Duke Energy

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Companywide CO₂ Emissions Reduction Goals

BY 2030

Cut CO₂ emissions by at least 50%

BY 2050

Attain **net-zero** CO₂ emissions

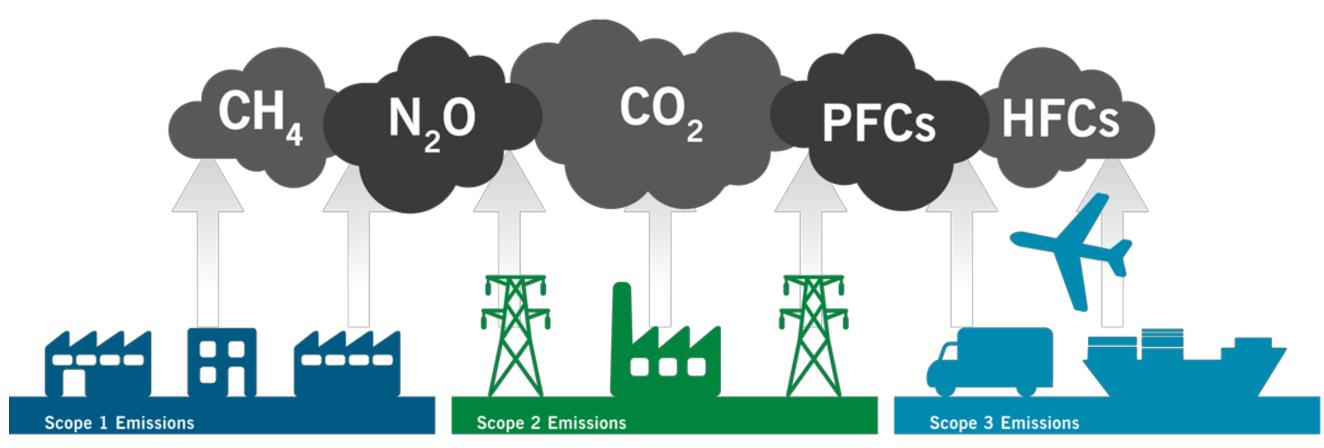


By achieving more than 44% reductions since 2005, we are beating the U.S. electric utility industry average.





What is Carbon Reduction?



Greenhouse Gas (GHG) emissions that are the direct results of owned or controlled sources

GHG emissions indirectly resulting from the generation of purchased energy

GHG emissions indirectly resulting from the extraction of purchased materials and fuels, transport-related activities such as business travel, outsourced activities, waste disposal, etc



Duke Energy Carbon Emissions Calculator

To calculate your company's carbon emissions, you'll need:

- The addresses of your facilities
- The name of your electric utility
- The number of total kilowatt-hours of electricity used per year

Using your electric bills and public records of utilities' generation mix, you can determine the pounds of carbon emissions generated from your electric use for a year.

https://sustainablesolutions.duke-energy.com/calculate-carbon-emissions/





Operational Emissions & Efficiency Enhancements

Calculate current operational emissions of facilities and establish year-on-year targets for reduction.

Operational carbon accounts for 28% of global greenhouse gas emissions.



Calculate the carbon footprint of our real estate portfolio in the most recent representative year. (2019, 2020, 2021)



Set a year-on-year reduction target and a 2030 reduction target.



Evaluate facilities with high energy and water utilization to plan efficiency enhancement projects.



Continuously track and report energy and water consumption to ensure alignment with targets.



Embodied Carbon

Identify areas for improvement in our construction standards to reduce embodied carbon.

Embodied carbon refers to the amount of carbon emitted during the construction of a building.



Concrete

 Select different concrete mixes for different uses



Steel

- Use recycled steel
- Use salvaged or reclaimed structural steel
- Use higher grade steel



Carpet

- High recycled content
- Solution-dyed nylon yarn
- Carbon neutral products
- Consider exposed concrete in lieu of flooring materials



Gypsum Board

- Consider lightweight gypsum board
- Increase recycling of gypsum board waste during project construction and decommission

- Reuse buildings
 - 2 Use less carbonintensive materials
- 3 Reuse materials
- 4 Use fewer finishings



Waste Management

Enhance current operations and construction waste management processes to divert materials from landfill.

Operations Waste



Calculate current average percentage of Municipal Solid Waste per facility.



Identify facilities where improvements can be made and develop action plan.



