

Franklin Township Public Schools

Energy conservation &
sustainability initiatives

Efficiency Program



SEE

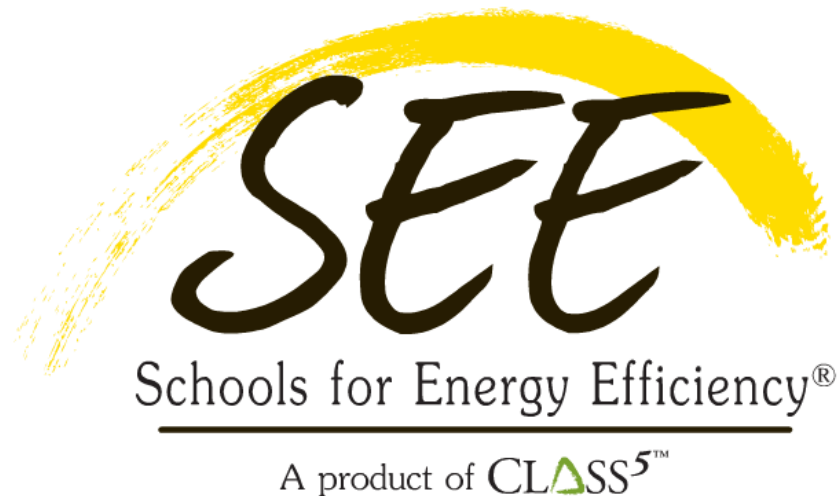
Schools for Energy Efficiency®

A product of CLASS⁵™

CLASS

Energy conservation & sustainability initiatives

schools for energy efficiency program

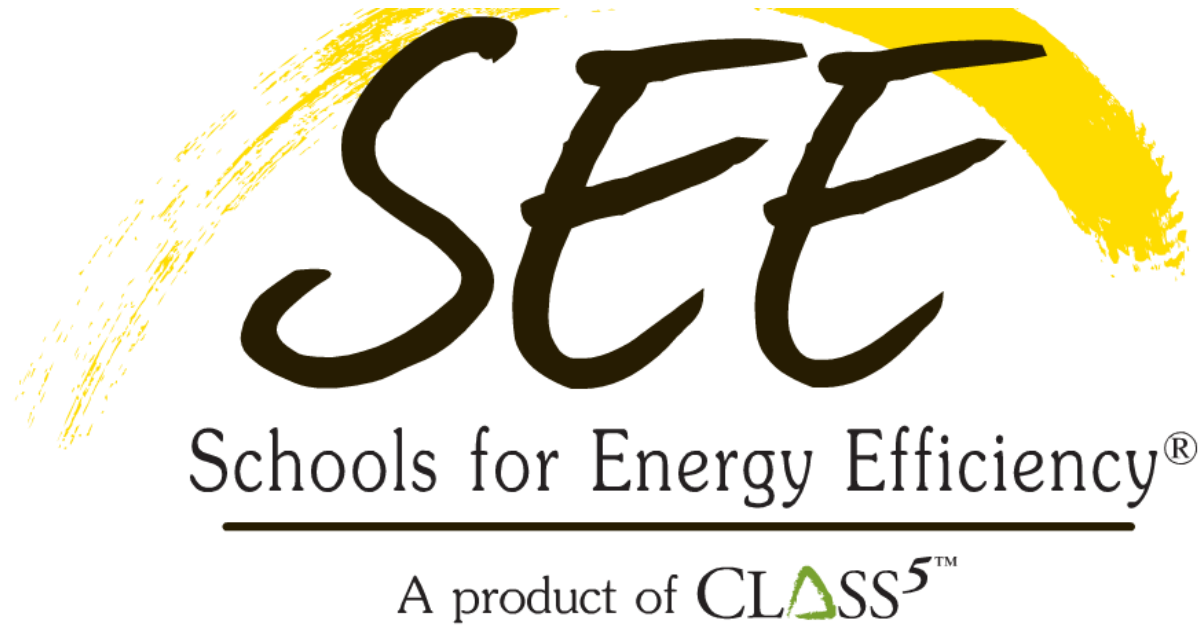


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tracking f

Benefits of the SEE program

what is the SEE program?

a comprehensive program for K-12 schools to save energy and money by changing behavior throughout the district. SEE provides a systemized plan, training and utility tracking for immediate and sustainable savings.



