

**EGG HARBOR TOWNSHIP SCHOOL DISTRICT**



**ENERGY & SUSTAINABILITY EAGLES**

# Egg Harbor Township School District

## ENERGY PROGRAM

### Support Staff & Teacher's Handbook 2017-2018

**Be an EHT Energy Eagle Energy Star!  
Save a Dollar for Education  
and**

**Energy for Our Nation**

**Safety, Comfort, & Energy Savings/Sustainability =  
EMBRACE-ENGAGE-EDUCATE!**

## TABLE OF CONTENTS

Cover Page	C
Back Cover	Blank
Table of Contents	Pg 1
Letter from the Superintendent	Pg 2
Letter from the District Energy Manager	Pg 3
Basics of the Energy Program	Pg 4-5
Demand Response Program	Pg 6
Energy Program Website	Pg 7
Visual Aides	Pg 8-10
Appendix A: Energy Policy 7460	Pg 11-13
Appendix B: Shutdown Checklist	Pg 14
Appendix C: Substitute Teacher/Employee Checklist	Pg 15
Appendix D: Sustainable Jersey for Schools	Pg 16
Appendix E: Weather Underground	Pg 17
Appendix F: Asthma Friendly Schools	Pg 18
Appendix G: EPA/NJ Outdoor Air Quality	Pg 19
Appendix H: Cenergistic, Inc.	Pg 20
Appendix I: Demand Response Program ENERNOC, Inc.	Pg 21
Appendix J: District Solar Generation & Should I go Solar?	Pg 22

# Egg Harbor Township Schools

[www.eht.k12.nj.us](http://www.eht.k12.nj.us)

Administration Offices

13 Swift Drive

Egg Harbor Township, NJ 08234

Kimberly A. Gruccia, **Ed.D.**  
*Superintendent*

Carolyn Gibson, **Ed.D.**  
*Director of Human Resources*

Ms. Chandra D. Anaya, **CPA**  
*Business Administrator/Board Secretary*

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August 2017

To All Egg Harbor Township School District Employees,

Greetings and welcome back for our 2017-2018 school year! All 12 month employees worked very hard to ready your buildings for you. Please thank the Maintenance, Custodial, Secretaries, and Grounds Crews for their excellent work when you see them. We made great strides in our Energy Program this summer and must continue to carry over all the hard work into the school year. Our Energy Program has garnered us 8 of 10 schools with 30 of the EPA's ENERGY STAR ratings and our Energy Program with the Award for Energy Conservation Excellence for being in the top 5% of programs in the US. It takes a team effort and I hope you will take the time to read about the program in this handout and on our Energy website. All our Schools have Certified Sustainable Jersey for Schools Bronze or Silver Certification! EHT High School and Swift School are both Silver Certified This past year! Alder & EHT High School are Champions or the # 1 High School & Middle School in the state!

We need to remain diligent in our everyday operations to ensure while we are providing a world class education to our students that we are saving energy and dollars for our district. Please start off with outstanding energy conservation practices, Embrace them. If needed re-double your efforts to make sure that all your items are turned off at the end of the day and when not being utilized. If you leave a room, even if there is an automatic shut off for lights, turn off the light by the switch as well. Every little bit helps. With regard to computers, monitors, and printers, if you do not intend to use them, do not just automatically turn them on. When not in use, turn off monitors to conserve energy. Keep doors/windows closed during HVAC operations. Report any issues with your areas to the Principal and maintenance always. They are the ones in control of these systems.

Our program has been successful due to all our efforts. It is important to note that when we budget now for the coming year we only budget at our current energy usage levels and the related costs. That means, if we exceed that amount we have a hole to fill and must cut something out of our budget to fill the hole. Working together we can not only avoid that situation but save even more resources to be able to maintain our current programs, materials and staffing to provide the great education you deliver to EHT's children and **Embrace, Engage and Educate all in EHT Schools to be Energy Conserving and Conscious of expensive Waste!**

Be an EHT ENERGY STAR! Safety, Comfort, Energy Savings and Sustainability! Thank you for your continued cooperation and for making these simple processes a part of your daily routine.

Sincerely,

Kimberly Gruccia  
Superintendent



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## Safety, Comfort, Energy Savings and Sustainability!

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*Telefax: 609-601-2904*

August 2017

Dear Egg Harbor Township (EHT) School District (SD) Employees and Staffs,

Welcome to Egg Harbor Township School District (EHT SD). I am Shawn P. Braue, your District Energy Manager. What is the energy program? In short, it is where we reduce our payments to utility companies by shutting off equipment and following basic energy saving strategies that help us attain our cost avoidance goals. The EHT SD embarked on an Energy Conservation Program in 2009/2010 and I'm proud to say we are one of the best in the nation! Recently we were awarded 8 more ENERGY STAR Awards from the Environmental Protection Agency (EPA) and we received the 1<sup>st</sup> Leadership Award in Sustainable Jersey for Schools Program in 2015. This doesn't happen because we say we are going to save energy. It happens because we all make a dedicated effort to conserve energy and thus save dollars that would be spent on utilities. Since March of 2011 EHT SD has a 39.0% cost avoidance savings and over \$8,936,975 million dollars in cost avoidance dollars. That is the value of the energy we didn't use because we were smart in operating our buildings and classrooms. As long as our Teachers and Staffs keep making the right choices when it comes to energy usage this will continue. The key is your involvement and common sense.

My background is as a Retired USAF Officer and aviator who served 28 plus years all around the globe and taught at the USAF Academy in Colorado Springs CO and the University of Notre Dame, in Indiana. I substitute taught in Atlantic County for about two and a half years before taking this position from former EHT SD Superintendent Dr. Phillip Heery in March of 2013. Dr. Heery got this program running for EHT SD and with your help we can jointly keep it going for the good of all and especially our children and schools. I look forward to meeting you and helping you in anyway and I ask for your support!

