



## 2 GROWTH

### Grow and Adapt the Business and Achieve Our Financial Objectives

## 2017 Highlights

- During 2017, helped our communities attract more than 12,000 new jobs and \$5.9 billion in capital investments to our service territories.
- Achieved adjusted diluted earnings per share of \$4.57, near the midpoint of our full-year earnings guidance to Wall Street, despite unfavorable weather.
- Increased the quarterly dividend by 4 percent; 2018 will mark the 92nd consecutive year Duke Energy has paid a quarterly dividend.
- As of year-end 2017, owned or had under contract over 6,400 megawatts (MW) of wind, solar and biomass.
- Proposed or have in service approximately 185 MW of battery storage.
- Reached important milestones in our midstream natural gas business. Sabal Trail went into commercial operation during 2017, and in early 2018, the Atlantic Coast Pipeline started initial construction activities.

## Challenges and Opportunities

- Continue to help attract jobs and capital investments in our communities through our economic development programs.
- Deliver value to our customers and grow our business by investing \$37 billion in growth capital over five years.
- Continue to take advantage of new technologies to find better ways to meet customer expectations.
- Maintain our position as an industry leader in environmental, social and governance disclosure.



Anthony Alston / Solar Technician / Kathleen Alexandridis / Engineer – Dogwood Solar Site, Scotland Neck, NC

## Solar Shines Bright in 2017

For the past few years, wind energy has been Duke Energy's fastest growing renewable energy resource. But in 2017, solar power led the company's transition to more renewable energy.

North Carolina continues to be the company's top solar energy state. The company connected almost 500 megawatts of solar power to its energy grid in 2017 – keeping North Carolina the No. 2 overall state in the nation for installed solar energy capacity.

In addition, the company worked with numerous stakeholders to support the Competitive Energy Solutions for North Carolina law, which will expand solar power even further in the state. The law – called H.B. 589 – helps Duke Energy roll out new programs that will make solar more attractive to all types of customers. In addition, the law will spur future construction of utility-scale solar projects that will serve thousands of customers.

With a number of solar facilities already in place, Duke Energy Florida announced it would add up to 700 megawatts of solar over the next four years. Part of that growth is already underway. The 75-megawatt Hamilton Solar Plant is under construction now, and will produce enough emissions-free energy to power more than 20,000 homes at peak production.

In Northern Kentucky, Duke Energy completed three solar facilities in Kenton and Grant counties – the first company-owned and operated plants in the state.

In Indiana, Duke Energy, the Department of the Navy and Naval Support Activity (NSA) Crane celebrated the operation of a 17-megawatt solar power plant at NSA Crane – also the company's first company-owned solar facility in the state.

In South Carolina, the company's successful solar rebate program continued, with about 2,600 customers signing up to take advantage of the company's program.

The company's commercial unit, Duke Energy Renewables, helped the company expand to a new state in 2017. The company acquired the 25-megawatt Shoreham Solar Commons project in New York.

Still, there was progress made on wind energy in 2017. In Kay County, Okla., the company's 200-megawatt Frontier Windpower Project began producing power. It's Duke Energy's first renewable energy project in Oklahoma. The company sells the output to City Utilities of Springfield, Mo.

The company continues to be on track for its sustainability goal of owning or purchasing 8,000 megawatts of wind, solar and biomass capacity by 2020. At the end of 2017, the company's overall total was 6,400 megawatts.



Heather Granados / Battery Storage Facility at Notrees Wind Power Plant – Goldsmith, TX

## Battery Energy Storage Advances

A few years ago, battery energy storage was more demonstration than application.

But much of that changed in 2017 as Duke Energy began moving forward with energy storage projects that will help selected parts of the company's territory. With renewable energy growing across the company, improved battery storage is needed to work in conjunction with wind, solar and the energy grid to provide reliable service to customers.

In Indiana, Duke Energy is planning to install a 5-megawatt battery storage system and 3 megawatts of solar that will provide grid services, along with operating as a microgrid, at the Indiana National Guard's Camp Atterbury training operation. The microgrid – connected energy sources that can serve a customer on its own – will help with reliability and grid security at the camp.

Duke Energy has also included 75 megawatts of energy storage in its 2017 Integrated Resource Plan in the Carolinas.