Benefits of the SEE program

- a systemized plan customized for schools
- Immediate and sustainable energy savings
- Promotes efficient facility operations and behavior modification
- Managed by the district
- Supported by energy experts
- National award winning program with proven results

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Key components of our success

Leadership

Utility tracking & benchmarking

Awareness & communication

Commitment & involvement



Leadership

Utility tracking & benchmarking

Awareness & communication

Commitment & involvement

Custodial Support

SEE THE CHANGE

...by saving energy
in the classroom

Energy News

Energy Efficiency Information for Staff & Students
Franklin Township Public Schools - 1755 Amwell Road - Somerset, NJ 08873 - 732-873-2400 - www.FranklinBOE.org



YOU HAVE THE POWER

TO REDUCE ENERGY COSTS AT SCHOOL

In terms of cost, typical schools spend the most money each year on electricity, followed by natural gas. Since electricity is the highest cost in a typical school, it makes sense that we are being asked to turn off electrical equipment, such as lights, whenever possible. With natural gas being the second highest energy cost in a school building, it also makes sense to turn the temperature down a degree or two to try to conserve energy. While everyone is aware of how budgets continue to be a huge challenge throughout school districts, not all of us may be aware of the following facts about energy costs:

- Nationwide, schools spend \$8 billion a year on energy.
- In many school districts, energy costs exceed the cost of books, supplies and computers
- Annual energy costs can exceed \$300 per student
- According to the EPA, up to 30 percent of energy used in school buildings is wasted.

The good news in all of this is that we have the power to help reduce energy costs in our schools. A school district's energy budget can be controlled because it is based on use. The more energy we use, the more it costs. By implementing an energy conservation program in our district, we have opportunities to make no-cost and low-cost changes that can help save money.

Energy use relates to money. The more energy we save, the more costs are reduced for schools. Together our efforts will add up!

The Franklin Public School District has become an ENERGY STAR® Partner. We have joined other school districts in New Jersey and across the country to participate in ENERGY STAR programs and recognition opportunities. School buildings earning the ENERGY STAR Label are among the most efficient in the nation. You can find more information at www.energystar.gov. Click on the link for **Buildings & Plants** to find out more about how ENERGY STAR can help us save energy at home and at school!



Energy Awareness Campaign Arrives in District Schools

Posters, classroom energy saving tip sheets and reminder stickers on monitors and light switches have been popping up in all of our buildings. School Green Teams and the FHS Environmental Club have been busy getting the awareness campaign posted in their buildings. Audra Wood, Science Specialist at Pine Grove Manor, has led the school Green Team to distribute classroom tip sheets and light switch stickers. They displayed SEE posters all over the building and are making plans to find ways to remind everyone to save energy every day. The Franklin High School Environmental Club is working to gain faculty and staff support to conserve energy at FHS. Club advisor and biology teacher, Ryan Parker, reported that members put up posters and requested that teachers display and follow the power-down stickers and classroom tips. Energy conservation and recycling are the Club's top priorities. Thanks to everyone who helped launch the energy awareness campaign. The first quarter of Year 1 energy tracking will end January 31st! Let's all work together to eliminate energy waste in our buildings. We will undoubtedly see the "payoff" in our first results report. Remember, our goal is 10% energy reduction.



Questions, comments and suggestions are encouraged!
Contact:
Connie Coriell
Energy Efficiency Coordinator
732-873-2400 x501
CCoriell@franklinboe.org

January 2011



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to help
you

- ✓ Turn off your computer monitor when you're finished using it.
- ✓ Shut down your computer every night.
- ✓ Use partial lighting where possible.
- ✓ Dress in layers to help you adjust to changing building temperatures.
- ✓ Unplug the TV DVD player, and other electronics when you're not using them.
- ✓ Clear off air vents and keep them free from clutter.
- ✓ Close your classroom door to help maintain the temperature.
- ✓ Turn off the lights when you leave the room.
- ✓ Lower and close the blinds at night to help keep your classroom comfortable.

Energy News

Energy Efficiency Information for Staff & Students
Franklin Township Public Schools - 1755 Amwell Road - Somerset, NJ 08873 - www.FranklinBOE.org

September 2011

SEE THE CHANGE

Our district has made significant progress in reaching our ten-percent energy conservation goal. Details and information about our progress can be found [here](http://www.franklinboe.org). Please remember to do a few simple actions every day to help the district continue to save energy. Small actions add up to big savings!



