



## **Making the Grade:**

**Financial & Energy Savings Opportunities for Schools**

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## Juanita Tackett | Trade Ally Outreach Representative | Duke Energy



Juanita Tackett joined the Smart \$aver program as a Trade Ally Outreach Representative in 2021. Prior to that, she was a lighting Trade Ally for nine years specializing in retrofitting and upgrading facilities to LED lighting.

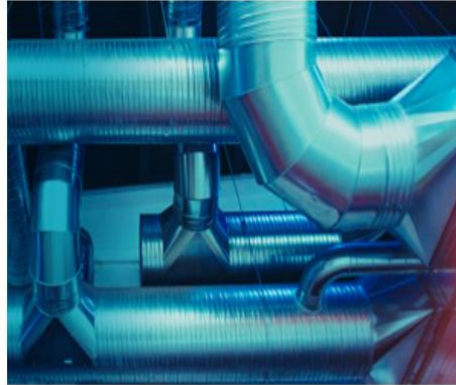
She strives to be a valued resource to those offering energy efficient equipment and make it easier for business customers to implement energy efficient projects.

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# What is Smart Saver® for Business?



Lighting



HVAC



Commercial Equipment

- Smart \$aver Business Program make rebates and incentives available to qualifying businesses
- Money savings offers have resulted in millions of dollars for Duke Energy business customers
- By installing energy efficient equipment, Duke Energy business customers:
  - Lower utility bills
  - Maximize productivity
  - Boost profits
  - Optimizing funding from other sources like federal funding from the American Rescue Act (ARA)

# Become Smart \$aver Eligible

Rebates and incentives are available to all eligible Duke Energy business customers:



Large Account Manager  
can assist with  
determining eligibility

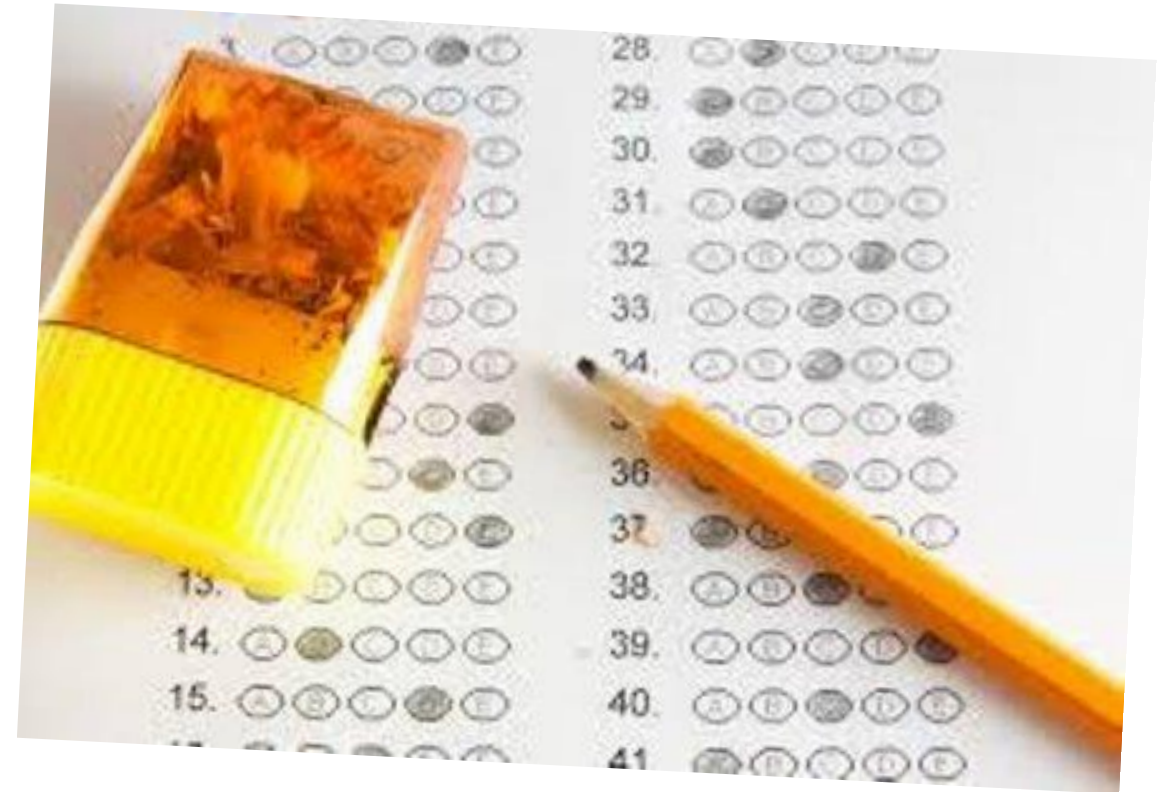


Cannot be opted  
out of the Energy  
Efficiency Rider



## Improved Student Performance

- Students exposed to natural daylight
  - Up to 20% faster progress on math tests
  - Up to 26% faster progress on reading test
- Classroom Temperature of 70 degrees and good ventilations result in less instances of off-task student behavior
- Better facilities can add 3-4 percentage points to school's standardized test scores



## Reduced Absenteeism

- Positive health impacts for flu, respiratory, colds and asthma from improved indoor air quality
  - Increase Outdoor Air
  - Moisture Controls
  - Pollutant Source Controls
- Reduced absenteeism rates as much as 15%



## Vendor Neutral

- Trade Ally Network
- Midstream Channel

## Rebates & Incentives

## 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 Incentives

- 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



## 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



# Benefits of a Comprehensive Energy Audit

Our Virtual Energy Assessment team can help you make your building more efficient. We offer:

- A no-cost assessment customized to your facility, budget and goals
- No site visit or in-person meetings required
- Energy modeling of your building complete with savings projections, utility incentive estimates and financial impacts
- Implementation assistance available to help connect you to top-tier trade professionals
- Engineering, application and verification support for Duke Energy's Smart \$aver<sup>®</sup> Incentive Program

You can also choose your own vendor and receive 50% of the audit cost with Energy Study Assistance



HVAC System Audit | Control Systems | Lighting

# What is SmartPath

- SmartPath™ was a new energy efficiency offering for 2021 designed to minimize financial barriers to customer participation by allowing customers to finance and implement energy efficiency upgrades in new ways.



