



This audit is similar to the energy audit about heat. These two audits together will give you a clear description of where and how energy is used in any building – at home or in a community setting.

Using electricity

Does the building have PV array?

Do you monitor how much it generates?

Is there an energy display meter?

Lighting

Count how many lights there are in the building. Use a tally counting method, eg ###

- Different bulbs use different amounts of power (measured in watts) – circle which bulb uses the most power.
- Energy is the amount of work done over a period of time and is measured in watt hours.
- A 60 watt lightbulb left on for 1 hour, uses 60 watt hours of energy.
- Which bulbs do you think are the most 'energy efficient'?



Conventional Incandescent bulb – 60 watt

How many lights:

How many are on in empty rooms?

How much energy has been wasted each hour these bulbs are left on?

60 watts x number of bulbs x 1 hour =watt hours
1000 watt hours (Wh) = 1 kilowatt hour (kWh)



Compact Fluorescent Lamp – 20 watt

How many lights:

How many are on in empty rooms?

How much energy has been wasted each hour these bulbs are left on?

20 watts x number of bulbs x 1 hour =watt hours
.....kWh





Strip Light – 80 watt

How many lights:

How many are on in empty rooms?

How much energy has been wasted each hour these bulbs are left on?

80 watts x number of bulbs x 1 hour =watt hours
.....kWh

 Halogen Spot Light – 35 watt These have 1 bright bulb	How many lights:	How many are on in empty rooms?
		How much energy has been wasted each hour these bulbs are left on? 35 watts x number od bulbs x 1 hour =watt hourskWh
 LED Spot Light – 7 watt These usually have 3 bulbs	How many lights:	How many are on in empty rooms?
		How much energy has been wasted each hour these bulbs are left on? 7 watts x number od bulbs x 1 hour =watt hourskWh
Are there any other different types of lights? (What about outside?)	List other types of lights here and how many there are.	
What else uses electricity in this building?		
Computers:	How many?	How many did you count left on standby?
Interactive Whiteboards or Smartboards:	How many?	How many did you count left on standby?
Who is responsible for monitoring the electricity in this building do you think? Are there any records of this visible?		
Has your Youth Group ever taken part in National/international energy related initiatives such as ‘Switch Off Fortnight’ or ‘Earth Hour’? If so, are there any records of this including any promotional materials or press releases?		
Have you ever had a visitor to your youth group to talk about Climate Change or Energy Saving initiatives?		

For each unit (kWh) of electricity used we emit 0.50kgs of carbon dioxide

For each unit (kWh) of heat used (from burning natural gas) we emit 0.18kgs of carbon dioxide

To work out how much Carbon Dioxide your schools is emitting through using electricity and heating the building:

From your energy bill answer:

.....kWhs electricity x 0.50 kgs CO₂ =Kgs CO₂

tonne = 1000kgs

How many buses of carbon dioxide has the building emitted?



