

# EDGE WEEKLY

ISSUE 3  
NOVEMBER  
2023



## ENERGY SAVINGS INCENTIVES

### Federal Tax Breaks

Your eligibility for incentives include tax deductions available under the 179D Commercial Buildings Energy-Efficiency program. Deductions can be in place for commercial building improvements in heating, cooling, ventilation, and hot water.

### PEPCO Incentives - Maryland

PEPCO offers incentives to install energy efficient EC Motors. To be eligible you must be a PEPCO customer and business in the MD territory and replacing HVAC equipment. All projects must be pre-approved through:

<https://homeenergysavings.pepco.com/business/applyMLB?>

The following chart represents the incentive amount per EC motor replaced.

EC Motor Incentives and Custom Measures	
EC Motor Horsepower Rating	Per Unit Incentive
<1	\$100
≥1 to <2	\$125
≥2 to <3	\$150
≥3 to ≤5	\$200
>5 to ≤10	\$400
>10	*Custom measures may be adjusted



“By operating more efficiently, we’ve reduced our carbon footprint by an estimated 128 tons.”

— Pat Talbert,  
C.J. Miller

### BGE Energy Solutions Program

According to BGE, HVAC can account for as much as 30% of a buildings annual energy use. Also, HVAC controls that lower heating and cooling loads for unoccupied spaces save up to 40% in electricity. BGE has an Energy Solutions Program for businesses that cover up to 50% of the cost for retrofit projects and up to 75% of the cost different between standard and higher efficient equipment for new construction.

### Energy Saving's Case Study

C.J. Miller’s facility only included upgrading their fan motors to more efficient technology. This resulted in \$30,000/year in energy savings and \$24,858 in incentives paid from BGE. An unanticipated added benefit was the reduction in natural gas usage in the dryers used to heat the asphalt. “By slowing down the air velocity in the dryer with the exhaust fan and burner blower, we increased our natural gas fuel efficiency,” Talbert says, “which was an unexpected savings.”



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## PECO - Pennsylvania

Commercial buildings consume nearly 20% of the nation's energy and cost businesses more than \$190 billion each year.\*

\*[energystar.gov/buildings/about-us](http://energystar.gov/buildings/about-us)

Rebates in place for new construction, retro-fits, data centers, and more.

Other HVAC	Incentive	Unit
ECM Circulation Fan	\$30	Fan

  

Motors and Drives	Incentive	Unit
Early Replacement with Premium Efficiency Motor 1.5-10 HP	\$150	Per Motor
Early Replacement with Premium Efficiency Motor 11-50 HP	\$200	Per Motor
Early Replacement with Premium Efficiency Motor 51-100 HP	\$300	Per Motor
Early Replacement with Premium Efficiency Motor >100 HP	\$400	Per Motor

## New Jersey's Clean Energy Program (NJCEP)

Whether you are involved in new construction or substantial renovations, New Jersey offers incentives for energy efficient compliant projects. Some of these projects include commercial, industrial, and multi-family buildings with 50,000 sq. ft. or more. They also offer incentives for owners who want to target specific systems within a building which are called multi and single measure programs. This includes the HVAC system. Find out more by visiting; <https://njcleanenergy.com/>

### Sources

- energystar.gov/buildings/about-us
- <https://www.nj.gov/bpu/assistance/incentives/>
- <https://bgsmartenergy.com>
- <https://www.peco.com>
- <https://www.q-pac.com/>



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## Can't Afford the Up-Front Retrofit Cost?

If you need a grant or loan to cover the initial investment of upgrading your system than look no further than the Green and Resilient Retrofit Program. The Federal government will assist in paying for your properties improved energy, water efficiency, or building electrification. You will need to provide a current evaluation of the property as well as the planned improvements.

## Increased Savings with Q-Pac Fans vs. AC

AC motor fans are designed to run most efficiently at 75% load. When the system is calling for low loads a complex control system with VFD's staging fans on and off is required. Other systems involve multiple fans being connected to the same VFD which forces the fans to run at low loads and cause inefficient operating conditions most of the time. To put this in perspective, at 40% load the efficiency is about 50.5% higher with a Q-PAC fan versus a traditional fan. It is important to know the efficiency of your equipment at standard operating conditions instead of just maximum load. Q-Pac fans even operate 22.8% more efficiently at 70% load since traditional fans having high bearing and VFD energy losses. Other factors to consider include the upfront added cost of VFD equipment and installation which are not required with Q-Pac fans.

