

# Utility Business Model and EITF Alignment

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## What is an Electric Utility in North Carolina?

- A person owning or operating equipment or facilities for producing, generating, transmitting, delivering or furnishing electricity, piped gas, steam or any other like agency for the production of light, heat or power to or for the public for compensation. (Cite: N.C. Gen. Stat. Sec. 62-3(23)a.1.)
- An “electric supplier” is a public utility that furnishes electric service. Every electric supplier has the right [and obligation] to serve all premises located wholly within the service area assigned to it. (Cite: N.C. Gen. Stat. Sec. 62-110.2)



## Four-step ratemaking process

Determine utility's rate base (RB)

(i.e., the reasonable cost of the utility's property which is used and useful in providing service to the public, minus accumulated depreciation, and plus the reasonable cost of the investment in construction work in progress).

Determine utility's reasonable operating expenses (OE)

(i.e., costs for wages and salaries, maintenance, annual depreciation charges and taxes).

Determine a fair rate of return on the utility's capital investment (RR)

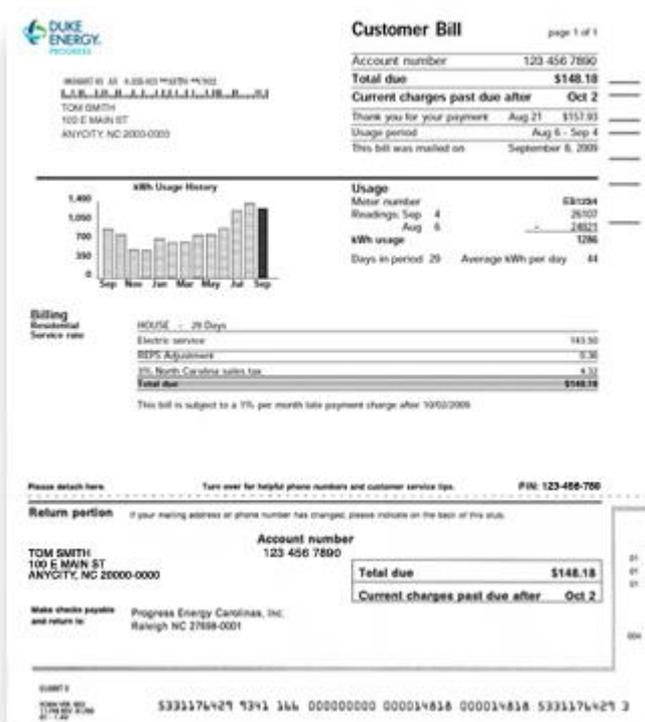
(i.e., a percentage multiplier applied to the rate base to produce the amount of money the Commission concludes should be earned by the utility, over and above its reasonable operating expenses).

*Current ROE (allowed profit) 10.25%*

$$(RB \times RR) + OE = \text{REVENUE REQUIREMENT}$$

**The revenue requirement represents the amount needed for the utility to recover all of its costs to provide electricity to its customers and is allocated among customer classes.**

