



1 CUSTOMERS

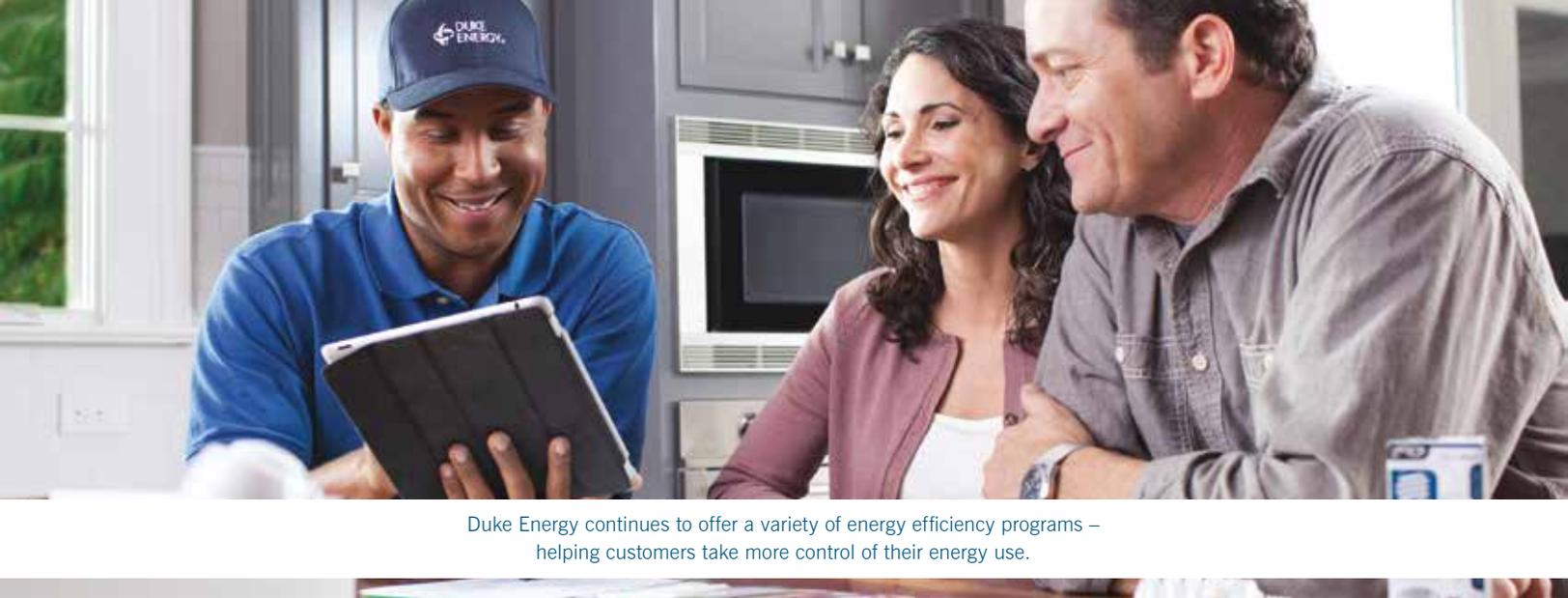
Improve the Lives of Our Customers and Vitality of Our Communities

2017 Highlights

- As of year-end 2017, customer energy consumption and peak demand were reduced by more than 14,400 gigawatt-hours and 5,300 megawatts, respectively.
- Customers benefited from electric rates below the national average in all customer classes and all service areas for the fourth consecutive year.
- Deployed 1.2 million smart meters in 2017, bringing the number of customers who have smart meters to 40 percent. Smart meters provide real-time information that enables customers to make better decisions about their energy usage.
- During 2017, the Duke Energy Foundation invested \$33.2 million to support our communities, and our employees and retirees volunteered over 115,000 hours.
- Piedmont Natural Gas was designated a 2017 “Most Trusted Brand,” “Utility Customer Champion” and “Utility Environmental Champion” by natural gas utility customers through polling conducted by Cogent Reports.

Challenges and Opportunities

- Enhance the customer experience and relentlessly pursue our goal of achieving and sustaining top quartile customer satisfaction.
- Invest \$25 billion during 2017-2026 to create a smarter, greener energy grid that also will be even more reliable and resilient during severe weather events.
- Continue to work with stakeholders to identify positive outcomes to issues important to our communities.