In Asheville, N.C., a 9-megawatt lithium-ion battery system will be placed at a Duke Energy substation in a local community. The battery will primarily be used to help the electric system operate more efficiently. It will provide energy support to the electric system, including frequency regulation and other grid support services.

In Hot Springs, N.C., a 4-megawatt lithium-ion battery system will help improve electric reliability for the town, along with providing services to the overall electric system.

Duke Energy has a smaller battery installation in Haywood County, N.C. The company has a 95-kilowatt-hour zinc-air battery and 10-kilowatt solar installation serving a remote communications tower on Mount Sterling in the Smoky Mountains National Park. During the aftermath of Hurricane Irma, the installation's microgrid operated without an outage to the facility.

As for the future, a settlement in Florida will allow the company to invest in up to 50 megawatts of battery energy storage in the state over the next five years. Duke Energy is currently evaluating sites for these deployments.



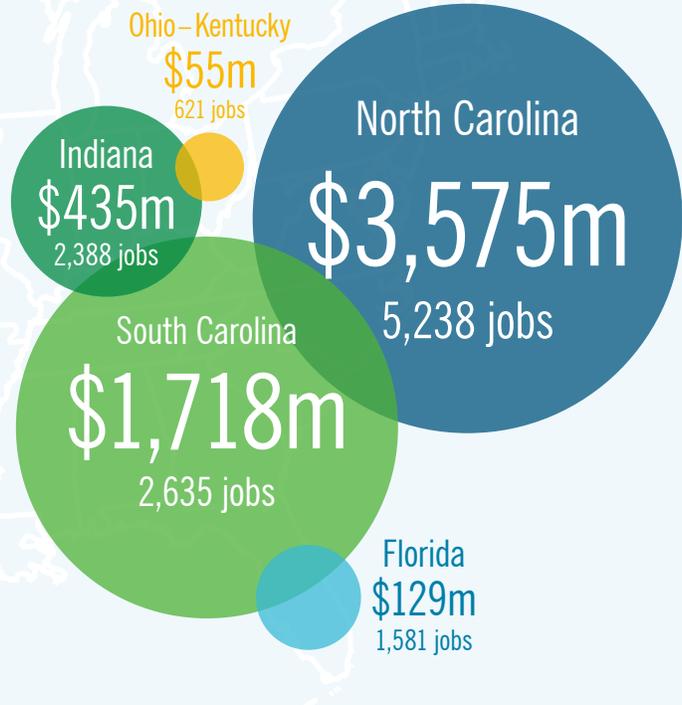
In 2017, Duke Energy moved forward with a number of battery storage projects that will be a part of the company's regulated operations.

## Economic Development

Duke Energy works in partnership with state and local authorities to attract business investment and jobs, and promote economic growth in our communities. Duke Energy helped attract 12,000 jobs and \$5.9 billion of investments in 2017.

**\$5.9b**  
Total Capital Investment

**12,000**  
Total Jobs



### Economic Development: Over 12,000 Jobs, \$5.9B in Investment

Duke Energy's economic development team – through 100 successful projects in 2017 – helped bring over 12,000 new jobs and \$5.9 billion in private-sector investment to the six states served by the company's electric utilities.

Site Selection magazine named Duke Energy to its "Top Utilities in Economic Development" list for the 13th consecutive year, citing the company's numerous successful collaborations with state and local economic development agencies and business organizations.

The magazine also recognized Duke Energy's efforts to build smarter energy infrastructure that bolsters recruitment of new businesses and reinforces retention of existing ones.

Duke Energy's economic development specialists work year-round to help new companies worldwide open offices, manufacturing plants and other facilities in North Carolina, South Carolina, Florida, Indiana, Ohio and Kentucky.

The team also works hard to encourage existing companies in those states to expand at home, rather than look elsewhere.

In addition, the team in 2017 helped prepare 25 large-scale properties across four states for potential business and industrial development through Duke Energy's Site Readiness Program.

Under the program, Duke Energy helps identify high-quality business and industrial sites, then partners with local government agencies and economic development professionals to build strategies to bring essential utilities – water, sewer, natural gas and electricity – to the properties.