# Understanding Your Electric Rates



## A. Electric Service

**\$104.59**

A1. Basic Customer Charge **\$6.75**

A2. Base Rate **\$76.32**

A3. Fuel Adjustment **\$19.31**

A4. DSMEE Adjustment **\$3.06**

A5. Merger Adjustment **-\$0.85**

## B. REPS Charge

**\$0.56**

Subtotal **\$105.15**

## C. 3% N.C. Sales Tax

**\$3.16**

**TOTAL \$108.31**

We've done pretty good keeping rates below the national average

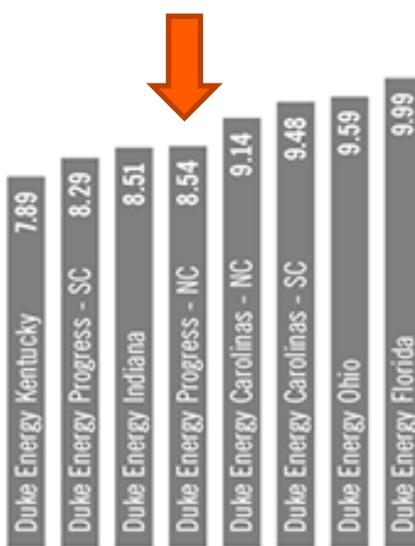
## Residential

U.S. Average 13.73



## Commercial

U.S. Average 11.79



## Industrial

U.S. Average 9.92



## Growing the Business through Energy Efficiency

### EE/DSM Rider includes:

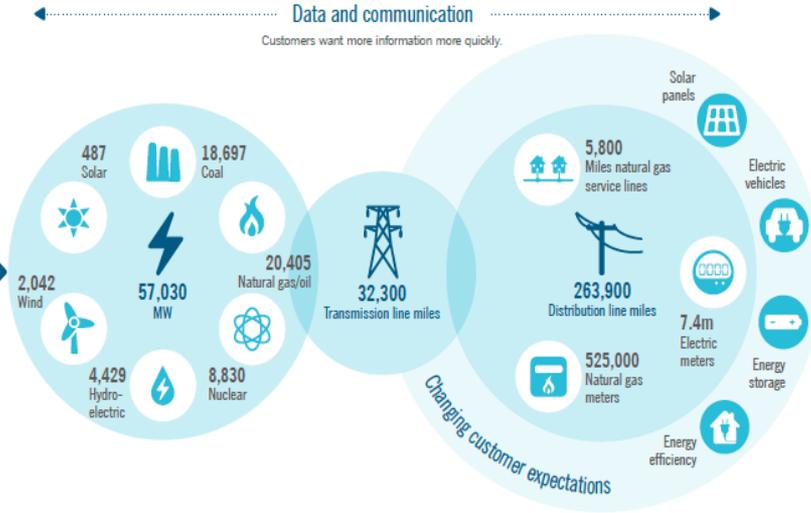
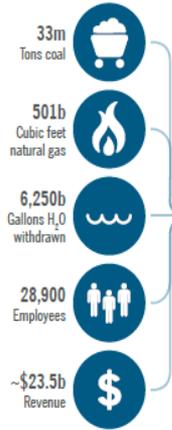
- \$ for \$ recovery for prudent “program cost” (i.e., marketing, design, administration, etc.).
- Net loss revenues
  - What were with lost net revenues and then able to recover over a 3-year period
- Portfolio Performance Incentive (avoided cost calculation)
  - Costs avoided for not building power plants, fuel, fixed and variable O&M, etc.
  - Cost of the programs vs. Shared Savings
  - **Allowed to earn 11.75% on the shared savings.**

- Helps Comply with Senate Bill 3
- Helps customers Save Money
- Grows the Business to help deliver financial expectations for investors.

EE/DSM Rider (DEP)	2016
	0.621 / cents per kwh

## Major Resources

Creating value starts with the basics – the staples of a good energy company.



**Generation**  
 Our diverse energy mix is one of Duke Energy's strong points.

**Transmission**  
 Moving electricity from power plants to customers – a vital part of Duke Energy.

**Distribution**  
 New technologies mean Duke Energy must adjust how it delivers to customers – it's not one-size-fits-all.

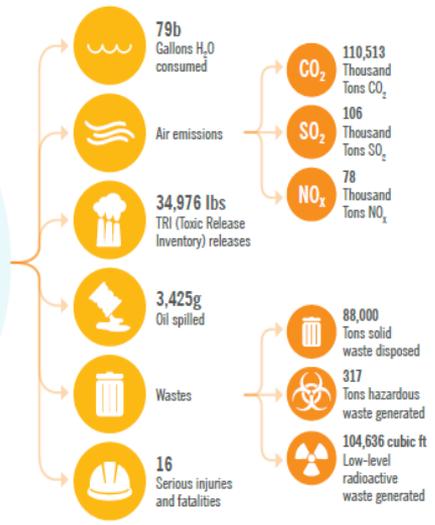
## Evolving Business Model

As technology and customer expectations change, Duke Energy must change with them.

**Data and communication**  
 Customers want more information more quickly.

## Impacts

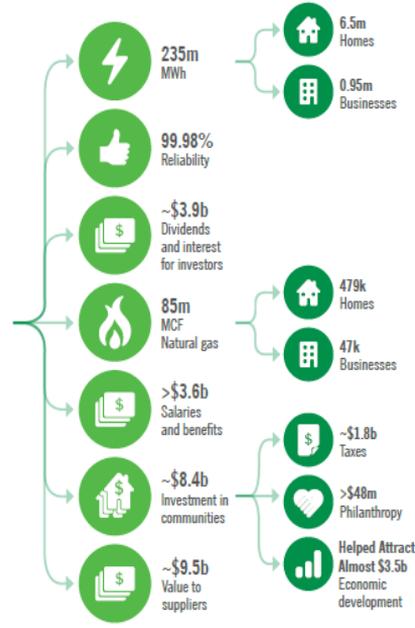
Generating energy creates environmental and other impacts. Duke Energy works hard to reduce them.