Duke Energy continues to offer a variety of energy efficiency programs – helping customers take more control of their energy use.

Saving Money with Free Energy Efficiency Advice

Duke Energy continues to expand its portfolio of [energy efficiency programs](#) that benefit our customers and the environment.

Duke Energy’s Referral Network completed its first full year of operation in 2017, providing customers with energy-related advice and purchasing confidence when selecting home improvement contractors.

The program provides professionals for home improvement services such as attic insulation and HVAC and water heating repair and replacement.

In 2017, the program generated more than 10,000 referrals in the Carolinas and Kentucky. The program will expand to Indiana and Ohio in 2018. Referred contractors can also assist customers in qualifying for up to \$1,600 in rebates via the Smart Saver® program.

Since 2009, the company has delivered more than 80 million energy-efficient lighting products to residential customers at deeply discounted prices. Newly expanded options for lamps and fixtures provide even more energy-

efficient solutions for every socket of our customers’ homes.

LEDs use 90 percent less energy and last 15 times longer than traditional bulbs, leading to savings on customers’ bills. Eligible customers can receive lighting options at participating retailers, accessing company-offered programs and by visiting the online store.

Duke Energy’s My Home Energy Report is approaching the 2 terawatt-hours of electricity saved. That’s enough to power 200,000 homes for a year. The program provides residential customers with a meaningful look at their energy use compared to similar homes based on age, size, location and heating source. It provides targeted insights to help customers take action to reduce their energy consumption.

In the fourth quarter of 2017, the company started sending the reports to customers electronically if they have registered an email address. Through the program, nearly 23 million reports were sent in 2017. These reports are printed on 100 percent recycled paper and a reforestation project has planted nearly 20,000 trees as part of the program.



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Duke Energy restored power in three days to 75 percent of its 1.3 million Florida customers who lost electricity when Hurricane Irma roared through the state.

Duke Energy Restores Power After Massive Hurricane Irma

Hurricane Irma made history in September 2017 as one of the strongest hurricanes on record in the Atlantic Basin, and the most destructive storm to ever hit Duke Energy's Florida service area.

The peak number of power outages occurred Sept. 11 when more than 1.3 million of Duke Energy's 1.8 million Florida customers – almost 75 percent – lost power.

Damage to Duke Energy's electrical distribution system was extensive and widespread. In some areas, the company had to rebuild the entire power distribution system.

The company replaced nearly 2,000 damaged power poles and more than 1,100 transformers – and inspected, repaired or replaced more than 1,000 miles of damaged power lines.

In addition, 124 high-voltage transmission lines and 71 substations needed major repairs.

The storm required a massive response. Duke Energy mobilized a small army of more than 12,000 line workers, tree professionals, damage assessors and

support staff who came to Florida from 25 states and Canada.

The company restored power to more than 75 percent of its customers in three days – and 99 percent in eight days.

Duke Energy also learned valuable lessons to apply to future large storms.

For example, the company is improving its modeling to better integrate damage assessments from field workers in order to give customers more accurate estimated power restoration times.

The company also is strengthening its power outage management system that provides outage information to customers via phone, text and online maps.