My position has me auditing buildings and reporting my findings so we can correct anything out of line with our District's Energy Conservation Policy. I have included the policy for you in the Appendix A of this guide. I also lead the District Energy & Sustainability Team and District Energy Management Team.

The following pages are a guide to help you get a brief understanding of the program from the ground up. Please take a look at this Handbook and feel free to call me and ask about the program if you have questions. (There really isn't a dumb question only the one not asked!) We do take the program seriously and need your support throughout the year. "Do the District a Favor, Be an Energy Saver!" Thanks in advance for your compliance with our BOE Policy 7460. If you have any questions please feel free to contact me. My Phone is (609) 646-8441, ext. 1010. My email is [Braues@eht.k12.nj.us](mailto:Braues@eht.k12.nj.us).

*Shawn P. Braue*

SHAWN P. BRAUE, Lt Col, USAF (Ret)  
District Energy Manager

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**Safety, Comfort, Energy Savings and Sustainability!**

## **Basics of the EHT Board of Education Energy Program**

Our Program rests on the simple premise of using the energy when it is needed and avoid wasting it when it is not needed. I am supported by the BOE, Superintendent, Kimberly Gruccio, PhD, and the Business Administrator, Mrs. Chandra Anaya, who want a Safe, Comfortable, Energy Saving and Sustainable Environments.

**Safety is First and foremost!** If you are ever in an environment that isn't safe let someone know. The first step is school specific. You should call, email or text if necessary the building leadership including your supervisor and Principal's office if there is a problem. You should also know the Building Mechanic and Lead Custodian in your school. I'll list them below. If you forget ask someone and get the word out. You should get the attention of the Principal and Supervisor to let them know the severity of the problem. They will in turn get ahold of Facilities, Maintenance, Grounds, and Custodians and right personnel who should solve your problem and give you some guidance, information and or direction. You may email, call or text me also, I cannot fix your problem, Facilities is charged with that responsibility but I'll help highlight it to the leadership. I may be able to determine what is causing this problem and relay information to the Facilities personnel. If something isn't right keep trying to get help from the front office. If for some reason it drags out please don't give up. Safety is not something to overlook. The District Leadership and Energy Program does not cause unsafe conditions but it does uncover a lot of them and will see them corrected. You as the frontline will more than likely find it first.

**Comfort in our buildings is our second priority.** Of course, we will never please everyone every time but we strive to keep our temperatures in the proven and tested limits. What are the proven limits? We have basically three. During winter or Heating season, 15 October to 15 April primarily, we strive to have our temperatures from **68-72 degrees** Fahrenheit (F). Some people are hot at 68 and others freezing at 72 degrees. Please feel free to keep a sweater on hand if cool and you need it. If your area is not in that range during occupied times in heating season, let your building principal and supervisor know to contact Facilities. Our building mechanics are charged to get the buildings ready for occupancy by bell time (When students arrive) or for occupied standards. Our next temperature is during "Cooling" season. (Basically the end of May to the End of September.) The temperature range of cooling for our buildings is **74-78 degrees** for occupied periods. There are two periods in between these dates/Heating and Cooling season called our "Shoulder months" or "Free Cooling" periods. During these periods temperatures may vary from **68-78 degrees**. At some point we turn off HVAC systems for the season changeover. During this time, just like at home, we save a great amount on our utility bills especially, the electricity, natural gas and water.

What is the difference to you the teacher or new staff member? During Heating season and Cooling season we are using our boilers and or our chillers/Roof Top Units (RTUs) to heat and or cool the buildings. During this time it is proper procedure to close your door in your classrooms and windows in your rooms while conducting class. If your room is having a problem, opening up a door or window in these areas for safety is ok, however you need to report this to the main office and your principal. Personal comfort isn't a reason to open the doors and windows. When one room in an area opens a door or window it affects all other rooms tied to the system that services your room and a block of rooms. It may make someone else's situation worse than yours. Please, avoid doing this without reporting the problem. I don't control the systems but if you are not in standards I can write it up and Facilities will then be responsible to fix it and maintain the Board of Education standards.

Things that help in many of these instances with classroom temperatures are opening your shades to get sunlight and radiant heat from the windows if your room is cool. By closing the shades to avoid the radiant heat, if we are cooling inside buildings and it is high temperatures. You can also save on lighting by using natural lighting in some cases. When your students enter the classroom we can expect a 1-2 degree rise or more in temperature depending on the space. This is why we try and get the Facilities mechanics to aim for the center of our occupied standard temperature or for example, 70 degrees for heating standards or 76 degrees for cooling standards that way the temperature will go up with a full class but still be in our desired standard temperature range.

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## **Safety, Comfort, Energy Savings and Sustainability!**

**Note:** The Energy Program has nothing to do with when the boilers are shut off or when the A/C is turned on for season changeover. The energy program is more concerned when they are on that we are in Board of Education standards and when unoccupied we have systems off. The HVAC systems usage or not is determined by the Director of Facilities and Maintenance as weather and other factors dictate and use of facilities schedule. Anyone telling you they cannot maintain these occupied standards of 68-72 degrees or 74-78 degrees heating & cooling season or shoulder months because the energy program doesn't allow them to, is incorrect, don't accept this.

You have heard about our "Occupied" standards but what are the "Unoccupied" standards? During "Unoccupied" periods we try to shut off everything we can to save energy. There is no need to heat or cool an empty, building, that is waste that costs the district. Our unoccupied standard allows the building to cool to 55 degrees during heating season and heat up to 85 degrees during cooling season. The systems are set up to come on only if the temperatures inside gets below 55 degrees or above 85 degrees F respectively. These are tested numbers that allow us to save energy and avoid any issues with freezing pipes or overheating motors on systems. Occasionally, we raise the minimum temperature to 60 degrees F or above for extreme cold conditions. If your temperatures get below 68 in heating season and above 78 in the cooling season let your leadership, Facilities & the District Energy Manager know about it. This is in line with the "Use it when you need it & shut it off when you don't!" Common Sense Right!