SEE THE CHANGE

...by saving energy
in the classroom

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January 2011

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Thanks to everyone who helped launch the energy awareness campaign. The first quarter of Year 1 energy tracking will end January 31st! Let's all work together to eliminate energy waste in our buildings. We will undoubtedly see the "payoff" in our first results report. Remember, our goal is 10% energy reduction.



SEE THE... by saving energy

Our district has made significant energy conservation information about our program. Please remember to do a few things to help the district continue to save energy. Add up to big savings!

- ✓ Turn off your computer monitor when not in use.
- ✓ Shut down your computer monitor when not in use.
- ✓ Use partial lighting where possible.
- ✓ Dress in layers to help you adjust to building temperatures.
- ✓ Unplug the TV, DVD player, and other electronics when you're not using them.
- ✓ Clear off air vents and keep them free from clutter.
- ✓ Close your classroom door to help maintain temperature.
- ✓ Open the blinds and use the natural light.
- ✓ Turn off the lights when you leave the room.
- ✓ Lower and close the blinds at night to help keep your classroom comfortable.

In the coming weeks, a new visual campaign will appear in our buildings to kick-off our second year of participation in the SEE program. Watch for the new posters, reminders and messages to help us all remember to save energy every day in our school district. Your actions count!

Questions, comments and suggestions are encouraged!

Contact:
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results!

**November 2010
through July 2011**

**Change
Electric
Kwh**

**Change Nat
Gas Therms**

**Change
Electric
Demand
KW**

RESULTS!

| November 2010 through July 2011 | Change Electric Kwh | Change Nat Gas Therms | Change Electric Demand KW | Change Total Energy (Btu) | Avoided Cost |
|--|------------------------------------|----------------------------------|--|--------------------------------------|-------------------------|
| Conerly Road School | -6% | -3% | -1% | -4% | \$3,481 |
| Elizabeth Avenue School | 11% | -14% | -4% | -8% | \$3,638 |
| Franklin High School | -10% | -17% | -6% | -14% | \$75,275 |
| Franklin Middle School | -13% | -8% | -10% | -9% | \$39,255 |
| Franklin Park Annex | 1% | -11% | -4% | -8% | \$2,000 |
| Franklin Park School | -8% | -7% | -1% | -7% | \$12,877 |
| Hillcrest School | -4% | -14% | -8% | -11% | \$7,815 |
| MacAfee Road School | 5% | -10% | -13% | -6% | \$3,311 |
| Middlebush Admin. Building | -6% | -7% | -6% | -7% | \$3,272 |
| Pine Grove Manor School | -5% | -15% | -7% | -13% | \$10,630 |
| Sampson G. Smith School | -9% | -9% | -2% | -9% | \$20,873 |
| Grand Total | -8% | -11% | -6% | -10% | \$182,427 |

[Home](#) > My Portfolio

| Portfolio Averages | |
|---|---|
| Baseline Rating: 55 Facilities Included: 11 | Current Rating: 59 Facilities Included: 11 |
| Change from Baseline: Portfolio Adjusted Percent Energy Use (%): -3.5% Facilities Included: 11 | |
| Averages are weighted by Total Floor Space. More about Baselines More about Change from Baseline: Adjusted Energy Use | |

[Add](#) a Property
[Import](#) Facility Data Using Templates

Work with Facilities
[Update](#) Multiple Meters
[Share](#) Facilities

Reporting and Analysis
New! [Generate](#) Reports and Graphs
[Request](#) Energy Performance Report

Apply for Recognition
[Apply](#) for the ENERGY STAR
[ENERGY STAR Leaders](#)

Automated Benchmarking
[Automated Benchmarking Services Console](#)

| Change Total Energy (Btu) | Avoided Cost |
|---------------------------|------------------|
| -4% | \$3,481 |
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| -10% | \$182,427 |

GROUP: [Create Group](#) | [View All](#) VIEW: [Create View](#) | [Edit View](#) | [View All](#)

[Download](#) in Excel Search Facility Name:

Results 1 - 11 of 11 All # [A](#) [B](#) [C](#) [D](#) [E](#) [G](#) [H](#) [I](#) [J](#) [K](#) [L](#) [M](#) [N](#) [O](#) [P](#) [Q](#) [R](#) [S](#) [T](#) [U](#) [V](#) [W](#) [X](#) [Y](#) [Z](#)

| Facility Name | Baseline Energy Period Ending Date | Current Energy Period Ending Date | Baseline Rating (1-100) | Current Rating (1-100) | Change from Baseline: Adjusted Energy Use (%) |
|--|------------------------------------|-----------------------------------|-------------------------|------------------------|---|
| Conerly Road School | 10/31/2010 | 08/31/2011 | 72 | 72 | 0.2 |
| Elizabeth Avenue School | 05/31/2011 | 08/31/2011 | 81 | 85 | -5.1 |
| Franklin High School | 06/30/2011 | 08/31/2011 | 47 | 50 | -2.5 |
| Franklin Middle School | 10/31/2010 | 08/31/2011 | 60 | 67 | -6.3 |
| Franklin Park Annex | 10/31/2010 | 08/31/2011 | 60 | 59 | 0.8 |
| Franklin Park School | 05/31/2011 | 08/31/2011 | 59 | 67 | -7.0 |
| Hillcrest School | 10/31/2010 | 08/31/2011 | 79 | 81 | -2.3 |
| MacAfee Road School | 10/31/2010 | 08/31/2011 | 52 | 49 | 2.5 |
| Middlebush Admin. Building | 09/30/2010 | 08/31/2011 | 68 | 71 | -4.6 |

Leadership

Utility tracking & benchmarking

Awareness & communication

Commitment & involvement

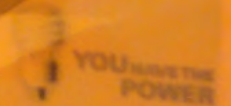
Custodial Support



GO Green! Save Energy!

We are saving energy today by serving a healthy cold lunch.

Keeping stoves and ovens off will save energy and keep the room cooler.





Turn it off
to save energy!