Continuously track towards goal of recycling 80% of operations solid waste.

Construction & Demo Waste



Identify large Real Estate projects to track C&D waste & handling processes.



Identify areas for improvement in current waste management processes.



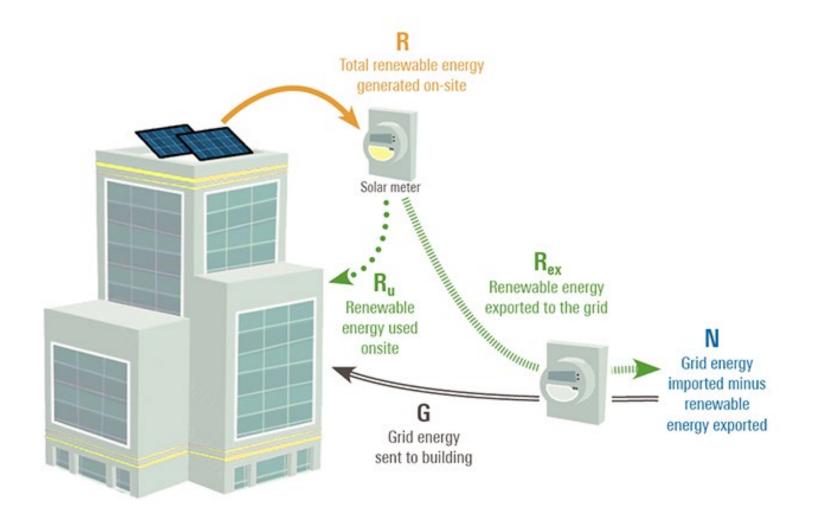
Establish a new process for C&D waste handling and reporting.





Onsite Renewable Energy Generation

Evaluate opportunities for onsite renewable energy generation at facilities.





Fleet Electrification & EV Charging

https://www.duke-energy.com/energy-education/energy-savingsand-efficiency/fleet-electrification

The **transportation sector** is the top carbon emissions industry segment in the U.S. Now is the time to consider making the switch to an electric fleet.

With an electric vehicle fleet, you can lower your operating costs, reduce maintenance, and support your company's sustainability goals.



BUILDING A SMARTER ENERGY FUTURE®





DUKE ENERGY EFFICIENCY PROGRAMS

Landon Williams















































Take Control of Your Energy Spending

A building is the face of any organization – and it makes an important impression.

We can help you meet your goals:



Drive down operational costs



Increase efficiency



Meet corporate sustainability goals or address aging infrastructure

We will work with you along the way to identify ways to save.





<u>Duke Energy Business - Energy Efficiency Website</u>



Multifamily Energy Efficiency >

Set yourself apart from the competition by offering energy-saving light bulbs and water measures to your residents.



SmartPath >

Get new energy-efficient equipment for your business at little to no upfront cost. Financing options are available for qualified customers.



Demand Response Automation >

Our Demand Response Automation program offers you incentives to reduce energy use during peak periods.



Small Business Energy Saver >

See us for a free, no-obligation energy assessment. We'll pay up to 80% of the cost of your improvements.



Energy Assessments >

Professional engineering studies that identify energy conservation measures and assist in lowering energy costs.



Energy Advisor >

Save energy and money with a free one-on-one consultation with a Duke Energy advisor.



Smart \$aver Rebates and Incentives

Duke is Vendor Neutral

- •Trade Ally Network
- Midstream Channel

Prescriptive Rebates

- Preapproved items with predetermined dollar amounts
- •More than 300 measures available
- Preapproval not required
- •Total rebate cannot exceed 75% material cost
- •Payment 6-8 weeks of approval



Custom

- Any project that saves energy and is either not listed in the incentive catalogs OR not 1:1 replacement
- •Rebates are based \$/kWh
- •All custom projects require an offer from Duke Energy prior to purchase commitment
- •Minimum 1 year Simple Payback
- •No Minimum or Maximum Rebate Amounts
 - Retrofits Add-ons Major renovations New construction



Prescriptive Rebates

Available rebates for prescriptive improvements include:



Building envelope improvements

- Cool roof
- Window film



HVAC equipment improvements

- Air-cooled and water-cooled electric chillers
- Packaged terminal AC
- Unitary AC and heat pumps



Indoor and outdoor lighting improvements

- Efficient indoor lighting
- Occupancy sensors
- ENERGY STAR® LED lightbulbs
- LED exit signs
- DLC qualified LED panels



Industrial energy improvements

- Air compressors equipped with variable frequency drives
- (VFDs) for pumps and HVAC



Food service

- ENERGY STAR ice makers
- ENERGY STAR commercial cooking equipment
- ENERGY STAR commercial dishwashers
- Freezer and refrigeration ECM motors



Information technology

- Controlled plug strips
- Variable frequency drives (VFDs) for pumps and fans
- PC energy management software



Custom Incentives

Custom incentives are offered for equipment that is not included in our standard list of prescribed rebates. These are determined on a case-by-case basis and must demonstrate verifiable energy savings to qualify.