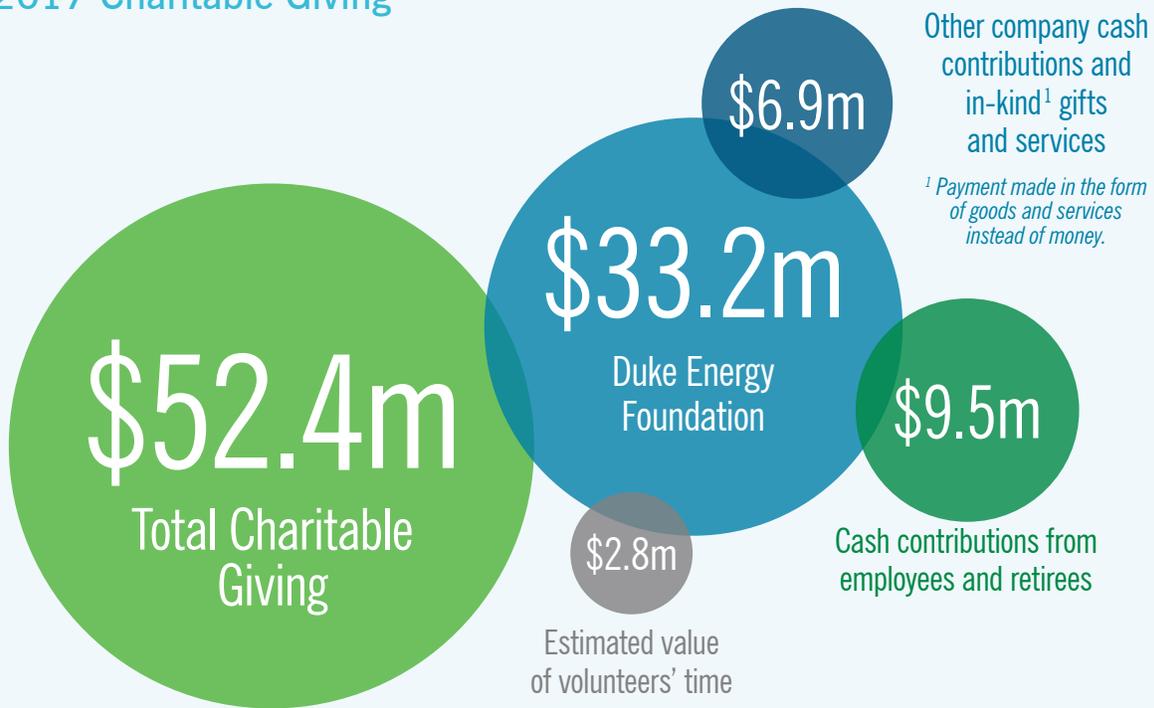
Meanwhile, Duke Energy will invest \$3.4 billion over the next 10 years to further strengthen its Florida energy grid. One example: the company will move about 1,250 miles of its most outage-prone overhead power lines underground.

The company also is investing in wireless sensing devices and other technologies to create an intelligent electricity delivery system – a “smart grid” that reduces the number and length of power outages.



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2017 Charitable Giving



Electric Grid Modernization Continues on Several Fronts

In 2017, Duke Energy continued to move forward with its \$25 billion, 10-year modernization plan to bolster the company's multistate electric grid – the power lines, substations and other equipment that deliver electricity from power plants to customers.

The initiative will increase reliability, reduce power outages, strengthen the grid against physical and cyber threats, give customers more information and more control over their electricity use, and accommodate additional solar energy and energy storage.

In North Carolina and South Carolina, the modernization initiative is called Power/Forward Carolinas – a \$16 billion plan to significantly upgrade the electric grid while also providing a strong economic stimulus that includes creation of 17,000 jobs and more than

\$26 billion in economic output over 10 years.

In Florida, Duke Energy completed work on an automated, self-optimizing grid network that enables the grid to self-identify problems and reroute power to shorten or eliminate power outages. This advanced grid also will support the growth of solar power, energy storage and other emerging technologies.

Duke Energy plans to deploy 100 similar self-healing networks in some of the company's other service areas in 2018, with the goal of having 80 percent of customers serviced by such networks in the next decade.

Additionally, the company plans to use data analytics to identify the most outage-prone power lines and relocate them underground. This initiative will reduce the number of power outages and shorten restoration times after storms.



In 2017, Duke Energy continued to move forward with its \$25 billion, 10-year modernization plan to bolster the company's multistate electric grid.

Meanwhile, Duke Energy continues to install digital smart meters that give customers more convenience and more control over their energy usage. The company installed 1.2 million meters in 2017 and will install an additional 1.4 million in 2018.

Today, 40 percent of Duke Energy’s customers are equipped with smart meters. The company remains on track to bring the technology to all of its customers by 2021.

The meters help customers save money by giving them online access to information about their electricity consumption, so they can adjust usage as they see fit.

The meters also enable Duke Energy to immediately determine when a customer loses power, so the company can quickly dispatch a repair crew.

Customer Satisfaction Scores Show Steady Improvement

While Duke Energy’s customer satisfaction scores improved for both business and residential segments in 2017, the company’s rankings still require improvement to be among the nation’s leaders.

All Duke Energy utilities are implementing plans to achieve top-quartile performance among large utilities in the J.D. Power Electric Utility Residential Study by the end of 2018.

In 2017, satisfaction scores for business customers increased for all four Duke Energy companies in the J.D. Power Electric Utility Business Study.