## Governance Ratings

To help keep our corporate governance practices strong, we benchmark against peer utilities and other best-in-class companies. The risk ratings provided for Duke Energy by ISS, a leading corporate governance advisory service to the financial community, are provided below. As of March 1, 2018, Duke Energy's overall ISS Governance QualityScore was 3.

	QuickScore 2016 <sup>1</sup>	QualityScore 2017 <sup>1</sup>	QualityScore 2018 <sup>1</sup>	Rating Scale
Board structure	2	3	<b>5</b>	1 = Lowest risk (best rating) 10 = Highest risk
Compensation	2	1	<b>3</b>	
Shareholder rights	4	3	<b>3</b>	
Audit	1	1	<b>2</b>	
<b>Overall score</b>	<b>2</b>	<b>1</b>	<b>3</b>	

<sup>1</sup> As of March 1.

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“The program helps communities – especially in rural areas – attract jobs and build thriving economies,” says John Geib, Duke Energy’s North Carolina Economic Development Director.

Separately, Duke Energy in 2017 provided more than \$1 million in financial support to local economic development agencies and initiatives to fund a variety of job creation and business development projects.

Additionally, the company continued its long-term financial investments in workforce development programs at community colleges, where classes and apprenticeships equip students with skills and training for tomorrow’s jobs.

## Encouraging Civic Participation

Educating lawmakers, policy advocacy and participation in America’s democratic process are activities Duke Energy encourages.

Civic engagement is essential to ensuring that our elected officials hear and understand many voices and perspectives as they consider important issues and make decisions that can have significant impacts on our lives. Policy positions and priorities important to Duke Energy include infrastructure, tax and regulatory reform, renewables, environmental issues and cybersecurity.

Duke Energy’s [Political Expenditures Policy](#) requires compliance with laws and regulations governing political contributions, government interaction and

lobbying activities. The company is legally prohibited from making direct contributions to candidates for U.S. federal offices and certain state offices.

Duke Energy’s Voices in Politics network educates and activates employees on political and policy issues that could affect our operations, employees or stakeholders. These efforts are for the purpose of making sure lawmakers fully understand the direct impacts of their decisions on Duke Energy and the customers and communities we serve.

In 2017, our reportable federal lobbying expenses (including office space, salaries, consulting and event fees, etc.) included \$2,296,595<sup>1</sup> in dues to support policy research and advocacy by trade associations such as the Edison Electric Institute and the Nuclear Energy Institute. Duke Energy also contributed approximately \$918,200<sup>2</sup> to Section 527 organizations created to support the nomination, election, appointment or defeat of a candidate.

DukePAC is a voluntary, nonpartisan political action committee that leverages the collective financial contributions of eligible employees to support political organizations and candidates seeking elected office at the federal and state levels. These candidates represent the communities we serve, are leading members of their elected legislative body or serve on relevant committees that impact the company’s business, employees, customers and communities. In 2017, DukePAC contributions totaled approximately \$708,780.

<sup>1</sup> Represents trade association dues of more than \$50,000 during 2017.

<sup>2</sup> For contributions in excess of \$1,000.



In Florida, the Sabal Trail natural gas pipeline and Citrus County natural gas-fired power plant.

## Lower-Carbon Energy: Natural Gas Pipelines, Power Plants

Natural gas continues to play an expanding role in Duke Energy's ongoing transformation into a cleaner, lower-carbon energy provider as the company increasingly moves away from coal-fired electricity generation.

Two new underground **interstate natural gas pipelines**, partly owned by Duke Energy, took major steps forward in 2017:

- The Atlantic Coast Pipeline received several state and federal government approvals, allowing partial construction to begin in early 2018. The approximately 600-mile pipeline – which will start in West Virginia and traverse Virginia before ending in North Carolina – is scheduled to open in late 2019.

The pipeline will fuel advanced natural gas power plants that are replacing aging, higher-carbon, coal-fired plants. The pipeline also will fuel new industrial development

in several economically challenged counties in eastern North Carolina – bringing thousands of new, higher-wage jobs for the region's workers and critically needed new tax revenue for cash-strapped local governments.