The information presented here is meant to provide an overview of Duke Energy and is not meant to be precise or inclusive of all the company's inputs and outputs. Please see the 2015 Duke Energy Annual Report Form 10-K for detailed notes and further explanations of financial information and this Sustainability Report for more social and environmental information.

## Value Created

Powering lives, supporting people and fueling the economy.



# the EVOLUTION of ENERGY

## NEXT 25 YEARS

First power plants



1890 – 1920s

Cities and homes lit by electricity

Electric appliances becoming commonplace

More reliable service

Nuclear and hydro scale up



1950s

Rates remain stable, cleaner air

More efficient plants built

Scrubber technology to reduce emissions introduced



1970s – 1980s

Natural gas shortage contributed to higher energy prices

Greater awareness of energy conservation measures

Installation of scrubbers on some older units

Increase in renewables (wind and solar)

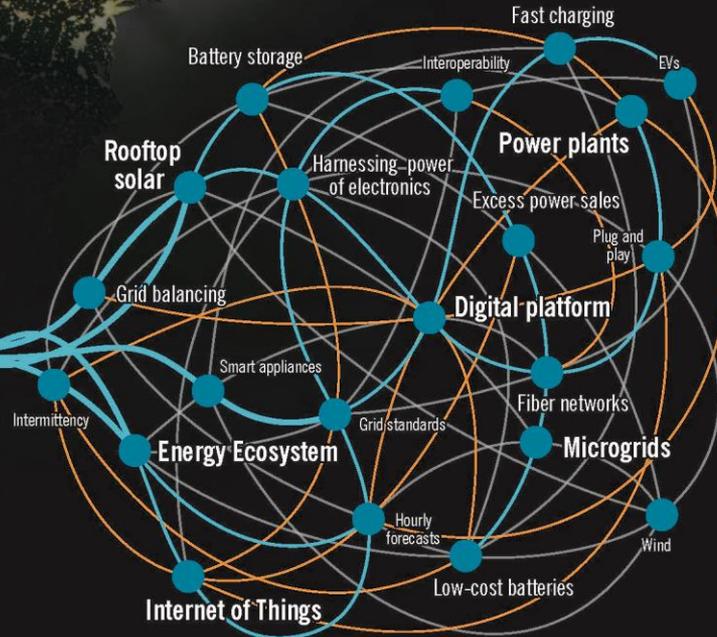
Increase in natural gas combined-cycle generation



2000s – present

Environmental stewardship and energy conservation became mainstream

Reduction in air emissions: sulfur dioxide about 90%; nitrogen oxides about 80%



## Where we're going

### OUR VISION

Lead the way to cleaner, smarter energy solutions that customers value.

### OUR STRATEGY

-  Transform the Customer Experience
-  Modernize the Power Grid
-  Generate Cleaner Energy
-  Engage Employees and Stakeholders



# Existing Energy Efficiency/Demand Side Management Programs

# We offer ways to lower your bill and more!

## Our Energy Efficiency Programs help you in 3 ways:

1. Make your home more comfortable and help the environment
2. Save money and energy on your utility bills
3. Pay for home improvement upgrades that may increase the value of your home

## Our Energy Efficient Product Line includes:

- Rebates and incentives off energy efficient equipment
- Deep discounts on lighting and bulbs
- Bill credits for helping the community use less energy
- Free home energy assessments and analysis tools



North Carolina  change location

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 Investors

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RESIDENTIAL

BUSINESS

LARGE BUSINESS

OUR COMPANY

- > Online Services
- > Billing & Payment
- > Start, Stop & Move Service
- > Customer Service
- > **Save Energy & Money**
- > Special Assistance
- > Products & Services
- > Outage & Storm Information
- > Renewable Energy
- > Generate Your Own Power
- > Our Community
- > En Español

 North Carolina » Save Energy & Money

## Save Energy & Money



Cut your water heating cost in half plus  
get a **\$350 rebate**  
when you upgrade your water heater.