- Duke Energy Progress was up 16 points to 780, remaining in the first quartile.

- Duke Energy Midwest was up 26 points to 779, moving up to the first quartile.
- Duke Energy Florida was up 37 points to 771, moving up to the second quartile.
- Duke Energy Carolinas was up 19 points to 769, moving up to the second quartile.

The study rates companies on six factors: power quality and reliability, billing and payment, corporate citizenship, price, communications and customer service.

According to internal data and surveys, 88 percent of large business customers were “highly satisfied” with Duke Energy as their utility – down slightly from 91 percent last year.

Among residential customers, 83 percent were highly satisfied with the service they received from Duke Energy in 2017 – up from 79 percent last year.

In the residential study, J.D. Power reported Duke Energy’s satisfaction scores were up for all four operating companies in 2017.

- Duke Energy Progress was up 42 points to 722, remaining in the second quartile nationally among all large utilities.
- Duke Energy Midwest was up 42 points to 721, remaining in the second quartile nationally among all large utilities.
- Duke Energy Carolinas was up 52 points to 721, moving up from the third to second quartile nationally among all large utilities.
- Duke Energy Florida was up 47 points to 701; however, the company remained in the fourth quartile nationally.

Diverse Supplier Spending¹ (in millions)

	2013	2014	2015	2016	2017
Spending with Tier I diverse suppliers ²	\$691	\$578	\$633	\$681	776
Spending with Tier II diverse suppliers ³	\$212	\$412	\$405	\$494	437
Total	\$903	\$990	\$1,038	\$1,175	1,213

1 Piedmont Natural Gas data from the first three quarters are included in 2016. Full-year data are included beginning in 2017.

2 Tier I represents direct purchases from diverse suppliers.

3 Tier II consists of spend by Duke Energy suppliers with diverse suppliers/subcontractors.



Quinn Davis / Director of Lighting Programs / Norv Clontz / Director of Data Science Innovation



Clontz and Davis won a James B. Duke Award, the company's highest honor, for their innovative solution to a customer's concern.

Customer's Question Led to an Innovative Solution

Jim Bradley has lived in Charlotte for 30 years, and he never experienced as many power outages as he did in early 2016. Frustrated, he contacted a friend who worked at Duke Energy.

His question made it to Sasha Weintraub, senior vice president of customer solutions, and inspired a new system that would help reduce outages for all customers.

Weintraub routed the question to Norv Clontz, who was then director of grid analytics, and Clontz brought in Quinn Davis, who was then a manager in the power quality and reliability engineering department. With a few months of research and collaboration, the pair found the reason for Bradley's outage – overgrown vegetation – and created the System Health Tool to help others, too.

"It's my job to prevent outages," Davis said. "It's all about asking, 'What's the best use of our next dollar to help the customer?'"

The new system identifies small pockets of poor performance and determines where grid investments are most

needed. Before the System Health Tool, engineers had to look at performance indicators separately – vegetation management, infrastructure, reliability and customer satisfaction data – which didn't present a clear picture of what areas needed improvements based on customer experience. The tool combines all of this data and shows sections of a map as red, orange and yellow based on priority.

Clontz and Davis won a James B. Duke Award, the company's highest honor, for their innovative solution to a customer's concern. The software has been particularly useful in research for our Power/Forward grid modernization initiative. This will include a \$5 billion investment to reduce outages by burying lines and installing protective equipment in North Carolina's most susceptible areas.

Grid & Clean Energy Investment Spurred By Settlement

In 2017, the Public Service Commission of Florida approved a settlement agreement that extends Duke Energy's current multiyear rate plan to 2021.

The agreement, supported by a number of consumer groups, included \$6 billion in renewable power and energy grid investments. It also would eliminate any further customer charges with the nuclear project in Levy County.

Some highlights:

- Duke Energy announced a four-year plan to add 700 megawatts (MW) of solar energy, greatly accelerating the company’s previous 10-year solar installation plan. A future 75-MW plant in Hamilton County in north Florida will be one of the first of the new facilities.
- It expands customer choices with two new optional billing programs. One is a shared solar program to allow customers to participate in solar generation without having the solar facility on their property. The other is a fixed bill program for residential customers – allowing them to pay a fixed amount each month regardless of usage.
- It allows Duke Energy to invest to modernize the energy grid to enhance reliability, reduce outages and shorten restoration times.
- The company can install advanced metering technology (smart meters) to enable more bill-lowering tools, access to more information about energy use, and the ability to receive usage alerts, outage notifications and customized billing options once fully implemented.
- The settlement will allow the company to install more than 500 electric vehicle charging stations and up to 50 MW of battery energy storage.