#### What does each Staff Member, Teacher, Aide or Employee need to do with regards to Energy Program?

If everyone were perfect they would take care of their personal areas and the district would save a lot of energy. For the most part you don't control the gas or water usage unless you work in the Kitchens, boiler rooms, or are a grounds keeper. That leaves our largest of the three utility commodities or Electricity. This is where you come in and are very responsible for success or failure. We ask that you shut down your classrooms not only at the end of the day but during periods you aren't in your rooms. (Lunch, recess, special functions, prep time that takes you out of that area, etc.) Below is a simple checklist that you should follow every day. Make your own if this doesn't work for you.

1. Are my windows and shades **closed and locked**?
2. Is my TV, DVD, Radio, Computer, Computer Monitor, Printer, Scanner, Copier, Smartboards Speakers, Etc. **OFF**? (The Top three items found on are Printers, speakers and computer Monitors.)
3. If I have power strips I can turn off are they turned **Off**?
4. Are the Lights and other lamps- **Off**?
5. Is my door **Closed and or locked if needed**?
6. **If you forget something you may get a reminder notice. (Not keeping score just a reminder) If you shutdown properly you may receive an ENERGY EAGLE!**

Finally, Energy Savings and Conservation will happen if you help and do your part. Safety, Comfort and then Energy Savings/Conservation.

The following few pages are visual aides to help everyone understand some parts of the Energy program here at EHT SD. Sort of a, "What to look for everyday!"

Note: This guide doesn't include everything about the program but it should give you a good start. Feel Free to ask questions and we will do our best to get you an answer. Again Thanks in advance

## **DEMAND RESPONSE PROGRAM**

### **What is Demand Response?**

According to [Federal Energy Regulatory Commission](#) (FERC), **Demand Response** (DR) is defined as:<sup>[1]</sup> “Changes in electric usage by end-use customers from their normal consumption patterns in response to changes in the price of electricity over time, or to incentive payments designed to induce lower electricity use at times of high wholesale market prices or **when system reliability is jeopardized**. See Demand Response APPENDIX I.

### **Is EHT SD in a Demand Response Program?**

Yes, with EnerNOC, INC. now part of ENEL Corporation.

### **How does a Demand Response program work?**

The Basics of a Demand Response program are; the FERC will call the utilities and tell them they need to reduce power demand or consumption. Usually to avoid a “Black or Brown Out,” in our region or across several power company regions. We will generally receive 24 hours but it could be as little as just 2 hours notification to put our Demand Response power down plan into action. The period we are vulnerable for this is 1 June to 30 September. The timeframe is usually around 2 to 8 pm. This corresponds to the end of the day when people return home and put things on like air conditioning, creating a high power demand. It is also usually the warmest part of the day weather wise. We in EHT SD will shut things off such as lights, computers, and HVAC equipment until we reach our goal for each meter. This varies by school. In return for participating the end users (EHT SD) receives an incentive payment. The more we shut off the better we are compensated. Although this has only happened 2 times in the last 5 years it could happen this year still and maybe more than once. It helps avoid a power grid failure.

### **What do I need to do to prepare?**

Think about a plan of action regardless of what lesson you may be teaching. What if you were teaching class and the power went out because of a hurricane or derecho? Are you prepared for that? What would you do? It is roughly the same thing but at least with Demand Response we usually have a little warning. Be ready to open shades and conduct class regardless. Usually later in the day we can shut off the HVAC equipment and coast the remaining part of the day with the conditioned air we have. The overheads and smart boards may be out, TVs and computers may go down. What would you do to educate your students if that happened? Maybe talk about Demand Response and relate it to your subject! Despite if it is a Math, English, History, Science, Physical Fitness, or Art/Music class. Whatever area of study, it can be done, so be ready. If the electric grid doesn't get enough end users participating in a power reduction, the result is usually a Brown or Black Out and prices for electricity go sky high. This should be incentive to participate as that will affect all end users in an area even homeowners in the area.

### **Are there any safety concerns?**

No systems such as fire or phones should be affected in a Demand Response Power reduction, unlike in a Black or Brown Out. In the latter case, there is a chance we can lose those safety systems if no backups or they fail. We pick what we shut off and that means we aren't turning off anything that will cause a safety concern. Bottom line: No safety concerns should occur. You should be notified by the Front office if any special measures need to be taken.

**For More information on Demand Response** Google “Demand Response” and or look for Demand Response topics on the EnerNoc website at <http://www.enernoc.com/>.



## Ways to get to the District Energy Program Page

First, under District Services and then click on Energy Program

This District Website is new this summer and will take time for IT to get it up to speed. Like many great things we are taking a slight step back to take a giant leap forward. Please bear with the repopulating of the site.

