growth and investment.

Trump's Proposed Budget Slashes Clean Energy, Environment and Agriculture

The [President's proposed budget](#) would cut funding for the Weatherization Assistance Program and the State Energy Program. It would cut funding for the Office of Energy Efficiency and Renewable Energy by more than 70%, and would end the effective Advanced Research Projects Agency-Energy. ACEEE has released a set of [fact sheets](#) that show the positive impact of some of the programs targeted for cuts.

National Infrastructure Proposal Revealed

As part of the budget proposal, the White House introduced its [Infrastructure Rebuilding Plan](#) for \$200 billion in federal funds to leverage \$1.3 trillion in financing with private partners and state and local governments for infrastructure projects across the country. The proposal also outlines streamlining permitting for projects and selling off federal energy assets such as the Tennessee Valley Authority.

2018 State of the Electric Utility Survey Shows Renewable Energy to Grow

Utility Dive's annual report on the state of the electric utility surveys nearly 700 electric utility executives to better understand the differing perspectives on change in the sector. The survey conducted in December 2017 shows utilities across the country expect to install more solar, wind, distributed resources and natural gas in the next decade, and modernize their grids to accommodate them. Get the [State of the Electric Utility](#) survey report and see for yourself the high level of confidence respondents have in utility-scale solar and distributed generation resources and energy storage.

Utilities can Help Drive Electric Vehicle Adoption

US auto companies now offer more than [40 plug-in vehicle models](#) and consumer interest in electric vehicles (EVs) continues to grow. While EVs have the potential to reduce petroleum use and the associated emissions, large-scale EV adoption will also create opportunities and challenges for the electric power sector. Utilities can help plan for EV growth in ways that can benefit both their business model and society at large. ACEEE's new report, [Strategies for Integrating EVs into the Grid](#), examines how utilities and other stakeholders are responding to this new opportunity.

Sustainable Energy in America Fact Book

The Business Council for Sustainable Energy and Bloomberg New Energy Finance has released its [2018 Sustainable Energy in America Factbook](#). The *Factbook* provides new information and trends on the U.S. energy economy, with an in-depth look at the energy efficiency, natural gas and renewable energy sectors as well as emerging areas such as battery storage and sustainable transportation. They also unveiled a new companion piece, [Faces Behind the Facts](#), which profiles business leaders behind the industry trends in the *Factbook*. See the [Factbook Infographic](#).

Renewables Account for Half of New Generation Capacity Installed in 2017

The U.S. Federal Energy Regulatory Commission has released its [Energy Infrastructure Update](#) for December, showing the U.S. added 725 power generation units in 2017 with a combined 24,614 MW of installed capacity. The report also shows 611 renewable energy generating units were placed into service last year, with a combined 12,271 MW of capacity. See the chart below for breakdown of generating resources.

New Generation In-Service (New Build and Expansion)

Primary Fuel Type	December 2017		January – December 2017 Cumulative		January – December 2016 Cumulative	
	No. of Units	Installed Capacity (MW)	No. of Units	Installed Capacity (MW)	No. of Units	Installed Capacity (MW)
Coal	0	0	0	0	3	45
Natural Gas	6	842	79	11,980	125	9,283
Nuclear	0	0	1	102	3	1,290
Oil	0	0	10	40	22	67
Water	0	0	11	214	37	449
Wind	8	913	69	6,881	93	8,045
Biomass	0	0	26	268	57	110
Geothermal Steam	1	37	2	55	0	0
Solar	42	798	503	4,853	612	9,282
Waste Heat	0	0	1	220	2	23
Other *	2	0	23	1	27	22
Total	59	2,590	725	24,614	981	28,616

Sources: Data derived from Velocity Suite, ABB Inc. and The C Three Group LLC. The data may be subject to update.

As of the close of 2017, the FERC estimates the U.S. has 1,188,000 MW of installed generating capacity in place. This includes 240,000 MW of renewable power capacity, which accounts for 20.21% of total U.S. installed electrical generation capacity. See the chart below for more info on total installed generating capacity.

