

# YES! ENERGY ACTION PROJECT REPORT

[**WWG Earth YES**]



# WE ARE THE WWG Earth YES! TEAM

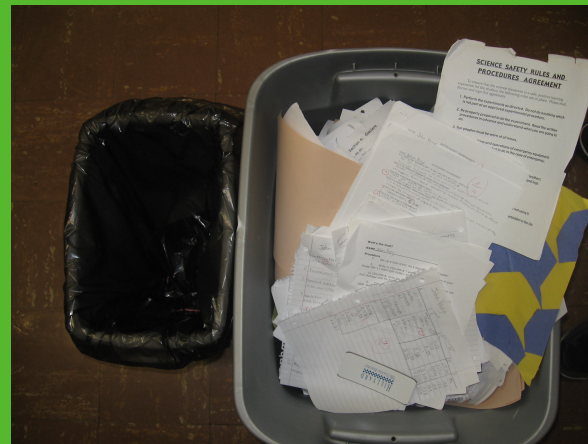
- Our team advisor is Mr. Merrick
- 21 students were members of our YES! Team throughout the year



# Paper Recycling

One of the first projects we worked on was paper recycling. We first found out how many teachers had recycling bins, and gave one to those who did not. From there, we counted how many pieces of paper were put into each bin, each day and if they were reusable or not.

We also held a paperless day. This is where we had a contest to see which of the teachers could use the least amount of paper for that day. With it being a competition, the teachers encouraged their student to not use paper either to try and keep their paper amount down. In fact the teacher who won did not use any paper that day.



Reed

# Blackout Day

Another project we did this year was blackout days, and these blackout days is were we shut all the lights off in the school for one hour one day out of the week. We repeated this process for three weeks and we ended up saving the school 30 dollars in electricity costs for the school. This project was an easy way for the WWG Yes team to save money and reduce the use of electricity in our schools.



[http://www.youtube.com/watch?v=BTkljK0YA\\_A](http://www.youtube.com/watch?v=BTkljK0YA_A)

WWG Earth Y.E.S. 1st Semester-  
introductory project to show  
interested students and faculty  
what YES can be

*Video*



# Christmas Lights

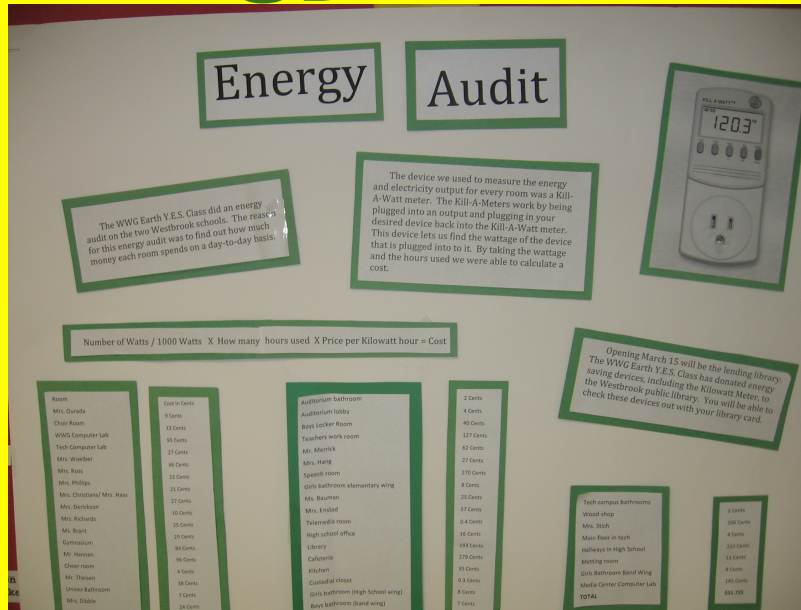
By: Kasia Her



One of our first semester projects we did was collecting Christmas lights. We had help from the communities and schools collecting over 450 pounds! These lights went to a recycling center, where they will be shredded and sorted to different components. Then they would be transported to another company for more processing. Also it saves landfill space and all proceeds from this big project goes to Toys for Tots.



# Energy Audit Day



For our Energy Audit Day we went around the whole school and calculated how much money we had to pay in one day. We used Kill-A-Watts to figure how much wattage a device used and multiplied that to the hours that it was used and the amount the school pays for kWh. We found out that our school spends about \$31.72 a day in energy cost. We then showed our results to the public by making a poster, and having it out on conference day so teachers and the community members can see how much we paid for energy in one day. Also the teachers were able to see how much energy their room used too. On the next slide you can see an example of a room we did.



**Erin Richards**

**Sped Room**

<b>Device</b>	<b>Quantity</b>	<b>W</b>	<b>kW</b>	<b>Hrs</b>	<b>kWh</b>	<b>Cost</b>
<b>laptop charger</b>	<b>2</b>	<b>71.6</b>	<b>0.0716</b>	<b>2</b>	<b>0.1432</b>	<b>0.0093</b>
<b>computer</b>	<b>1</b>	<b>95.3</b>	<b>0.0953</b>	<b>8</b>	<b>0.7624</b>	<b>0.0496</b>
<b>computer on standby</b>	<b>1</b>	<b>2.5</b>	<b>0.0025</b>	<b>16</b>	<b>0.04</b>	<b>0.0026</b>
<b>Ipod charge</b>	<b>9</b>	<b>79.2</b>	<b>0.0792</b>	<b>0.5</b>	<b>0.0395</b>	<b>0.0026</b>
<b>lights</b>	<b>14</b>	<b>448</b>	<b>0.448</b>	<b>10</b>	<b>4.48</b>	<b>0.2912</b>
<b>printer</b>	<b>1</b>	<b>14.8</b>	<b>0.0148</b>	<b>1</b>	<b>0.0148</b>	<b>0.001</b>
<b>printer on standby</b>	<b>1</b>	<b>10.9</b>	<b>0.0109</b>	<b>23</b>	<b>0.1152</b>	<b>0.0075</b>
					<b>Total Cost</b>	<b>\$0.36</b>



