

#### ENERGY

#### SUSTAINABILITY CASE STUDY

# EGG HARBOR TOWNSHIP

## GET SCHOOLED ON ENERGY

The Egg Harbor Township School District (EHT) has developed an innovative program to reduce energy usage throughout its ten schools. **The District won 8 ENERGY STAR awards from the EPA as well as the 1st Leadership Award by the Sustainable Jersey for Schools Program in 2015, for its sustainability efforts.** In 2017, the District reduced its energy costs by almost 40% saving over \$9 million dollars. These successes can be attributed to integrative actions towards energy conservation.

In its efforts the school has enacted a policy for students and faculty to conserve energy as well as measures to foster energy independence. The District utilizes heating and cooling processes that take advantage of unoccupied hours and seasonal changes, protocols for staff and students to reduce wasted energy, and solar arrays to self generate renewable energy.

The District Energy Manager, Shawn P. Braue, a USAF veteran, has led the energy program. Braue has helped the District release an Energy Program Handbook to support staff and teachers which outlines the actions necessary to conserve energy in schools. **Strategies adopted by the District can be applicable to other communities in New Jersey and municipalities to improve energy sustainability across the state**.



#### 2017 Annual ENERGY STATS



Expected Energy Cost \$23,162,226

Actual Energy Cost \$14,062,129

Program Savings \$9,100,097

Percent Savings 39.3%





Heating Season October to April Temperatures kept from 68-72 degrees F



Between H/C Seasons April and September H/C system turned off



Cooling Season May to September Temperatures kept from 74-78 degrees F



Faculty and students are encouraged to bring a sweater if they are normally cold during 68 degree periods



If a faculty member follows the energy conservation checklist they may be given an Energy Eagle Award by the district

#### **Conscious Heating & Cooling Methods**

**Comfort & Sustainability**: The EHT District utilizes tested and proven temperature standards in order to heat and cool spaces to their ideal comfort levels. Staff and students are advised to wear sweaters so that they can be comfortable while also saving heat in order to stay within temperature standards during the heating season.

**Occupied and Unoccupied Times:** A lot of energy is wasted by heating and cooling rooms when they are not occupied. The heating and cooling systems of schools in the EHT District operate differently based off occupied and unoccupied timeframes. During occupied times, heating and cooling (H/C) systems operate to meet tested standards. When unoccupied, the schools are allowed to reach 55 degrees F during the winter and 85 degrees during the summer.

#### **EHT's School Energy Policy**

The EHT School District Energy Policy is a way for faculty to become involved in making a difference in energy consumption at their schools. Faculty members are asked to shut off anything that requires energy in their classrooms whenever they are out. This conserves the energy used to power unused appliances, lights, or other devices. The policy is an example of an initiative that can be implemented in many settings to save energy.

#### **EHT FACULTY ENERGY CONSERVATION CHECKLIST**



Is my TV, DVD, Radio, Computer, Computer Monitor, Printer, Scanner, Copier, Smartboards, Speakers, Etc. OFF?



If I have power strips I can turn off, are they turned OFF?



Are the lights and other lamps OFF?



Is my door closed and /or locked if needed?

#### **EHT School District's Solar Arrays**

8 Schools within the EHT School District feature Solar Panels In August 2017, EHT's solar panels saved energy and emissions equal to:



### **School Energy Use Facts**

Fact #1: The Department of Energy has estimated that 25% to 30% of the total energy used in public schools within the U.S. is wasted.

**Fact #2:** The simple act of turning off the lights in one classroom for just one hour prevents two pounds of pollutants from entering the environment.

**Fact#3:** Some schools such as the Albuquerque Public School District have declared that they spend more money on electricity in their schools than educational materials