

John Fitch Elementary

Energy audit

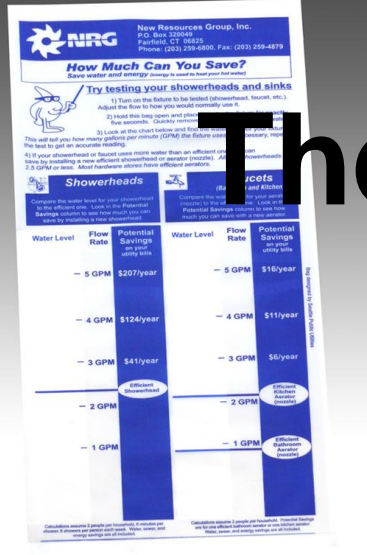


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On May 6, 2010, we took a trip to John Fitch Elementary.

Since, we have been working with Peco, we have learned a lot about energy. So, we did an energy audit on the school.

Here is the conclusion we came to!



The Tools Of The Trade:

- Light Meter
- Water Flow Bag
- Flicker Checker
- Kill A Watt Meter
- Water Thermometer
- Humidity/Temperature Pen



Computer Room

(Room 4)

Number of windows: 9

Indoor Temperature: 80.4

Relative Humidity: 50.8%

Light Meter Reading: 60

Hot Water Temperature: 90

Type of Light Ballasts: Electronic

Is there a thermostat? Yes

Are there adjustable vents? No

Are there adjustable lights? Yes

Are the lights on? Some

Are the windows open? No

Are the blinds closed? Some

Are the faucets dripping? No

Electrical Appliances-

Computers-Sleep Mode

CD Player-Turned Off

Paper Shredder-On

1 Gallon per minute of water flow
from faucet

The Cave

(Faculty Room)

Number of windows: 2

Indoor Temperature: 78

Relative Humidity: 58%

Light Meter Reading: 40

Hot Water Temperature: 78

Type of Light Ballasts: Electronic

Is there a thermostat? Yes

Are there adjustable vents? No

Are there adjustable lights? Yes

Are the lights on? No

Are the windows open? No

Are the blinds closed? Some

Are the faucets dripping? Yes

Electrical Appliances-

Soda Machine-Turned On

Microwave (2)-Turned On

Toaster Oven-Turned Off

Fridge-Turned On

Air Conditioner-Turned Off

5 ½ Gallon per minute of water
flow from faucet

Classroom

(Room 20)

Number of windows: 8

Indoor Temperature: 80.4

Relative Humidity: 50.7%

Light Meter Reading: 77

Hot Water Temperature: 78.5

Type of Light Ballasts: Electronic

Is there a thermostat? Yes

Are there adjustable vents? No

Are there adjustable lights? Yes

Are the lights on? Yes

Are the windows open? Some

Are the blinds closed? Yes

Are the faucets dripping? Some

Electrical Appliances-

Fan-Turned Off

Microwave-Turned on

2.1 Gallon per minute of water
flow from faucet in bathroom

1.8 Gallon per minute of water
flow from faucet in classroom

(Leaks)

Kill A Watts Used

Electrical Device	Watts Measured
(3)Computers	500 Watts
Paper Shredder	140 Watts
Boom box	7 Watts
Microwave	1615 Watts (each)
Air Conditioner	1000 Watts
Soda Machine	70 Watts
Fridge	30 Watts
Television	50 Watts
Toaster Oven	580 Watts

The Day's Conclusion

After our long trip to John Fitch Elementary School, we realized just how much energy we use that is wasted. Thanks to our research, we have produced a list of ideas and suggestions to cut back on energy usage.

Our Recommendations-

- Unplug appliances that aren't in use.
- If no one is in the room, shut the lights off.
- Open the blinds for light on nice days.
- Open windows instead of using fans.
- Fix all leaking faucets.
- Only have the necessary appliances in rooms.