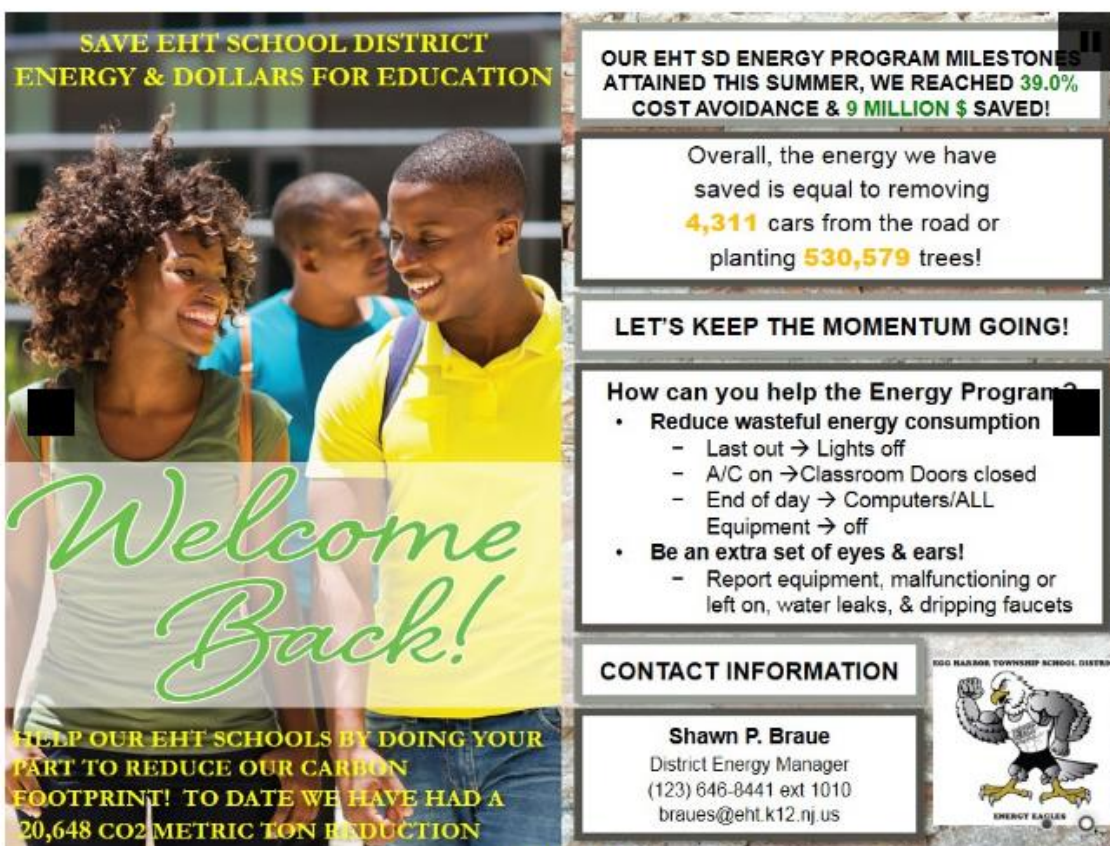
[http://www.eht.k12.nj.us/district\\_services/energy\\_program](http://www.eht.k12.nj.us/district_services/energy_program)

### Energy Program

- Reports
- Schools
- Solar
- How To
- About Us
- Sustainable NJ
- Energy Star
- Air Quality Forecast
- EPA Air Quality/NJ Clean
- Energy Handbook
- My Bio

## Energy Program

Egg Harbor Township School District / District Services / Energy Program



**SAVE EHT SCHOOL DISTRICT ENERGY & DOLLARS FOR EDUCATION**

**OUR EHT SD ENERGY PROGRAM MILESTONES ATTAINED THIS SUMMER, WE REACHED 39.0% COST AVOIDANCE & 9 MILLION \$ SAVED!**

Overall, the energy we have saved is equal to removing **4,311** cars from the road or planting **530,579** trees!

**LET'S KEEP THE MOMENTUM GOING!**

**How can you help the Energy Program?**

- Reduce wasteful energy consumption
  - Last out → Lights off
  - A/C on → Classroom Doors closed
  - End of day → Computers/ALL Equipment → off
- Be an extra set of eyes & ears!
  - Report equipment, malfunctioning or left on, water leaks, & dripping faucets

**CONTACT INFORMATION**

**Shawn P. Braue**  
District Energy Manager  
(123) 646-8441 ext 1010  
braues@eht.k12.nj.us

**WELCOME BACK!**

**HELP OUR EHT SCHOOLS BY DOING YOUR PART TO REDUCE OUR CARBON FOOTPRINT! TO DATE WE HAVE HAD A 20,648 CO2 METRIC TON REDUCTION**

**Earth Day 2018**

**Safety, Comfort, Energy Savings and Sustainability!**



## A PICTURE IS WORTH A THOUSAND WORDS

**A Friendly Reminder Your**  
**Monitor** \_\_\_\_\_  
**Printer** \_\_\_\_\_  
**Speaker** \_\_\_\_\_  
**Shades** \_\_\_\_\_  
**Windows** \_\_\_\_\_  
**Radio** \_\_\_\_\_  
**Scanner** \_\_\_\_\_  
**Computer** \_\_\_\_\_  
**Other** \_\_\_\_\_  
**was found on!**



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THANKS FOR BEING  
AN EHT ENERGY EAGLE!!

You may find this note on your computer or in your work area if we find something not in compliance. In BOE Policy. It is never meant to make you feel uncomfortable only to let you are not complying with the BOE policy. Thanks in advance for making sure we don't waste. Remember it is a "FRIENDLY REMINDER!!!"



Above is a copy of the Checklist for your area to help remind you to do a proper area shutdown. Put it in a good spot and use the supplied Checklist or make your own Shutdown reminder! If you don't have one as the Energy Manager for one.

**Safety, Comfort, Energy Savings and Sustainability!**

## A PICTURE IS WORTH A THOUSAND WORDS Continued



Monitor on left and center are on and speaker is on. This is the only off position for a monitor.



If you see a red light on the mouse the computer is still on.



For most of us this is the power button that shuts down the computer. Some shutdown power strips in addition to turning off equipment.



Turn off Printers and copiers!

Remember if it has an **on/off switch** it will not hurt it to be turned off!

Power Strips can be turned off if accessible everyday and for sure during longer breaks.

Turn off your lights and look to see what lights are on around room.

## **Safety, Comfort, Energy Savings and Sustainability!**

DVD's are often missed. The Clock lights Blink if not set to a time and remains on if plugged in. The DVD light is the Key



On because the DVD light is on.