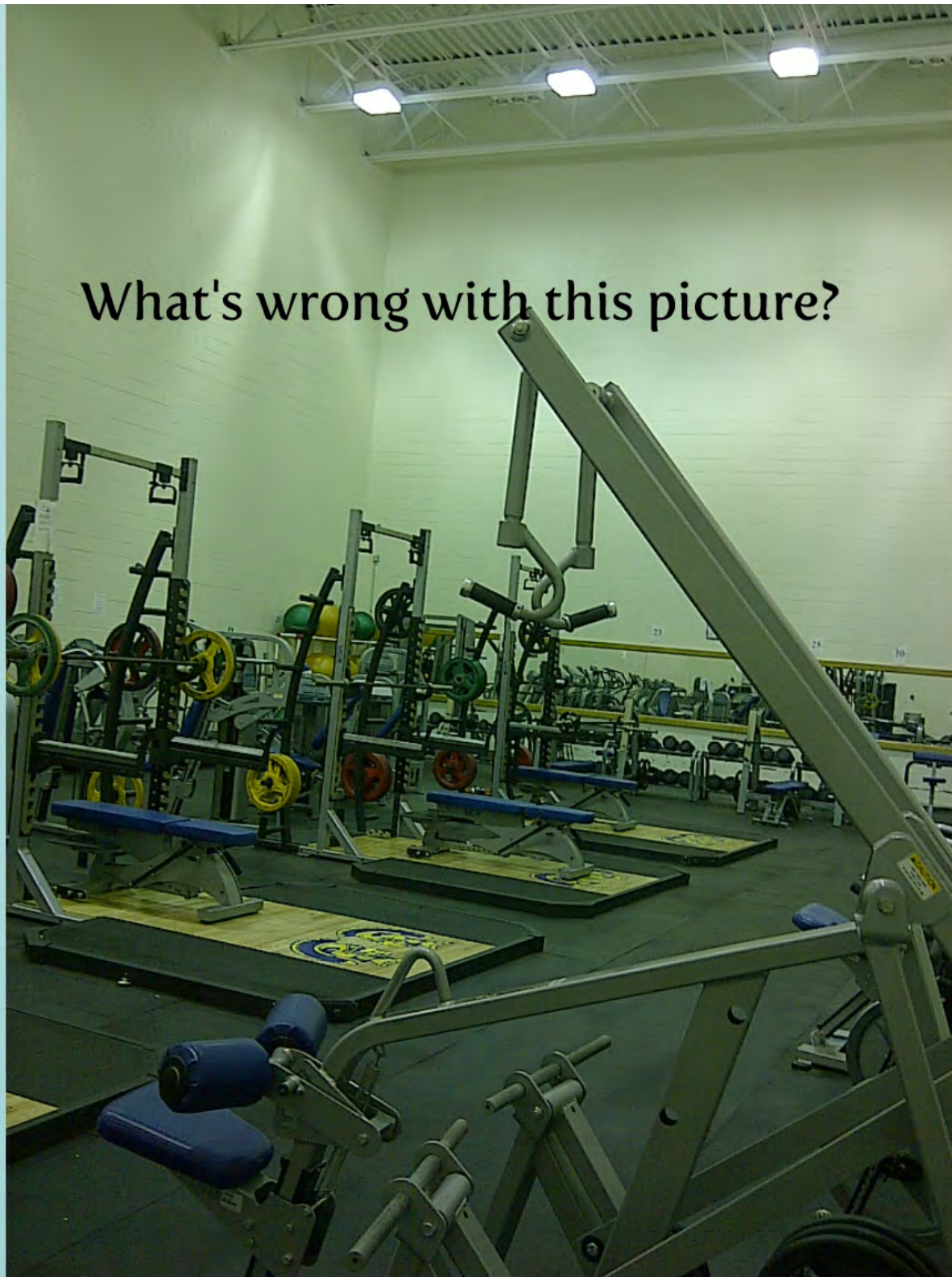
AIR CONDITIONER HARD AT WORK

PLEASE KEEP GYM DOORS CLOSED!!!

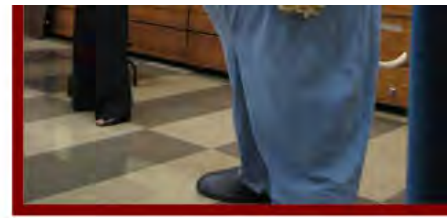
THANK YOU!



What's wrong with this picture?



Custodial Support

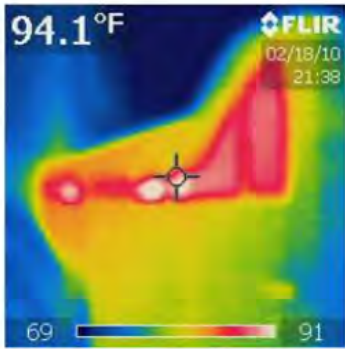


Somerset County Improvement Authority Solar Initiative Phase I



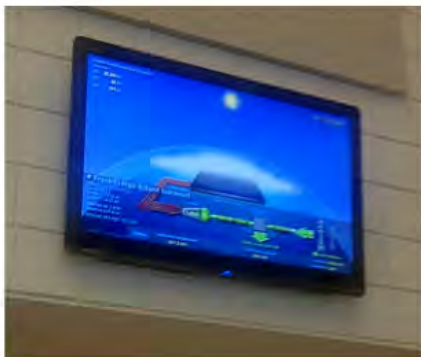


**Elizabeth Avenue School
Net-zero electric July 2011**



Buildings as labs

- supports 21st century curriculum standards
- utilizes resources
- provide authentic data
- relevance