# Energy Audit Night

For our Energy Audit Night we went around to every room in both schools and measured all the electrical devices that were plugged into a outlet or a power strip. We used kill-a-watt meters to measure how much electricity each device is using. We used the equation of number of watts/1000 to get kilowatts then we multiplied kilowatts by how many hours the device is on or plugged in, then we multiply that number by the cost the school pays per kilowatt hour (6.5 cents per kilowatt hour). Then that is our total cost for that device when used or plugged in. The results for the night energy audit, with both schools we found out that at night the school spends 3.83 dollars between 4pm and 7am. See example of energy audit and the equation we used to find the total costs of all the rooms in both the high school and tech campus.

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Mrs. Larson

Device	W	kW	Hrs	kWh	Cost
projector	4	0.004	15	0.06	0.39
candle light	21.4	0.0214	15	0.321	2.0865
power strip	0	0	15	0	0
computer	3	0.003	15	0.045	0.2925
fish tank 1	27.5	0.0275	15	0.4125	2.68125
fish tank 2	12.6	0.0126	15	0.189	1.2285
TV	1.7	0.0017	15	0.0255	0.16575
fish tank 3	17.2	0.0172	15	0.258	1.677
fish tank 4	9.4	0.0094	15	0.141	0.9165
fish tank 5	1.6	0.0016	15	0.024	0.156
				Total Cost	9.594

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# Phone Recycle

The WWG Y.E.S. team collected 52 cell phones. We sent these phones to GRC Wireless Recycling. It is a company based out of Florida that we found on the Internet. The phones are either reused in third world countries or they are recycled. The recycled phones are 100% recycled and none of them ever touch a landfill. We received \$57 from the company from the phones that we sent them.



Shawn



Eli Herding

## Shoe Recycling

The Y.E.S team collected over 600lbs of shoes to be recycled and given to people in third world countries. We got 50 cents per pound and saved valuable landfill space. The shoes are going to be sent to a company called green sneakers where they are processed.



[Click image for article](#)

# Lending Library

John Yang

The WWG Earth Yes class donated five electronic measuring devices to the Westbrook Public Library. We donated some Kill-A-Watt meters, infrared thermometers, microwave detectors, pipe thermometers, and a CO2/energy cost meters. People from the community will be able to check them out from the library the same way they could check out a book. They can use them to check the efficiency of their home electronic appliances.



# Bike Generator

*For this project we built a bike with a generator so we could produce energy. We would use this energy to charge Ipads, Ipods, and other small devices.*

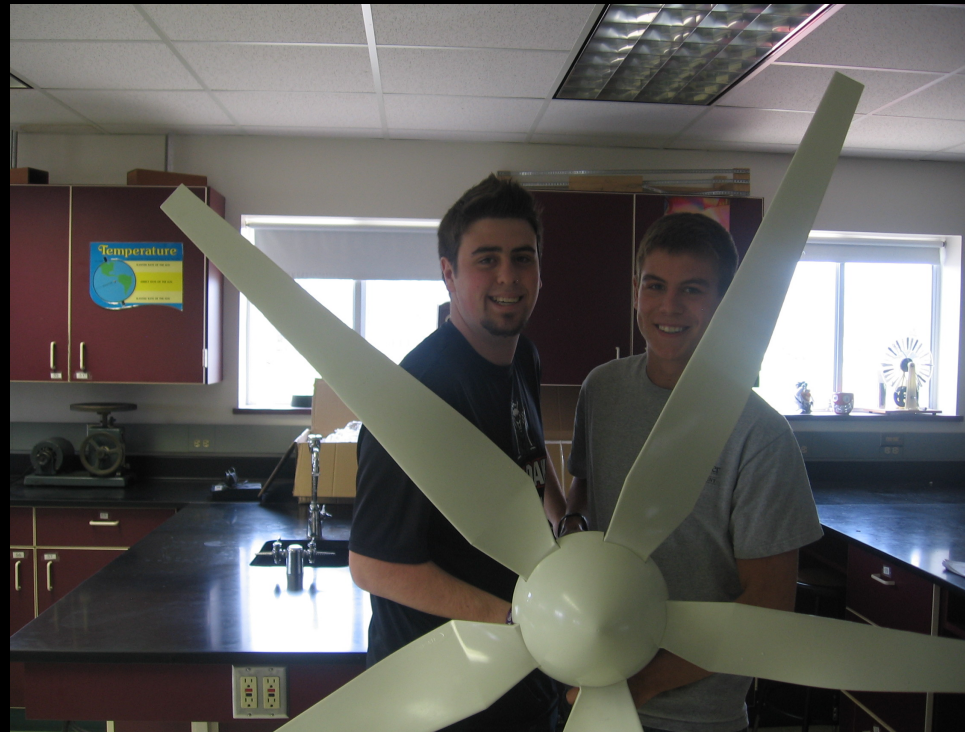


Brandon Balsavage

# Windmill

Eli

Another project we did was purchased a wind turbine. We are planning to place it on one of the bus garage so the school will never have to pay for the electricity used by the garage.



**Throughout the year, we were able to talk to many groups and get articles in lots of different papers.**

**Article in the Marshall paper. [click for article](#)**



# THE END

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Please e-mail your final PowerPoint to your YES! coordinator by April 9<sup>th</sup>.