If just the clock is blinking/off the DVD Power is off.

Remember you are responsible for your area. Every dollar you save is a dollar saved for education and not paid to the utility company! The only Energy saved is the Energy not used. Standby uses energy, Sleep mode uses energy! OFF IS OFF!

Open (Left) for Natural light or radiant heat as you might want. Close (Right) at end of the day as a layer of protection for Conditioned Air or to keep room cool or heat in at night.



**Safety, Comfort, Energy Savings and Sustainability!**

## Appendix A

### 7000 Program

### R7460 Energy Management

#### OPERATIONAL STANDARDS

##### General

1. Instruction room doors shall remain closed when HVAC is operating. Ensure doors between conditioned space and non-conditioned space remain closed at all times (i.e. between hallways and gym or pool area).
2. Proper and thorough utilization of data loggers will be initiated and maintained to monitor relative humidity, temperature, and light levels throughout the organization's facilities to ensure compliance with organization guidelines.
3. All exhaust fans should be turned off daily.
4. All office machines (copy machines, laminating equipment, etc.) shall be switched off each night and during unoccupied times. Fax machines should remain on.
5. All computers should be turned off each night. This includes the monitor, local printer, and speakers. Network equipment is excluded.
6. All capable PC's should be programmed for the "energy saver" mode using the power management feature. If network constraints restrict this for the PC, ensure the monitor "sleeps" after 10 minutes of inactivity.

Cooling Season Occupied Set Points <sup>1</sup> : 74°F – 78°F Unoccupied Set Point: 85°F Heating Season Occupied Set Points: 68°F – 72°F Unoccupied Set Point: 55° F
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<sup>1</sup> Set points are in accordance with ASHRAE 55 "Thermal Conditions for Human Occupancy"

##### Air Conditioning Equipment

1. Occupied temperature settings shall NOT be set below 74°F.
2. During unoccupied times, the air conditioning equipment shall be off. The unoccupied period begins when the students leave the area at the end of day. It is anticipated that the temperature of the instruction room will be maintained long enough to afford comfort for the period the staff remains in the instruction room after the students have left.
3. Air conditioning start times may be adjusted (depending on weather) to ensure instruction room comfort when instruction beings.
4. Ensure outside air dampers are closed during unoccupied times.

5. Ceiling fans should be operating in all areas that have them.
6. Relative humidity levels shall not exceed 60% for any 24 hour period.
7. Air conditioning should not be utilized in facilities during the summer months unless the facilities are being used for summer school or year-round school. Air conditioning may be used by exception only or in those facilities that are involved in team-cleaning.
8. In all areas which have evaporative coolers such as shops, kitchens and gymnasiums, the doors leading to halls which have air conditioned instruction rooms or dining areas should be kept closed as much as possible.
9. Where cross-ventilation is available during periods of mild weather, shut down HVAC equipment and adjust temperature with windows and doors. Cross-ventilation is defined as having windows and/or doors to the outside on each side of a room.
10. Ensure dry food storage areas are maintained within code requirements. Typically, this is 55°F-75°F temperature and 35%-60% relative humidity. Utilize loggers to verify.

#### Heating Equipment

1. Occupied temperature settings shall NOT be above 72°F.
2. The unoccupied temperature setting shall be 55°F (i.e. setback). This may be adjusted to a 60°F setting during extreme weather.
3. The unoccupied time shall begin when the students leave an area.
4. During the spring and fall when there is no threat of freezing, all steam and forced air heating systems should be switched off during unoccupied times. Hot water heating systems should be switched off using the appropriate loop pumps.
5. Ensure all domestic hot water systems are set no higher than 120°F or 140°F for cafeteria (with dishwasher booster).
6. Ensure all domestic hot water re-circulating pumps are switched off during unoccupied times.
7. For heat pumps, ensure a 6°F dead-band between heating and cooling modes.
8. Heating oil and propane (if applicable) levels should be physically measured and recorded by “sticking the tanks” at least on the following intervals: 1) recurring scheduled monthly date 2) immediately before new delivery, 3) immediately after delivery.

#### Lighting

1. All unnecessary lighting in unoccupied areas will be turned off. Staff should make certain that lights are turned off when leaving the instruction room or office when empty. Utilize natural lighting where appropriate.
2. All outside lighting shall be off during daylight hours.
3. Gym lights should not be left on unless the gym is being utilized.



4. All lights will be turned off when students and staff leave for the day. Custodians will turn on lights only in the areas in which they are working.
5. Refrain from turning lights on unless definitely needed. Remember that lights not only consume electricity, but also give off heat that places an additional load on the air conditioning equipment and thereby increases the use of electricity necessary to cool the room.

#### Water

1. Ensure all plumbing and/or intrusion (i.e. roof) leaks are reported and repaired immediately.
2. Grounds watering should only be done between 4am-10am. Do not water during the heat of the day typically between 10am-8pm.
3. When spray irrigating, ensure the water does not directly hit the facility.
4. Consider installing water sub-meters on irrigation and cooling tower supply lines to eliminate sewer charges.

#### **E. Kitchens**

1. Appliance and equipment “on” times will be as close as possible to the actual use.
2. Ventilation fans should be used in conjunction with equipment use.
3. Refrigerator and freezer doors should remain closed as often as possible.
4. Unused kitchen equipment will be unplugged during the summer.
5. Freezers will be consolidated during the summer. Refrigerators and freezers not in use will be turned off for the summer months where possible.
6. Every effort will be made to utilize vending machines (soda, water, juice, snacks) that are energy efficient: timers, de-lamping or shutting off during the summer months are strategies to consider for vending machines whenever possible.

#### **F. Purchasing**

ENERGY STAR products will be considered when purchasing any new equipment or appliances.