## Customers who will Succeeded with SmartPath

- Customers who are interested in an Energy Efficiency project but are concerned about their cashflow, or simply do not have the funds to cover the project out of pocket.
- Customer who have longer operating hours than 40/hrs per week.
- Customer who want a turnkey project.
- Customers who want a comprehensive energy savings package across multiple technologies, whole building approach.

# New Construction Energy Efficiency Design Assistance

## Step 1



### Enrollment

You provide schematic information about your building through our Energy Design Assistance application

## Step 2



### Preliminary Analysis

Together we perform real-time evaluation of energy-efficiency measures and bundle potential whole-building strategies for further analysis

## Step 3



### Final Analysis

You determine the strategies bundle that best aligns with your project goals, from which projected energy savings and utility incentives are determined

## Step 4



### Validation

We confirm your project was constructed to plan and issue a final report for you and your utility provider

## Step 5



### Incentives

Your utility provider issues incentives for the strategies implemented in your project

# Smart \$aver Business K-12 DEI Case Study

COVID-19 didn't stop energy-efficient improvements at schools in Indiana

Noblesville Schools LED lighting retrofit

- Remote digital learning during the pandemic has challenged parents, teachers and students, it opened the door for energy-efficient improvements on school campuses.
- Upgraded the lighting to LED flat panels in 10 of their schools, as well as an administration building. The school system received over \$500K in rebates from the Duke Energy's Smart \$aver Prescriptive Program
- Project will result in an estimated 4 million kilowatt-hours saved across schools including Hinkle Creek Elementary, Noblesville High School and Noblesville East Middle School.
- Enhanced environment for teachers and students
- For Noblesville Schools participating in the program, David Mundy said, "This is part of our overall energy-savings strategy that allows us to direct more funding to teachers and classrooms while reducing environmental impacts."



Noblesville Schools will save an estimated 4 million kilowatt-hours at schools including Hinkle Creek Elementary, Noblesville High and Noblesville East Middle.

# Smart \$aver Business K-12 DEP Case Study

## Wake County Public Schools Energy Efficiency Design Assistance Projects

- Wake County Public Schools in North Carolina has installed several energy-efficient measures in the new schools they are constructing.
- The school system has submitted 24 projects in the last four years in Duke Energy's New Construction Energy Efficiency Design Assistance (NCEEDA) offering in the Smart \$aver Custom Program, which will result in at least 25% annual energy savings for each of these projects. Paid and potential incentives for these projects will be over \$1.45 million
- NCEEDA is a Smart \$aver Custom Program offering that provides business customers with an energy model analysis of energy-efficient options ranging from mechanical to lighting systems that can be worked into the designs of new buildings.
- “These best practices not only demonstrate to the community, staff and students that our facilities are striving to be good stewards of our environment and reduce utility costs, but also can provide teachable opportunities to students and others regarding good fiscal responsibility,” said Douglas Congdon, program executive for the school system’s Facilities Design & Construction.



Photo: WCPSS Facilities Design & Construction

Conn Magnet Elementary School  
Media Center, Raleigh, N.C.

## Greenville County Schools, South Carolina Lighting and HVAC improvements

- With a mission to educate students in a safe, efficient environment, Greenville County School District improved that environment with energy efficiency upgrades in its schools. “In order to save money, you have to save energy and when you save energy, you save the environment,” said District Energy Manager Bill Knight about the school District’s energy projects.
- The school District serves over 70,000 students and maintains 90 District facilities. District staff knew from routine building audits that the best investment opportunity for government funding would be lighting replacement even though other measures would also be considered.
- New lights were installed in Bethel Elementary, Heritage Elementary, and Hillcrest High Schools. In addition, new chillers were installed in Greenville, Hillcrest and Wade Hampton High Schools, plate heat exchangers in Maudlin and Wade Hampton High Schools, and variable frequency drives on water pumps at Hillcrest High School.
- Greenville County School District has earned over \$319,000 in rebates and incentives through Duke Energy’s Smart \$aver. “We’re not done yet,” said Knight about the future energy upgrades that will bring more rebate money to schools in the District.

[K-12 Education Brochure](#)

[Smart \\$aver - Business - Rebates and Incentives](#)

[Rebate Program At-A-Glance](#)

[Smart \\$aver Custom Incentive Program](#)

[Virtual Energy Audit](#)

[Energy Design Assistance for New Construction](#)

[DOE | Better Buildings Initiative in Education](#)

[South Carolina Energy Office Conserfund Loan](#)



- Smart \$aver Business Program, Eligibility, Benefits & How the Program Works
- Virtual Energy Audit Benefits and Opportunities
- Links to Resources

**Duke Energy Smart \$aver Team is here to assist as needed with your school facilities improvement efforts!**

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