

**Baltimore County****\$109,269**

**15-21 Governors Court, LLC** is an office facility in Windsor Mill that is in need of lighting and HVAC upgrades to reduce its load on the local electricity grid. The existing HVAC system utilizes constant volume Rooftop Units (RTUs) with only basic thermostat control, fluorescent, and metal halide lighting. Proposed upgrades include retrofitting existing lighting to LED with occupancy sensor/controls and retro commissioning Heat Pump Rooftop Units (RTUs) to a central BAS. The project will result in projected annual electricity savings of more than 372,816 kWh which translates to more than \$48,466 in annual cost savings or 25% energy reduction.

**Baltimore County****\$200,000**

**7102-7108 AMBASSADOR, LLC** owns and operates four office buildings located on Ambassador Road located in Windsor Mill. Currently, the office spaces primarily consist of fluorescent fixtures with standard efficiency ballast and T8 lamps. There are limited occupancy sensors controlling the lights in the building. All 2x2 and 2x4 troffers will be equipped with integrated sensors with occupancy sensors, daylight harvesting and task tuning capabilities for increased energy savings. The fixtures are controlled using an Android cell phone or tablet.

Each of the four buildings will have slight variations, a summary of HVAC measures includes: Tying the building in to a central BAS will allow for greater HVAC control. The Carrier RTUs will be scheduled off during unoccupied hours, turning on automatically to meet new setback temperatures. During occupied hours, the supply fans will cycle off when there is no call for heating or cooling. New space temperature sensors will be installed so that the RTUs will respond to those instead of return air temperature. Energy conservation measures include the installation of a central BAS to operate the 4 main RTUs and the (1) lobby RTU serving 7104 Ambassador Road. This BAS will save energy by cycling supply fans on and off while ensuring adequate fresh air levels by measuring CO2 levels in the spaces. The new controls will allow for additional energy savings through scheduling, optimum start/stop and setting back space temperature set points during unoccupied periods such as nights and weekends.

These improvements will result in a reduction of annual electricity consumption exceeding 512,737 kWh, which translates to more than \$63,528 in annual cost savings or 39% energy reduction.

**Howard County****\$200,000**

**6810 Deerpath, LLC.** owns and operates a 5-story 80,000 square foot office building in ElkrIDGE. The facility proposes to upgrade both fluorescent and metal halide interior and exterior lighting to LED fixtures, and adding occupancy sensors. Additionally, proposed upgrades include installing a central Building Automation System (BAS) to operate all RTUs serving the building. Tying the RTUs in to a central BAS will allow for greater HVAC control. In addition, the condenser water (CW) pumping loop will be converted to a variable volume system controlling to a differential pressure set-point. Other HVAC upgrades include new duct sensors, damper actuators, installation of multiple VFDs. The entire project will reduce electricity consumption by more than 698,691 kWh, which translates to more than \$85,145 in annual cost savings or 34% energy reduction.

**Caroline City****\$18,464**

**Crystal Steel Manufacturing**, located in Federalsburg is proposing efficiency upgrades on Buildings 1 and 2 of the facility that manufactures steel beams used for the construction industry. Manufacturing process includes cutting, polishing, painting, and shipping of large steel fabricated into specific sized beams. Projects proposed includes replacing in total 118 lights, metal halide and T5/T8 fluorescent lights with more efficient LEDs with occupancy sensors. They will install VFDs for 28 total exhaust fans in both buildings. Through energy audit, multiple compressed air leaks were detected, applicant will seal leaks. The MEA-funded energy conservation measures will reduce electricity consumption by more than 270,847 kWh, which translates to more than \$23,835 in annual cost savings or 29% energy reduction.

**Prince George's County****\$47,397**

**GFE Distribution, LLC** owns The Capital Meat, Co. a 40,000 square foot facility with offices and a warehouse with 6 bay doors in Landover. The Capital Meat Co., will upgrade HVAC equipment with more efficient VFDs, RTUs, and refrigeration sensors and controls. These improvements will result in a reduction of annual electricity consumption exceeding 217,242 kWh, which translates to more than \$14,913 in annual cost savings or a 47% energy reduction.

**Baltimore County****\$92,500**

**H.T Lyons** is a five-story 81,000 square foot multi-tenant office building in Hanover. In 2015 H.T Lyons was awarded a \$500,000 grant from MEA for installation of a Demand Response and Advanced Building Automation System at this property and another located at 10010 Junction Drive, Annapolis Junction, MD. In addition to installing their patented FADRS Painless Demand Response and Enhanced BAS system for the HVAC loads. The net result was an average energy savings in HVAC alone (controls only) of 31.5% over the course of 2.5 years. For the 2019 C&I grant, H.T Lyons will install 1,712 LEDs and install new HVAC building automation systems to expand upon the previous FADRS project. Expanding the FADRS Enhanced BAS hardware and software with the latest version and expanding the functionality of FADRS Enhanced BAS, Painless Demand Response, Data Analytics & Fault Detection and Beyond ongoing commissioning. These improvements will result in a reduction of annual electricity consumption exceeding 652,968 kWh, which translates to more than \$74,553 in annual cost savings with a simple payback is 10.6 years or a 17% energy reduction.