Total Available Installed Generating Capacity

	Installed Capacity (GW)	% of Total Capacity
Coal	277.49	23.35%
Natural Gas	517.14	43.51%
Nuclear	108.18	9.10%
Oil	43.53	3.66%
Water	100.86	8.49%
Wind	88.53	7.45%
Biomass	16.68	1.40%
Geothermal Steam	3.83	0.32%
Solar	30.30	2.55%
Waste Heat	1.26	0.11%
Other*	0.79	0.07%
Total	1,188.59	100.00%

Sources: Data derived from Velocity Suite, ABB Inc. and The C Three Group LLC. The data may be subject to update.

* "Other" includes purchased steam, tires, and miscellaneous technology such as batteries, fuel cells, energy storage, and fly wheel.

Finally, renewable energy generation capacity additions are set to soar over the next three years. There are 141,467 MW of proposed renewable energy capacity additions to be placed into service by January 2021. See the chart below for proposed generation additions and retirements through January 2021.

Proposed Generation Additions and Retirements by January 2021

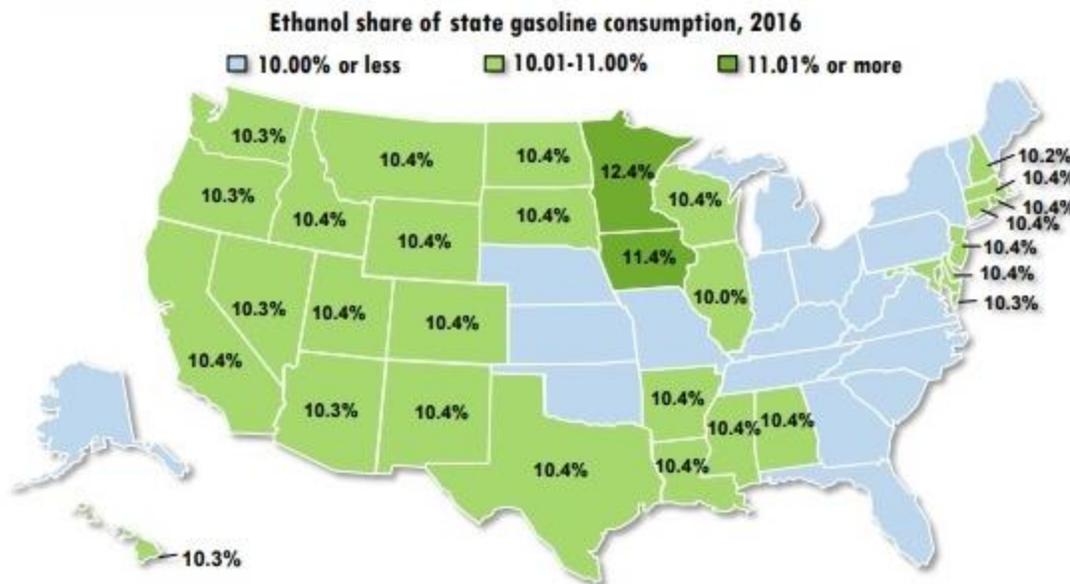
Primary Fuel Type	Additions		Retirements	
	No. of Units	Installed Capacity (MW)	No. of Units	Installed Capacity (MW)
Coal	4	1,927	74	20,650
Natural Gas	380	92,708	118	10,803
Nuclear	6	6,363	6	5,585
Oil	31	736	36	571
Water	265	12,563	25	706
Wind	464	79,770	2	68
Biomass	62	890	21	47
Geothermal Steam	28	1,173	0	0
Solar	1,861	47,071	5	2
Waste Heat	8	176	0	0
Other *	50	680	0	0
Total	3,159	244,057	287	38,432

Sources: Data derived from Velocity Suite, ABB Inc. and The C Three Group LLC. The data may be subject to update.

* "Other" includes purchased steam, tires, and miscellaneous technology such as batteries, fuel cells, energy storage, and fly wheel.