Adopted: 12/2010

## APPENDIX B

### 2015 EHT SUMMER, WINTER, OR SPRING BREAK CLASSROOM/OFFICE/WORK AREA SHUTDOWN CHECKLIST

BUILDING: \_\_\_\_\_ CLASSROOM # \_\_\_\_\_ DATE: \_\_\_\_\_  
NAME: \_\_\_\_\_

Thermostats turned <b>OFF</b>	Yes _____	No _____
Lights <b>OFF</b>	Yes _____	No _____
Computers & Monitors <b>OFF—<u>LEAVE PLUGGED IN!</u></b>	Yes _____	No _____
Copying machines— <b>OFF and UNPLUGGED</b>	Yes _____	No _____
PA systems/Stage and Sound Systems — <b>OFF</b>	Yes _____	No _____
Power Strips — <b>OFF</b>	Yes _____	No _____
Ceiling fans— <b>OFF-UNPLUGGED</b>	Yes _____	No _____
TVs, DVDs and VCRs— <b>OFF-UNPLUGGED</b>	Yes _____	No _____
Speakers-Radios— <b>OFF-UNPLUGGED</b>	Yes _____	No _____
Clocks-Stereo's— <b>OFF-UNPLUGGED</b>	Yes _____	No _____
Lamps-Single Lights— <b>OFF-UNPLUGGED</b>	Yes _____	No _____
Power Strips-Carts <b>OFF &amp; UNPLUGGED</b>	Yes _____	No _____
Microwaves- <b>OFF</b>	Yes _____	No _____
All refrigerators turned <b>OFF &amp; EMPTIED &amp; DOORS OPEN</b>	Yes _____	No _____
Scanners-FAXes-SMART Boards <b>OFF-UNPLUGGED</b>	Yes _____	No _____
Printers <b>OFF-UNPLUGGED</b>	Yes _____	No _____
Shades <b>CLOSED/SHUT</b>	Yes _____	No _____
Windows <b>CLOSED/SHUT/LOCKED</b>	Yes _____	No _____
SMART Boards <b>OFF-UNPLUGGED</b>	Yes _____	No _____
OVERHEAD AV EQUIPMENT <b>OFF-UNPLUGGED</b>	Yes _____	No _____
<u>FACULTY ROOMS</u> : Refrigerators/Microwaves- <b>Off-Emptied-Opened</b>	Yes _____	No _____
<b>(Refrigerators) Unplugged (Microwaves &amp; Refrigerators)</b>		
All unnecessary equipment <b>OFF and UNPLUGGED</b>	Yes _____	No _____
ALL HEATERS/FANs/PERSONAL ITEMS <b>TAKEN HOME</b>	Yes _____	No _____
Performed by: _____		
Signed off by Principal/Supervisor _____		

**Safety, Comfort, Energy Savings and Sustainability!**

## APPENDIX C

### SUBSTITUTE TEACHER AND EMPLOYEE CHECKLIST

All Substitute Teachers, Aides, and Employees to the EHT SD should be aware there is an Energy Conservation Program we follow in our School District. Part of your duties as a substitute is to shut down your areas and classrooms when you leave them and at the end of the day. Please follow the Checklist below for each class you are in and don't assume someone will follow you and shutdown the area after you depart. Thank you on behalf of the Board of Education, Administration and our Students!

- 1.) Shut any open windows, doors and window shades if present
- 2.) Turn off all computers, monitors, printers, audio carts, speakers, TVs, DVDs, radios, overheads, Smartboards.
- 3.) Clean your board off.
- 4.) Turn off lights and close the door.
- 5.) Don't assume anyone is coming into this area after you.
- 6.) Report to the Main office any problems in the classroom with facilities, or IT equipment.
- 7.) Any other electrical items you may have used or turned on.

IF SUBSTITUTING ON LAST DAY BEFORE A LONG WEEKEND, OR HOLIDAY BREAK...

- 1.) Turn off any power strips that are accessible
- 2.) Unplug equipment such as, pencil sharpeners, radios, clocks etc.
- 3.) Unplug Microwaves, coffee pots, and TV's.
- 4.) Shut off copiers and printers
- 5.) Ensure the above checklist is also completed.

To the Main Office:

I certify my room was properly shutdown and the checklist above was completed.

Room Number: \_\_\_\_\_

Printed Name: \_\_\_\_\_

Substitute for: \_\_\_\_\_

Substitutes please drop off this checklist with Main office or with Teacher's Folder.

## APPENDIX D

### Other Important Pages to Save to your Tool Bar!

<http://www.sustainablejerseyschools.com/>

**FOR SCHOOLS SUSTAINABLE JERSEY CERTIFIED**

**A BRIGHTER FUTURE** one school at a time

**REGISTER**

**REGISTER YOUR SCHOOL DISTRICT OR SCHOOL**  
Start the certification process by registering with Sustainable Jersey for Schools.

**ABOUT SUSTAINABLE JERSEY FOR SCHOOLS**

Sustainable Jersey for Schools is a certification program for New Jersey public schools that want to go green, conserve resources and take steps to create a brighter future, one school at a time. [Learn More](#)

**CERTIFICATION ACTIONS**

Review our menu of sustainable actions. A school will collaborate with its district to complete actions, upload documentation and achieve certification.

**THREE TYPES OF ACTIONS**

<input checked="" type="checkbox"/> <b>District Only</b>	District completes these actions and submits them for review.
<input checked="" type="checkbox"/> <b>School Only</b>	Individual schools complete these actions and submit them for review.
<input checked="" type="checkbox"/> <b>Either District or School</b>	Action must be claimed by the agreed upon entity.

[LEARN MORE](#)

**PARTICIPATING DISTRICTS & SCHOOLS**

View the map of participating districts and schools, and register your district or school today! [View Map](#)  
Or download a [printable list](#).