[Learn more](#) 

### Free LED Program

Find out if you're eligible to receive free LED bulbs.

### Understand Your Energy Usage

Learn how you can get a Personalized Energy Report to help you better manage your energy costs.

### Calculate Your Home Energy Savings

Get personalized recommendations on how you can save energy and money in your household.

### Low Income Programs

Learn about our special assistance programs for low income customers.

### Save More with Home Improvements

Our home improvement calculators help you determine which home improvements help you save energy, and money.

### High Bill Alerts

Know when the weather could affect your next bill.

### Retail Lighting Discounts

### Duke Energy Savings Store

Our online Savings Store features products which make it easier for you to save energy and money.

### Easy Ways to Lower Your Bill

Find out how you can save money by making small changes in your household routine.

### Energy & Money Saving Offers

Take advantage of these money-saving offers to boost your home's energy efficiency.

### Energy Savings Q&A

Get answers to your energy questions and learn how to make simple low cost changes that result in big savings.

### Why save energy?

On extremely hot and cold days, it is hard and expensive to keep up with demand. Electric conservation benefits you and the environment. Learn more from this short video.

### Smart Appliances

Find answers to some of the most common questions regarding smart appliances.

## Participating Appliances

- Central Air Conditioner
- Water Heater
- Heat Pump w/ Electric Strip Heat

## Benefits to You

### Bill Credit Amounts

- Central AC - \$25
- Water Heater - \$25
- Heat Pump - \$25

## How to Enroll

- [duke-energy.com/energywisehome](http://duke-energy.com/energywisehome)
- Call toll free number 866.541.8886.

Free and voluntary program that pays you, through bill credits, for reducing your electric use during times of high demand for electricity.

# Home Energy Improvement Program

Rebates and incentives directly to you that can help with the initial costs of making your home more energy efficient.



***Energy Efficiency – An Investment that pays you back***

# Home Energy Improvement Program

## Benefits to You

- Money-saving rebates
- Potential savings on energy bills
- Comfortable home
- Possible increase on home's value

## Rebates Overview

- Air duct – up to \$190
- Attic insulation – Up to \$300
- Geothermal Heat Pump Replacement - Up to \$300
- HVAC audit - \$100
- High efficiency Heat Pump/AC – Up to \$300
- Heat Pump Water Heater - Up to \$350
- Window AC unit – up to \$100 (\$25 per unit)

## How to Enroll

- Enroll at [duke-energy.com/energywisehome](http://duke-energy.com/energywisehome)
- Call toll free number 866.990.4347.

# Discounted LEDs, CFLs and Lighting Fixtures

Discounted energy-efficient lighting that is up to 65% off! You can get instant savings at retail stores in your area when you buy Energy Star qualified lightbulbs!

The image features three vertical panels, each with a circular icon at the top and a list of benefits below. A large double-headed arrow at the bottom spans all three panels, with the text 'Discounts up to 65% off!' centered within it.

- CFLs**
  - Use 75% less energy
  - Last about 9 years
  - Saves up to \$40 in energy costs over the life of the bulb
- LEDs**
  - Use 80% less energy
  - Lasts about 22 years
  - Can cost as little as 96cents per year to operate
- Energy-efficient fixtures**
  - Use 75% less energy
  - Distribute light more efficiently and evenly

Discounts up to 65% off!

*Did you know? 90% of the energy used to power a traditional incandescent bulb is wasted as heat!*



## CAPSULE

These bulbs, which are also known as "A" lamps, most closely resemble traditional incandescents although capsules are slightly larger in size. CFLs reach full brightness within 30 seconds of being turned on whereas LEDs become fully bright immediately. Capsules have a wide range of uses, including table and floor lamps with clip-on shades, pendants, wall sconces and ceiling lights. Certain LED capsule bulbs are compatible with dimmer switches in which the light typically dims down to 20 percent of the bulb's full brightness, providing ambience.



## CANDELABRA

These bulbs are commonly used in decorative fixtures, such as wall sconces and ceiling fans, in which bulbs are exposed. With small bases and sleek shapes - offered in flame tip or torpedo styles - these bulbs are ideal for tight-fitting fixtures.