Biofuels Helping to Provide a More Energy Secure Nation

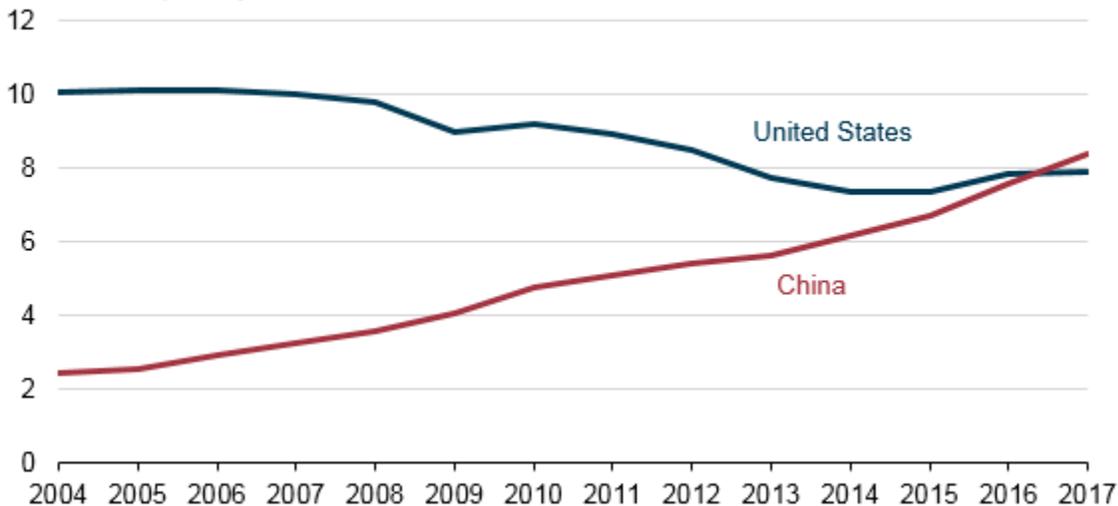
State-level energy consumption data prepared by the U.S. Energy Information Administration (EIA) shows that gasoline consumed in 30 states and the District of Columbia contained more than 10.0% fuel ethanol on average in 2016. Expanded sales of E15 and E85 have pushed average ethanol blend rates beyond 10%. See the [fact sheet](#) with more details on state-level ethanol blend rates. **Mississippi** is one of the states that have "broken the blend wall."



Not only are biofuels delivering on its promise to expand consumer access to lower-cost, higher-octane, cleaner fuel options at the pump, biofuels have enhanced U.S. energy security over the past decade. This is reflected in the fact that China has surpassed the United States as the world's largest crude oil

importer. China [surpassed the United States](#) in annual gross crude oil imports in 2017, importing 8.4 million barrels per day (b/d) compared with 7.9 million b/d for the United States. The U.S. has increased domestic production of both crude oil and biofuels and increased efficiency of vehicles. China on the other hand has seen a drastic decline in domestic petroleum production and increasing petroleum consumption for the ninth consecutive year.

Annual U.S. and China gross crude oil imports (2004-2017)
million barrels per day



Net petroleum dependence in the United States was 25% in 2016, but would have been over 35% without the addition of ethanol, biodiesel and cellulosic biofuels to the fuel supply. The U.S. [consumes](#) on average about 19.69 million barrels per day.

Ethanol Production Provide Significant Economic Benefits

The Renewable Fuels Association has released its latest study that looks at the contribution of the ethanol industry to the economy of the nation and individual states in 2017. The research found:

- 15.8 billion gallons of ethanol was produced and consumed last year;
- Nearly 72,000 direct jobs and nearly 287,000 indirect and induced jobs supported;
- The U.S. ethanol industry added nearly \$44.4 billion to the nation's GDP;
- More than \$24 billion in income added to American households;
- An estimated \$5 billion in federal tax revenue and \$5.7 billion in state and local tax revenue;
- Nearly \$6 billion in GDP generated through exports alone; and
- 532 million barrels of imported oil displaced, keeping \$26.9 billion in the U.S. economy.

Download the [2018 Ethanol Industry Outlook](#) and [Pocket Guide to Ethanol](#) for more information.