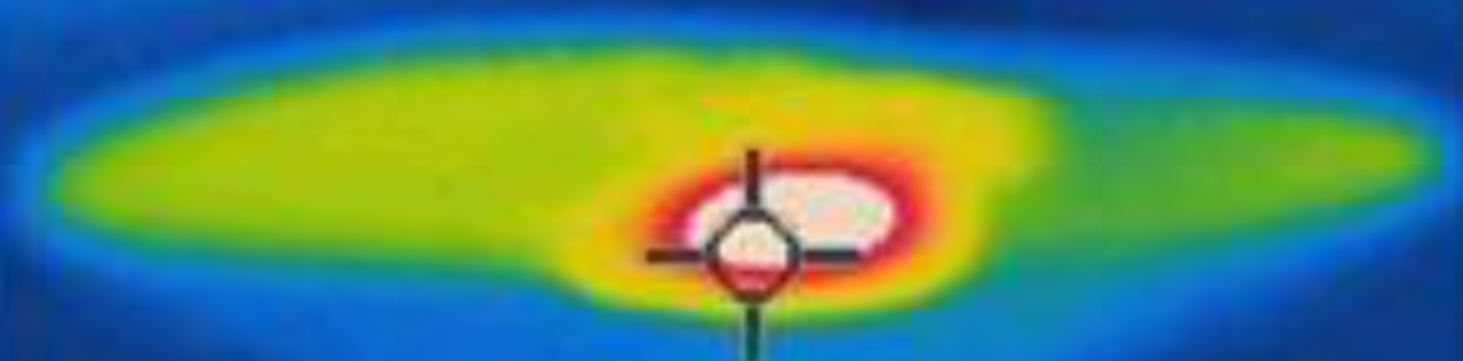
foam recycling
Dart foam densifier

> 302°F

FLIR

02/18/10

21:40



67



302

94.1°F

FLIR

02/18/10

21:38

R

10

40

69



91





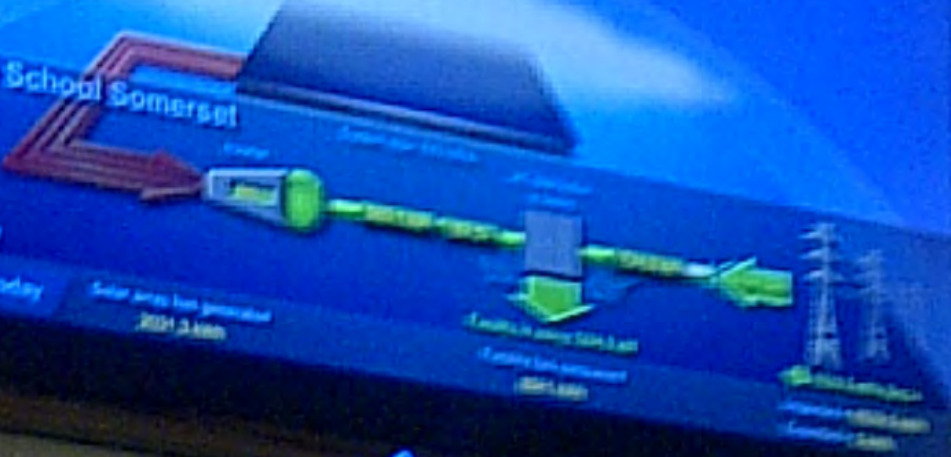
Avoided Greenhouse Gas Emissions
This month

| | |
|-----------------|------------|
| CO ₂ | 27,384 lbs |
| NO ₂ | 95 lbs |
| SO ₂ | 141 lbs |



Franklin High School Somerset

09/13/2011 08:04:00 pm
Temp: 65.7 F
Sunrise: 6:56:12 am
Sunset: 7:09:23 pm
Humidity: 48.3 %
Wind: 0.7 mph
Wind dir: 95.8 mph Dr: 80%



Today Solar Array has generated 2021.3 kWh

Energy Produced (2021.3 kWh)
Energy Delivered (2021.3 kWh)

Power Towers (2021.3 kWh)
Capacity (2021.3 kWh)



AYEZ L'OEIL SUR LES TEMPÉRATURES!

Quand des thermostats ne sont pas correctement réglés ou ne sont pas précis pour des questions d'usure, d'endommagement ou d'erreur humaine, nous gaspillons de l'énergie. Un environnement trop chaud ou trop froid augmente non seulement nos coûts mais il peut également compromettre la qualité et la fraîcheur du produit dans certains secteurs.

Si vous pensez qu'il fait trop chaud ou trop froid ou si vous remarquez qu'un thermostat ne fonctionne pas correctement, **SIGNALEZ-LE!**

C'est un fait!

Nous pouvons empêcher le dégagement de 3.580,00 tonnes d'émissions au niveau des centrales électriques et éviter 651.000,00 dollars de frais chaque année simplement en maintenant toujours les températures adéquates dans toutes les usines d'Unilever N.A.



TOGETHER, WE ALL HAVE THE POWER TO CONSERVE





Metal, Plastic, Glass

Paper

Paper Recycling

PLASTICS

Can be recycled:

| | |
|----------|-----------|
| Aluminum | Cardboard |
| Steel | Plastic |
| ... | ... |

Can't be recycled:

| | |
|-----|-----|
| ... | ... |
|-----|-----|

Household Batteries
SEAL IN PLASTIC ZIP-TOP BAGS
DO NOT MIX BRANDS
Newspapers, ONLY
BUNDLED WITH TWINE OR STAPLES
Junk Mail/Advertisements (ONLY)
PLACED IN BLUE BAGS ONLY
Corrugated Cardboard
NO. LID WITH TWINE OR STAPLES
(NEVER INSIDE BAGS)
Aluminum, Steel & Recycled Glass



foam recycling
Dart foam densifier

what can i do in my school?

-  Get with the program!
-  Set a good example
-  Quantify
-  Communicate
-  What do you know?



Get with the program!



Set a good example



Quantify



Communicate



What do you know?



Involve everyone!

connie coriell
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732-718-4168