## REFLECTOR

These bulbs provide directional light and are commonly used in track lights. There are different designations of reflectors. A "R" lamp is a common reflector that directs light in one direction. A "BR" is a bulged reflector, which can direct more light in the central part of the beam. "PAR," or parabolic aluminized reflector, has an interior reflecting surface to help project a narrower beam and can be used in security fixtures. Compared to CFL reflectors, LED reflectors can deliver a greater concentration of light more effectively in the direction where the bulb is pointed.



## GLOBE

These sphere-shaped bulbs are frequently used in open fixtures in which bulbs are visible, such as bathroom vanity strips and hanging ceiling pendants. Globes provide dispersed light and are suitable for general and decorative lighting.

*Did you know? If you replace 30 regular bulbs with energy-efficient bulbs you can save on average \$123 a year off your energy bill and produce 2,339 fewer lbs of CO2 per year! That is equal to planting 27 trees!*

# Discounted LEDs, CFLs and Lighting Fixtures

## Benefits to You

- Saves energy and money
- Up to 65% instant discounts
- Upgraded Lighting

## Participating Retailers

*(select locations)*

- The Home Depot
- Lowe's
- Wal-Mart
- Sam's Club
- Target
- Ace
- Batteries Plus
- Dollar Tree
- Habitat Restore
- Goodwill

## How to Participate

- Find participating retailers at [duke-energy.com/bulbs](http://duke-energy.com/bulbs)
- Look for special pricing sticker at the participating retailers

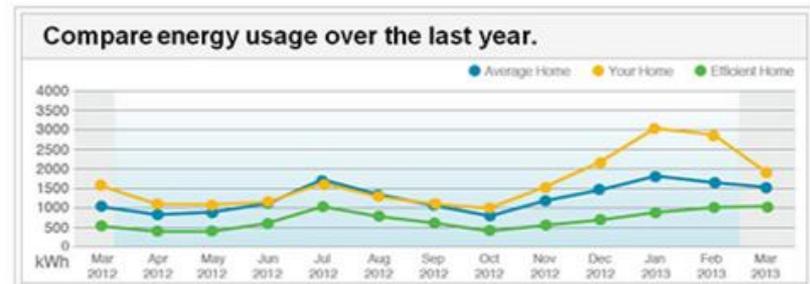
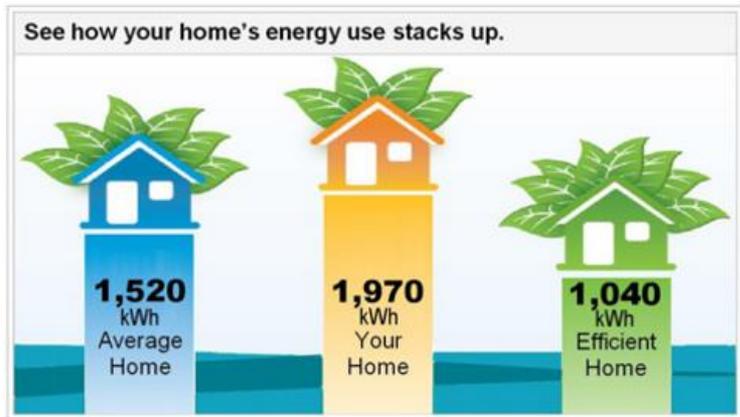


# My Home Energy Report

Free report and online portal that shows how your home compares to similar homes in your community. Plus get tips to help make your home more energy efficient!

How it works:

1. On a regular basis, you'll receive your report in the mail or view your information on the online portal
2. Report compares your energy usage to similar households in your community
3. Take action on the tips provided to help reduce your energy usage



# My Home Energy Report

## Benefits to You

- Offers ways to save energy and money with timely tips
- Communicates special program offered by Duke Energy Progress
- FREE to Duke customers

## How to Receive Report

- US mail
- Email
- Interactive portal where customer can set up a home profile, set goals/track progress and have access to Duke Energy Expert

## How to Participate

- Enroll at [duke-energy.com/myhomereport](http://duke-energy.com/myhomereport)

# Home Energy House Call

## Benefits to You

- Free Home Audit with helpful tips on how to improve your homes comfort.
- Free EE Kit.
- Cross Sell other programs that the customer may need to keep their home efficient. Heat Pump, Insulation etc.

## How to Participate

- Sign Up Online or Phone at [www.duke-energy/dingdong](http://www.duke-energy/dingdong) or 844.ding.dong (844-346-4366)
- Install Energy Saving Products