Greenest and Meanest Vehicles Identified

The American Council for an Energy-Efficient Economy (ACEEE) released its 21st annual GreenerCars vehicle ratings to help consumers choose among affordable, efficient, tech-smart cars and trucks now on the market. Green Scores of the 1,500+ configurations of all model year 2018 vehicles are available for free in the [greenercars.org](#) interactive database, along with each configuration's fuel economy, health-related pollution impacts, and greenhouse gas emissions.

The following vehicles make up the [Greenest List](#) for 2018, representing the most environmentally friendly cars for sale today.

Greenest	Green Score
1. Hyundai <u>Ioniq</u> Electric	70
2. Mercedes-Benz Smart <u>Fortwo</u> Electric Drive	69
3. BMW i3 BEV (94 Ah)	68
4. Tesla Model 3 Long Range	67
5. Kia Soul Electric	66
6. Chevrolet Bolt EV	66
7. Hyundai <u>Ioniq</u> Blue	65
8. Toyota Prius Eco	64
9. Ford Focus Electric	64
10. Kia Niro Plug-in Hybrid	63
11. Honda Clarity Plug-in Hybrid	62
12. Chevrolet Volt	62

The [Greener Choices List](#) includes both conventional vehicles and traditional hybrids and may be a more practical option for the average driver/consumer. The [Meanest List](#) is populated - as usual - by large SUVs, well-equipped pickup trucks, heavier medium-duty vehicles, and European luxury cars that are the least friendly to the environment.

Meanest	Green Score
1. Mercedes-Benz G550	19
2. Mercedes-Benz AMG G65	22
3. Mercedes-Benz AMG G63	25
4. Jeep Grand Cherokee <u>TrackHawk</u> 4x4	25
5. Toyota Sequoia FFV	27
6. Toyota Tundra FFV	28
7. RAM 1500	28
8. Lexus LX 570	28
9. Nissan Armada	28
10. Mercedes-Benz AMG GLS63	28
11. Toyota Land Cruiser Wagon	28
12. Dodge Durango SRT	28

Breakthrough Research in Engine and Fuel Co-Optimization

The DOE [Co-Optima initiative](#) is a coordinated research effort designed to provide American industry with the scientific underpinnings needed to maximize vehicle performance and efficiency, leverage domestic fuel resources, boost U.S. jobs, and enhance energy security. A new study, [Fuel Blendstocks with the Potential to Optimize Future Gasoline Engine Performance](#), identifies eight representative high-octane blendstocks across five chemical groups that could be blended into gasoline for better performance. These new blendstocks, co-optimized with advanced gasoline engines, show potential to improve passenger vehicle fuel economy by 10%.

Nike Wants All Its Electricity to Come from Renewable Sources by 2025

Nike has signed its second major wind power agreement with Avangrid Renewables. The deal is for 86 megawatts of wind power from the Karankawa Wind Farm in Bee and San Patricio counties in Texas. This agreement enables Nike to source 100% renewable energy across its facilities in North America. Nike has set itself the target of sourcing 100% of its global electricity needs from renewable sources of energy by the year 2025.

New Guide Helps Frame Evaluation of Utility Energy Efficiency Programs

LBNL has issued a new report that describes how to create and update frameworks for conducting evaluation, measurement, and verification (EM&V) of energy efficiency programs funded by utility customers – such as the Quick Start Programs in Mississippi. The report, [*Guide for States: Evaluation, Measurement, and Verification Frameworks-Guidance for Energy Efficiency Portfolios Funded by Utility Customers*](#), describes the two primary purposes for EM&V frameworks: 1) to support consistent, documented and comparable EM&V within a jurisdiction and 2) to provide all stakeholders with an understanding of how EM&V is conducted within the jurisdiction, supporting confidence in results.

NRDC, EEI Advance Clean Energy Recommendations

Unusual pairing of environmental group NRDC and power trade group EEI [leads to collaboration](#) resulting in [21 policy recommendations](#) to state utility regulators on how to best sustain the clean energy transition that is “underway and accelerating.”