**Baltimore City****\$200,000**

**JMS Capital** group owns the property 300 East Lombard Street a 12-story 256,893 square feet office building located in downtown Baltimore City. It proposes four Energy Conservation Measures (ECMs). They will convert the primary hot water loop serving an Air Handling Unit (AHU) and chilled water loop serving an AHU to a variable volume drive instead of a constant drive, and install Variable Frequency Drives (VFDs) on both pumps. Install VFDs on two 30 HP cooling tower fans on the existing cooling tower with new fan staging controls. Repair of VFD and ductwork to restore AHU ventilation and operation economizer sequence. Retrofit existing fluorescent lighting to LED fixtures with occupancy controls. Projected annual electricity savings exceed 2,100,324 kWh, which translates to more than \$207,207 in annual cost savings or a 32% energy reduction.

**Wicomico County****\$23,450**

**K&L Microwave** is a manufacturing facility in Salisbury, proposes replacing 855 older high wattage LED lights with lower wattages LEDs, and adding daylighting controls where applicable. A new 60 HP VFD air compressor will be installed along with a new refrigerated air dryer and an additional storage tank. This system will more efficiently meet the demand for compressed air particularly for lower demand periods during second shift and off shift hours. Additionally, the company will add a heater to the compressor room to enable the unit to be shut down during weekends without the concern of a cold start resulting in damage. Finally, a robust air leak management and air use awareness program will be implemented at the company. These improvements will result in a reduction of annual electricity consumption exceeding 201,771 kWh, which translates to more than \$21,455 in annual cost savings or a 17% energy reduction.

**Prince George's County****\$58,488**

**Maryland University of Integrated Health** is a private university in Laurel. The two storied 32,077 sq-ft building consists of several classrooms, office space and cubicles, staff and student kitchens, café, conference rooms, lobbies and other common areas, a library, dispensary, IT suite, and Natural Care Center (NCC). The school built in 2002 is using original HVAC equipment. The school will install a HVAC that is an all-electric, high-efficient, air-source, Variable Refrigerant Flow with Heat Recovery (VRF-HR), with bi-polar-ionizers, and a Dedicated Outdoor Air System (DOAS). It is comprised of 4 VRF-HR systems (each with multiple indoor zones) with one DOAS system. The proposed HVAC system includes VFD driven and has integrated, adjustable controls to manage the VRF system HVAC system for the building. The campus will also replace 442 lighting fixtures with more efficient LED equivalents. These improvements will result in a reduction of annual electricity consumption exceeding 917,758 kWh, which translates to more than \$96,582 in annual cost savings or a 69% energy reduction.

**Caroline County****\$30,527**

**Maryland Plastics, Inc.**, located in Federalsburg, manufactures specialty plastic goods including plastic trays, cutlery, and other products for industrial and residential use. This location houses manufacturing, office, warehouse and packaging operations. The facility will upgrade 864 light fixtures to higher efficient LEDs with occupancy sensors. The facility uses compressed air for drilling, spraying and other manufacturing related operation. The company conducted an air leak detection audit, identifying many small, medium and large sized leaks of compressed air. The facility will seal all leaks, costing only \$660 and saving 43,221 kWh/yr. These improvements will result in a reduction of annual electricity consumption exceeding 661,890 kWh, which translates to more than \$65,665 in annual cost savings or a 20% energy reduction.

**Wicomico City****\$48,429**

**Toroid Corp.**, located in Salisbury, will upgrade their 25-year-old facility which has 23,000 sq. ft. of space consisting of office, manufacturing and warehouse areas. The office space and most of the manufacturing areas are conditioned by six constant volume RTUs having a total capacity of 30.9 tons with gas-fired heating. Air balance issues have been reported for the perimeter offices on cold days, which has led to the use of small electrical resistance heaters. The exiting lighting consists of T8 fluorescent lighting and metal halide; all will be changed to higher efficiency LEDs. The existing six RTUs will be replaced with new variable volume RTUs with a total capacity of 27 tons. The three existing 4-ton units that condition the office and lounge areas will also have a 4-ton capacity; however, the three 6.3-ton units that condition the main production area will be reduced to 5 tons each. These improvements will result in a reduction of annual electricity consumption exceeding 110,760 kWh, which translates to more than \$15,484 in annual cost savings or a 47% energy reduction.

**Wicomico County****\$58,488**

**Trinity Sterile, Inc.**, located in Salisbury, has 40,000 sq. ft. facility that houses their office, manufacturing and warehouse needs. Current building lighting consists of both T8, T12 and metal halides in exterior, and not using occupancy sensors. Trinity Sterile proposes to change; 637 light fixtures to more efficient LED equivalents and add occupancy sensors. Additionally, the existing air compressor will be replaced with a smaller 30 Hp VFD unit. This unit will meet the maximum demand for compressed air and efficiently handle all of the partial load conditions experienced during off-shift hours. These improvements will result in a reduction of annual electricity consumption exceeding 521,872 kWh, which translates to more than \$56,130 in annual cost savings or a 34% energy reduction.

**Caroline County****\$17,296**

**Wayside Body Shop**, located in Denton, handles a variety of vehicle repairs on residential, commercial, and emergency vehicles. The facility has a lobby, office space, as well as the repair center, paint booths and wash bay. The shop will upgrade lighting and HVAC controls. A total of 290 T-12 fixtures will be replaced with more efficient LED equivalents. These improvements will result in a reduction of annual electricity consumption exceeding 73,836 kWh, which translates to more than \$11,168 in annual cost savings or a 46% energy reduction.

*\*Award amounts may be subject to change*