- Meanwhile, a second new pipeline – Sabal Trail – opened after 18 months of construction, bringing a significant new supply of natural gas to Florida to fuel power plants and industry in that heavily gas-dependent state. The 515-mile pipeline begins in Alabama and traverses southern Georgia before terminating in central Florida.

Simultaneously, construction of new **natural gas-fired power plants** continued in Anderson County, S.C. (opening in 2018); Citrus County, Fla. (opening in 2018); and Buncombe County, N.C. (opening in 2019). The three plants will replace older coal-fired generating units at each location. The new plants also will complement the company's growing use of solar and wind facilities, whose power output is intermittent.



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## Investing in a Smarter Energy Future in Multiple Ways

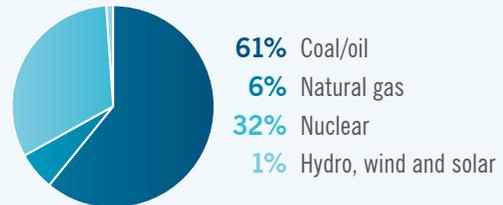
Duke Energy in 2017 continued to invest in a smarter energy future in multiple ways:

- Modernizing the energy grid.** The company is investing \$25 billion between 2017 and 2026 to create a smarter energy grid that will accommodate additional renewable energy and improve system performance in many aspects – customer control and convenience, security, and service reliability. (See related article on page 18: [“Electric Grid Modernization Continues on Several Fronts.”](#))
- Generating cleaner energy.** The company continues to make significant progress in reducing its environmental footprint – reducing carbon dioxide emissions by closing coal-fired power plants and investing \$11 billion between 2017 and 2026 in cleaner natural gas-fired power plants, solar energy and other renewable generation sources.
- Expanding natural gas infrastructure.** Natural gas will play a major role in Duke Energy’s cleaner energy future. The company is investing heavily in natural gas-fired power plants and interstate natural gas pipelines, and retrofitting three large coal-fired power plants to also burn natural gas. (See related articles on pages 28 and 36: [“Lower-Carbon Energy: Natural Gas Pipelines, Power Plants”](#) and [“Gas Co-Firing Offers Many Positive Benefits.”](#))
- Transforming the customer experience.** Duke Energy exists to serve its customers, and the company is working hard to further improve the overall customer experience. New technology is shortening and even eliminating power outages. Smart meters are giving customers new ways to manage and reduce their electricity usage, and save money. New electric vehicle charging stations are giving customers new transportation fuel options.
- Engaging stakeholders.** Fortune magazine named Duke Energy to its 2018 “World’s Most Admired Companies” list – an indication that Duke Energy’s many diverse stakeholders recognize and value the company’s continued progress on its future-focused journey. The company continues to work collaboratively with regulators, legislators, environmentalists, consumer advocates and many others on its multipronged modernization initiatives.

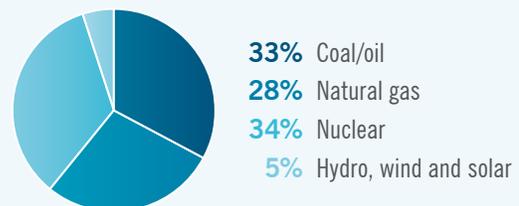
## Moving Toward a Cleaner Generation Fleet and Increased Fuel Diversity

(megawatt-hour output)

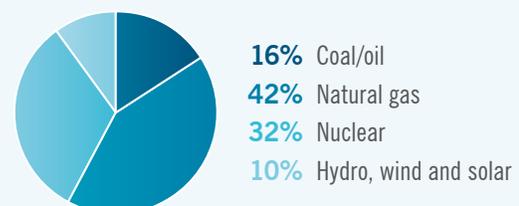
2005<sup>(1)</sup>



2017<sup>(1)</sup>



2030E<sup>(2)</sup>



1. 2005 and 2017 data based on Duke Energy’s ownership share of generation assets as of Dec. 31, 2017.

2. 2030 estimate will be influenced by customer demand for electricity, weather, fuel availability and prices.



Projects funded by Duke Energy in North Carolina are getting drivers and companies to use electricity instead of gasoline and diesel to run their engines.

## Trucks Plug In, Save Fuel and Help the Environment

Long-haul trucks idling their engines aren't unusual. Many times it's for the comfort of the driver or the need to keep cargo refrigerated.