**PARTICIPATING DISTRICTS & SCHOOLS**

**273** DISTRICTS **679** SCHOOLS

[REGISTER NOW](#)

View the map of participating districts and schools, and register your district or school today! [View Map](#)

**SUSTAINABLE JERSEY CERTIFIED SCHOOLS**

**194** CURRENTLY CERTIFIED **181** BRONZE **13** SILVER

[BECOME CERTIFIED](#)

**PROGRAM FUNDERS**

**HEADLINES**

- Funding for School Sustainability Projects Announced**  
AUG 18, 2017
- 34 Sustainability Grants Awarded to New Jersey Schools**  
APR 25, 2017

**UPCOMING EVENTS**

- 2017 NJEA Small Grant Cycle Informational Webinar**  
Online  
Sept 14, 2017 - 03:00 PM  
ED 04:00 PM
- 2017 Sustainable Jersey Small Grants for Energy Projects Webinar**  
ONLINE  
Sept 19, 2017 - 03:00 PM  
ED 04:00 PM

**GETTING STARTED**

Review the steps to certification and the resources now available to help you get started on the program.

[LEARN MORE](#)

**QUICK RESOURCES:**

- Sustainable Jersey for Schools Program Brochure
- Sustainable Jersey for Schools Fact Sheet

Note: We have 10 of 194 schools certified, 2 silver Schools of 13 & 2 champions of 3 statewide.

## Safety, Comfort, Energy Savings and Sustainability!

## APPENDIX E

[https://www.wunderground.com/history/airport/KACY/2015/7/22/DailyHistory.html?req\\_city=Atlantic+City+International&req\\_state=NJ&req\\_statename=&reqdb.zip=08240&reqdb.magic=5&reqdb.wmo=99999](https://www.wunderground.com/history/airport/KACY/2015/7/22/DailyHistory.html?req_city=Atlantic+City+International&req_state=NJ&req_statename=&reqdb.zip=08240&reqdb.magic=5&reqdb.wmo=99999)

### Atlantic City, NJ ★

✈ Atlantic City International

© 11:00 AM EDT on August 29, 2017 (GMT -0400)

Forecast **History** Calendar Rain / Snow Health

#### Weather History for KACY - August, 2017

Change the Weather History Date:

August

▼

29

▼

2017

▼

View

Tuesday, August 29, 2017

« Previous Day

Next Day »

**Daily** Weekly Monthly Custom

	Actual	Average	Record
<b>Temperature</b>			
Mean Temperature	69 °F	73 °F	
Max Temperature	70 °F	82 °F	98 °F (2010)
Min Temperature	68 °F	63 °F	41 °F (1982)
<b>Degree Days</b>			
Heating Degree Days	0	0	
Month to date heating degree days		0	
Since 1 June heating degree days		27	
Since 1 July heating degree days		0	
Cooling Degree Days	4	8	
Month to date cooling degree days		281	
Year to date cooling degree days		895	
Since 1 June cooling degree days		831	
Growing Degree Days	19 (Base 50)		
<b>Moisture</b>			
Dew Point	66 °F		
Average Humidity	90		
Maximum Humidity	96		
Minimum Humidity	73		

Freddie Mac Multifamily

## Green Advantage.™

It just makes cents.

[LEARN MORE](#)

Freddie Mac  
MULTIFAMILY

Search for Another Location

Airport or City:

KACY

Submit

Trip Planner

Search our weather history database for the weather conditions in past years.

Great place to look at the weather here or where you might be going!

**Safety, Comfort, Energy Savings and Sustainability!**



## APPENDIX F

### PACNJ's ASTHMA FRIENDLY TRAINING & AWARDS

<http://pacnj.org/asthma-friendly-schools/step-5-nj-peosh-free-training/>

**EHT School's Nurses were Awesome Great Job!**

10 of 44 certified by PACNJ in 2015-16

Largest & 1<sup>st</sup> District South of Wharton State Forest, NJ!

**ALL EHT SCHOOLS NOW ASTHMA FRIENDLY CERTIFIED SCHOOLS**

**Safety, Comfort, Energy Savings and Sustainability!**

## APPENDIX G OUTDOOR AIR QUALITY at AIRNOW.GOV

<http://www.eht.k12.nj.us/Departments/air-quality.html>



[Return to the EHT School District website](#)

What Does the AQI INDEX or Flag Color Mean?			What should I do as a Teacher, Nurse, Aide, or Student?	
Air Quality Index Levels of Health Concern	Numerical Value	Meaning	AQI Value	Actions to Protect Your Health From Particle Pollution
Good	0 to 50	Air quality is considered satisfactory, and air pollution poses little or no risk.	Good (0 - 50)	None
Moderate	51 to 100	Air quality is acceptable; however, for some pollutants there may be a moderate health concern for a very small number of people who are unusually sensitive to air pollution.	Moderate (51 - 100*)	Unusually sensitive people should consider reducing prolonged or heavy exertion.
Unhealthy for Sensitive Groups	101 to 150	Members of sensitive groups may experience health effects. The general public is not likely to be affected.	Unhealthy for Sensitive Groups (101 - 150)	The following groups should <u>reduce prolonged or heavy</u> outdoor exertion: - People with heart or lung disease - Children and older adults
Unhealthy	151 to 200	Everyone may begin to experience health effects; members of sensitive groups may experience more serious health effects.	Unhealthy (151 - 200)	The following groups should <u>avoid prolonged or heavy</u> exertion: - People with heart or lung disease - Children and older adults Everyone else should reduce prolonged or heavy exertion.
Very Unhealthy	201 to 300	Health warnings of emergency conditions. The entire population is more likely to be affected.	Very Unhealthy (201 - 300)	The following groups should <u>avoid all</u> physical activity outdoors: - People with heart or lung disease - Children and older adults Everyone else should avoid prolonged or heavy exertion.
Hazardous	301 to 500	Health alert: everyone may experience more serious health effects.		

