



Maryland Trade Center I & II



THE OPPORTUNITY

In 2014, the property owners of Maryland Trade Center I & II, two multi-tenant office towers in Prince George's County, Maryland, were seeking ways to reduce energy waste and improve the efficiency of the indoor work environment for occupants. ENGIE Services U.S. (ENGIE) performed a comprehensive energy efficiency analysis of both towers, uncovering three main areas where the property could see significant energy efficiency improvements: 1) lighting, 2) mechanical functioning, and 3) building automation.

With the majority of the buildings' existing lighting fixtures consisting of high wattage lamps with standard efficiency ballasts, an upgrade to high efficiency interior LEDs was an easy solution. On the mechanical front, the condensing water pump motors were not operating efficiently and needed to be upgraded. To optimize outside air intake, and create a more streamlined way of controlling the indoor climate, upgrades to the building automation system would reduce unnecessary energy consumption used in the heating and cooling of outside air.

THE PARTNERSHIP

ENGIE's analysis identified energy efficiency measures which would capture 1.5 million kWh in savings every year, and qualify the Maryland Trade Center for a variety of incentives under Potomac Electric Power Company's (PEPCO) utility programs. ENGIE's Utility Program Manager helped secure nearly \$300,000 in incentives for the energy efficiency upgrades in partnership with PEPCO. On top of this, ENGIE qualified the project for an additional \$400,000 in energy efficiency grant monies from the Maryland Energy Administration for the customer.

Program Summary

- Annual Energy Savings: \$157,000
- 1,532,000 kWh
- Annual Maintenance Savings: \$20,000
- Total Installation Cost: \$1,227,138
- Project Incentives Secured: \$700,000
- Simple Payback 3.7 (years)

As a result of the supplemental incentive and grant funding available to implement the building improvements, the Maryland Trade Center owners were able to significantly reduce capital outlay needed to complete these important upgrades.

ENGIE worked closely with the property management and facilities team to ensure minimal disruption to tenants during the energy retrofit by conducting work after regular business hours. ENGIE was able to upgrade over 5,000 lighting fixtures to high efficiency models. As a result of the interior lighting upgrades alone, Maryland Trade Center was able to secure an energy cost savings of over \$66,000 per year, as well as \$20,000 in savings on annual maintenance costs.

To address mechanical infrastructure issues, ENGIE installed variable frequency drives on the condenser water pumps and core heat pumps, resulting in \$30,000 in annual energy savings. Upgrading the building controls and optimizing outside air quantity intake to reduce unnecessary heating and cooling, produced another \$61,000 to the overall energy savings at Maryland Trade Center I and II.

Through combined upgrades to lighting, mechanical, and building automation systems on site, ENGIE has helped property owners realize approximately \$177,000 in energy and maintenance savings per year.

3 DIMENSIONS OF IMPACT

ENGIE is committed to building three dimensions of impact in every customer's future:



Supporting People

- The combination of better quality lighting, and advanced controls to better manage the HVAC systems improved occupant comfort.



Saving Money

- Annual energy savings of \$157,000 plus \$20,000 in maintenance cost savings, were amplified with the qualification of nearly \$700,000 in incentives and economic grants to give the project a simple payback of 3.7 years.



Protecting the Environment

- The project creates an annual electricity savings of 1,532,000 kWh, the equivalent to removing 244 passenger vehicles from the road for a year.