It also uses about 1 billion gallons of fuel a year, according to Argonne National Laboratory. That costs roughly \$3 billion and 11 million tons of carbon dioxide released into the environment, not to mention wear and tear of engines.

Is there a better way? Duke Energy thinks so.

Projects funded by Duke Energy in North Carolina are getting drivers and companies to use electricity instead of running their engines.

At the Big Boy Truck Stop in Johnston County, Duke Energy worked with IdleAir to install 24 electrification units. Truckers pay an hourly fee to plug in. In addition to avoiding emissions, truckers will save around \$1 an hour compared to fuel costs.

In Hickory, 36 electric outlets help trucks at the Merchants Distributors (MDI) distribution center keep cargo cold for their fleet of trucks. Shorepower Technologies installed the power outlets.

The outlook for future projects looks good as companies like MDI see electrification as a way to reduce environmental emissions and save money. The two projects, which are part of a 2015 settlement with the U.S. Environmental Protection Agency and environmental groups, are expected to save more than 50,000 gallons of diesel fuel a year.

While that's a small part of the 38 billion gallons of diesel fuel used each year by trucks on the highway, it's just one part of what Duke Energy is doing to promote electricity as a cleaner transformation fuel for the country.

The company has been active in building hundreds of public charging stations at parking decks, libraries and shopping areas. That infrastructure is needed as electric vehicles become a growing part of the nation's auto fleet, and the effort will continue in 2018 with Duke Energy Florida installing more than 500 charging stations.

In North Carolina, Duke Energy is continuing a project that will ultimately fund more than 200 public EV charging stations under a \$1.5 million grant program.

## Financial Highlights

(In millions, except per share data) <sup>1</sup>	2017	2016	2015
Total operating revenues	\$23,565	\$22,743	\$22,371
Income from continuing operations	\$3,070	\$2,578	\$2,654
Reported diluted earnings per share (GAAP)	\$4.36	\$3.11	\$4.05
Adjusted diluted earnings per share (Non-GAAP)	\$4.57	\$4.69	\$4.54
Dividends declared per share	\$3.49	\$3.36	\$3.24
Total assets	\$137,914	\$132,761	\$121,156
Long-term debt including capital leases, less current maturities	\$49,035	\$45,576	\$36,842

<sup>1</sup> See Duke Energy's Annual Report on Form 10-K/A for the year ended Dec. 31, 2017 for detailed notes and further explanations.



The company is already seeing the benefits of our multiyear portfolio transition and our regulated and highly contracted energy infrastructure businesses are generating strong results.

## Delivering Results for Shareholders and Customers

Our stakeholders depend on us to deliver on our commitments and we did just that in 2017. From financial results to the dividend, the company created sustainable value for our shareholders, and this focus will continue into 2018 and beyond.

In 2017, Duke Energy achieved adjusted diluted earnings per share of \$4.57. The company is already seeing the benefits of our multiyear portfolio transition and our regulated and highly contracted energy infrastructure businesses are generating strong results.

Through investments in the energy grid, cleaner generation sources and natural gas infrastructure, as well as a keen focus on cost management, the company delivered on its financial commitments to shareholders.

The company experienced solid growth in its electric and natural gas utilities. The company has reaffirmed its adjusted diluted earnings per share growth objective of 4 to 6 percent from 2018 to 2022, based off of the midpoint of the original 2017 guidance range of \$4.50 to \$4.70 per share.

The company has also factored in the impacts of the new federal tax law – and is working constructively with our state regulatory commissions to identify ways to pass along savings to customers, while also upholding the sustainable financial health of the company.

Duke Energy remains committed to offering an attractive long-term investment to its shareholders. 2018 will mark the 92nd consecutive year we have paid a dividend to our shareholders. Duke Energy grew that dividend by about 4 percent in 2017.

Duke Energy's total shareholder return – measured as the change in stock price plus the reinvestment of dividends – for 2017 was 13.0 percent, compared to 12.8 percent for the Philadelphia Utility Index (20 U.S. utilities) and 21.8 percent for the S&P 500 during the same period. Despite solid returns to investors in 2017, the utility sector trailed the overall market based on larger trends like federal tax reform outcomes and rising interest rates.