Custom projects can include but are not limited to:



Green building design (new construction and renovation projects)



Air compressors



Energy management systems



Unique process equipment



Large variable frequency drives (VFDs)



Nonprescriptive lighting projects

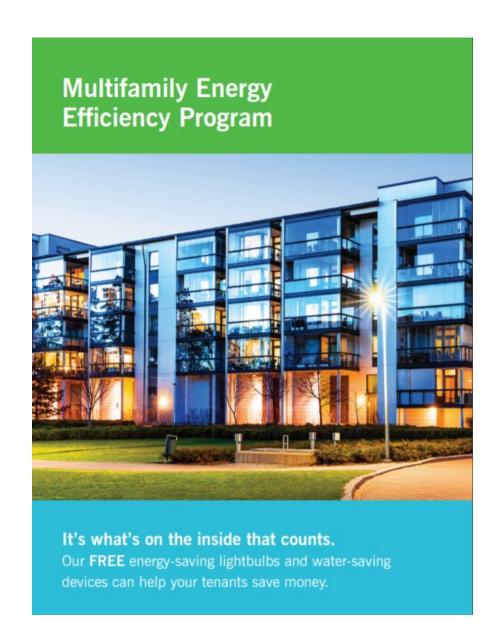
These custom incentives require project approval prior to entering contracts, placing orders for equipment or beginning construction.

The simple payback time must be greater than one year after applying the incentive. Limits on incentives related to project costs also apply.



Multifamily Program

- This program is **no cost** to residents as part of Duke's energy efficiency portfolio.
- Our team will install energy efficiency products throughout :
 - Multi-family units and common areas.(Includes Housing authorities)
 - Senior living and nursing facilities.
 - University student housing.
- We provide the labor, products, resident notices, and a 2-year warranty.





SmartPath

Duke Energy sought to address barriers to participation that our current programs present. With SmartPath, our goal is to:



Minimize financial barriers, streamline access, and remove burdens that prevent customers from making energy efficient upgrades.



Drive maximum energy savings through performance-based incentives.



Select a list of **qualified trade allies** and provide them with **concierge service** from the SmartPath team.



• Facilitate ongoing relationships with trade allies and customers.



NCEEDA and NCEEDA Light

DESIGN ASSISTANCE

Energy efficiency from the ground up



Built-in life cycle savings – over 100 Million kWh saved so far!

As we pass 1,000 enrollments in the Design Assistance program, we applaud our building owners' commitment to designing and constructing energy-efficient buildings that are better for the environment and less expensive to operate. It's true – energy efficiency is a smart business decision. And the best time to consider energy efficiency options is during the early stages of designing a building.

Our Design Assistance team can help make buildings more efficient. We offer:

- . Energy consulting services and whole-building energy analysis
- Construction incentives for a package of energy opportunities from building envelope, lighting and cooling to heat recovery and more
- Support for your energy design goals
- Savings calculations
- · Professional, unbiased energy consultants
- Assistance with the Smart \$aver® Incentive Application



Design Assistance may be a good fit for projects meeting the following criteria:

- Owner is an eligible
 Duke Energy customer
 on a nonresidential meter
- Owner has opted in or is planning to opt in to the Energy Efficiency Rider
- Project team interest and commitment to evaluating energy efficiency options
- In the design phase of your project
- New or existing building scope that includes upgrades to:
 - Mechanical and lighting systems or
 - Mechanical and envelope systems or
 - Industrial process loads



EV Charger Prep Credit Program



Duke Energy is helping remove financial barriers to EVs for our North Carolina customers and simplifying the process to go electric.

Upgrades covered by the credit include the installation of wiring and other upgrades that support EV charging – such as new electric plug-in outlets for a garage or other electrical wiring improvements.



Questions?

Trade Ally Outreach

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