## Safety, Comfort, Energy Savings and Sustainability!

## APPENDIX H CENERGISTIC EHT Board of Education's Energy Company

<http://www.cenergistic.com/>



The Energy Conservation Company®

[What We Do](#) | [Who We Work For](#) | [About Us](#) | [Contact Us](#)



**Cenergistic® Client News**

**Mansfield ISD - 3 Straight ENERGY STAR Awards**

Mansfield ISD is honored to receive for the 3rd year in a row, the 2018 ENERGY STAR Partner of the Year Award. Click below for more info.

[LEARN MORE](#)

### The Energy Conservation Company

For over three decades we have revolutionized how our clients view, consume and use energy nationwide. Our behavioral-focused energy conservation approach is unique in the industry - changing behaviors to realize significant savings. It comes with no risk, no debt, and no equipment to buy. Our average client has saved 26%, and collectively, we've helped our clients redirect \$4.2 billion dollars to invest in the lives of the people our clients serve, not utility companies.

#### CORE Benefits

In addition to substantial energy savings, Cenergistic delivers these CORE benefits:

- **Capital:** Save through elimination or deferral of capital purchases.
- **Operations and Maintenance:** Save through reduced labor costs and consumables replacement.
- **Recognition:** Acknowledgement of good stewardship through ENERGY STAR awards and positive publicity.
- **Environmental:** Conserve natural resources while creating a better environment for your constituents.

Plus, there is no capital investment, and we bear the burden of the risk!

[SHARE](#)

#### In The Spotlight

Texas - Mansfield ISD

Cenergistic: Training & Development

An Independent Evaluation from a Leading Academic Authority

California - Vallejo City Unified School District

#### Cenergistic Success Stories in your area



#### Cenergistic Clients

Our clients span the country, encompassing a wide range of climates and types of organizations.



School Districts



Colleges & Universities



Healthcare



Chrysler


[What We Do](#)  
How It Works

[Who We Work For](#)  
School Districts

[About Us](#)  
History

[Contact Us](#)

[Careers](#)

Connect with us on  
     

**Safety, Comfort, Energy Savings and Sustainability!**



## APPENDIX I ENERNOC and DEMAND RESPONSE

<http://www.enernoc.com/>  
WHAT is Demand Response?

Why do we Do it?

Go to the Website and get the answers!

How will this affect you?



**Safety, Comfort, Energy Savings and Sustainability!**

# SOLAR IN EHT SCHOOLS

## Generation of kWh Per School Array

(See ETH Energy Program Website Solar pages)

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1	School	Jan-17	Feb-17	Mar-17	Apr-17	May-17	Jun-17	Jul-17	Aug-17	Sep-17	Oct-17	Nov-17	Dec-17	TOTALS
2	Day P	5,684	10,725	14,427	15,435	16,972	19,566	15,081	0	0	0	0	0	97,890
3	Slay E New	4,021	7,778	10,566	11,438	12,896	14,986	13,688						75,373
4	Swift New	4,972	10,504	14,013	12,108	9,752	16,938	10,158						78,445
5	Alder	5,310	10,384	14,147	15,062	16,429	19,267	16,403						97,002
6	Fennwood	4,309	7,954	10,959	11,500	12,777	14,692	12,989						75,180
7	Day E	166	0	0	0	12,125	39,344	33,943						85,578
8	Slay E Old	7,973	15,437	21,593	22,582	24,663	29,112	25,689						147,069
9	Miller	4,110	7,924	10,666	11,621	12,116	14,041	14,969						75,447
10	Swift Old	5,904	10,901	15,538	16,736	18,694	20,913	19,450						108,136
11	EHT HS	21,315	23,672	32,545	34,900	38,228	54,740	38,205						243,605
12														
13	Monthly Totals	63,764	105,279	144,454	151,382	174,672	243,599	200,575	0	0	0	0	0	1,083,725

## Explore reasons to go solar at home!

### Reason #1: SRECs

Aside from generating electricity and lowering your electric bill which you already pay, the solar panels on your roof will pump out State Renewable Energy Certificates (or SRECs). They are worth big bucks, which your utility company will purchase from you, just to prove they are sourcing their electricity from a clean source, like your rooftop.

For a medium sized solar system, your New Jersey utility company will now pay you about \$3,000 a year in SREC payments for the next 15 years. That amounts to roughly \$45,000! How cool is that? To learn more about how you could be earning thousands of dollars in just a few months, [get hooked up here](#).

### Reason #2: New Jersey state solar rebate

In addition to holding the utility companies accountable for sourcing a small slice of their energy from the sun, the NJ state legislature also enacted a state rebate for solar homeowners. This rebate has stepped down in value as more and more residents have gone solar, but it currently stands at a still hefty amount of \$.75/watt. Next year, it may be even less value, so you'll have to check back with them (or us) to see what the new amount will be. What does \$.75/watt mean for an average sized solar system? That amounts to about \$4,000. Nothing to sneeze at, more cash right back in your pocket.

### Reason #3: 30% federal tax credit

The feds will give you a big bonus tax credit for putting solar panels up on your roof in New Jersey, too. On an average sized system after the state rebate, your tax credit will be about \$6,000. You can see how all the bonuses are really adding up!

### Reason #4: The electricity savings and the environment!

Your new electric bill will probably be something like \$15 instead of \$120. That makes those monthly living expenses a little easier to deal with, no? Aside from that, just having solar on your roof is the equivalent of planting 70 trees, or eliminating the CO<sub>2</sub> from driving across the country 75 times over the life of the system.

## Safety, Comfort, Energy Savings and Sustainability!