“We applaud Duke Energy Florida for working proactively with stakeholders to embrace smart technologies that are both good for consumers and the environment,” said Dr. Stephen A. Smith, executive director of the Southern Alliance for Clean Energy, in the [press release](#) announcing the settlement. “Large scale solar, electric vehicles and battery storage demonstrate that Duke is embracing technologies for the 21st century. We welcome Duke’s willingness to work with stakeholders on data collection and any rate design changes impacting customer-owned demand side solar.”

Duke Energy’s Electric Rates: Below U.S. Average

In effect as of July 1, 2017 (cents per kilowatt-hour (kWh))

Residential

Duke Energy Kentucky	8.89
Duke Energy Carolinas-NC	10.40
Duke Energy Progress-NC	11.11
Duke Energy Carolinas-SC	11.13
Duke Energy Progress-SC	11.78
Duke Energy Ohio	11.81
Duke Energy Florida	11.84
Duke Energy Indiana	12.05
U.S. AVERAGE	13.99

Commercial

Duke Energy Progress-NC	8.01
Duke Energy Kentucky	8.14
Duke Energy Carolinas-NC	8.88
Duke Energy Ohio	8.91
Duke Energy Progress-SC	9.14
Duke Energy Carolinas-SC	9.39
Duke Energy Indiana	9.50
Duke Energy Florida	9.56
U.S. AVERAGE	11.84

Industrial

Duke Energy Kentucky	7.36
Duke Energy Progress-NC	7.53
Duke Energy Progress-SC	7.62
Duke Energy Ohio	8.00
Duke Energy Carolinas-NC	8.22
Duke Energy Carolinas-SC	8.43
Duke Energy Indiana	8.62
Duke Energy Florida	8.95
U.S. AVERAGE	9.99

Notes: Residential typical bill based on 1,000 kWh per month usage. Commercial typical bill based on 40 kW demand and 14,000 kWh per month usage. Industrial typical bill based on 1,000 kW demand and 400,000 kWh per month usage.

Source: Edison Electric Institute Typical Bills and Average Rates Reports, Summer 2017 (latest available).



Duke Energy seeks environmentally friendly as well as diverse and local suppliers to support the needs of the communities we serve.

Supply Chain Relationships Support Sustainability

In addition to selling billions of dollars of energy to customers, Duke Energy is also a large purchaser of goods and services. That makes the company's supply chain a critical aspect of our commitment to sustainability.

Overall, Duke Energy buys more than \$10 billion of goods and services each year; of that about \$3.7 billion is spent with local suppliers. And the company's spending with minority-, women-, veteran-, service-disabled veteran-owned and HUBZone businesses directly and through subcontracting continues to exceed \$1 billion annually.

In recognition of our efforts to improve diversity and inclusion by advancing purchasing opportunities for diverse suppliers within the electric power industry, the Edison Electric Institute awarded Duke Energy the 2017 Business Diversity Excellence Award.

One way the company has succeeded in its supply chain efforts is by creating and maintaining relationships with supplier partners. Those partners are supportive of our corporate responsibility sourcing strategy, which focuses on safe work practices, local economic impact, supplier diversity and environmental stewardship. In addition, Duke Energy suppliers are expected to adhere to our [Supplier Code of Conduct](#).

The company's membership in the [Electric Utility Industry Sustainable Supply Chain Alliance](#) is also a valuable relationship and helpful resource to Duke Energy's efforts.

During 2017, for the second consecutive year, Duke Energy hosted more than 100 individuals representing approximately 40 companies at our Supplier Exchange Forum to communicate the company's operational expectations, including efforts to support Duke Energy's overall sustainability mission.

In addition to supplier representatives, Duke Energy executives and supply chain leaders attended the event, providing a great opportunity to enhance existing relationships, develop new ones, and discuss the company's priorities.

Duke Energy seeks environmentally friendly as well as diverse and local suppliers to support the needs of the communities we serve. These efforts have made lasting positive impacts on economic development and sustainability, locally, regionally and nationally.