

Purpose:

A practical activity to explore how to reduce the carbon footprint of your meeting place.

Youth work outcomes:

Outcome 4: Young people participate safely and effectively in groups Outcome 6: Young people express their voice and demonstrate social commitment

Sustainable development goals:



How it works:

In person: Audit sheets.

Online:

Instead of auditing the youth work setting, young people could use the template to audit their own homes and then discuss the actions they will take.

Description:

Explain that the purpose of this activity is to explore together how we can reduce energy use in our community buildings and homes. Discuss as a group why this is important in helping to reduce greenhouse gas emissions and to help tackle the issue of climate change.

Split in to smaller groups or pairs. Each group should assess energy use in their community building or homes (or you can assign groups to assess specific areas of the building) using the questions in the audit sheets. Once assessments have been completed bring them all together to compare findings and to develop an energy reduction action plan.

You could also decide to take meter readings, using the meter readings template, to help measure and compare any potential energy savings delivered by the action plan. In order to do this you would need to take meter readings before, during and after the energy audit. We would suggest taking meter readings at least a week before the energy audit and a week after implementing any energy reduction changes; to hopefully see a difference in energy use and reductions made. The audit sheet includes all the relevant boxes for collecting the meter readings data, and for calculating the daily energy used before and after the energy audit. Example data is also included in the audit sheet as a guide.







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The audit sheet includes all the relevant boxes for the meter readings and the calculations with example data included.

Split into smaller groups or pairs. Each group should assess the meeting space using the questions in the audit. Groups could be assigned different spaces if your youth work organisation has access to more than one space. Once the groups have completed the assessment, bring them back together to compare their findings and develop an action plan for reducing energy.

Once the groups have completed the audit and tried some of the energy saving ideas, take the meter readings again (leave at least a further 5 days) to see if there has been a change in the daily usage rate. Again, you can use the audit sheet to record this information and to show the, hoped for, reduction in energy usage. If you don't have access to the meters, the remainder of the audit can still be carried out.

Discussion questions:

- Which steps were the easiest to implement? Which do you think saved the most energy?
- What made it harder to reduce energy in your youth work setting/home? E.g. other users of the space
- Did your energy saving changes impact the behaviour of others?
- The Scottish Government have set a target to reach net zero emissions by 2045. Who has the most responsibility to achieving this? Why?

Next steps

Learn more about the main sources of emissions with this fun matching activity.

Think more about how climate change might affect Scotland in the future with Scotland 2100.

Meter readings

Meter readings before energy saving activities Example data				
Before energy audit date: 25/12/20 Electricity meter reading: 1000 Gas meter reading: 1000				
Energy audit date: 30/12/20 Electricity meter reading: 1100 Gas meter reading: 1050				
Average daily use:				
Amount of energy used between the 1st and 2nd meter readings, divided by number of days between the readings:				
Electricity use: 20 units per day				
Gas meter reading: 10 units per day				
Meter readings after energy saving activities				
Final readings date: 04/01/21 Electricity meter reading: 1180 Gas meter reading: 1090				
Average daily use:				
Amount of energy used between the 2nd and the Final meter readings, divided by number of days between the readings:				
Electricity use: 16 units per day				
Gas meter reading: 8 units per day				

Have these results changed from before the activity? How much energy would be saved across a whole year? How much might this be worth in £s?

Questions

Lights			
Question	Comments		
Are the lights on unnecessarily? E.g. in empty rooms			
Can you switch on the lights in one area only (e.g. the area furthest away from the windows)?			
Are there any non-energy efficient light bulbs?			

Electrical equipment			
Question	Comments		
Are all unused computers (including monitors) and other electrical appliances turned off? Remember appliances in the kitchen.			

Windows and doors			
Question	Comments		
Are there draughts around the edges of windows and doors?			
Are the windows double-glazed?			
Are windows and doors left open when the heating is on?			

Heating			
Question	Comments		
Can you turn heating up or down in each room separately?			
Are any of the rooms too warm?			
Are the corridors kept as warm as the rooms? (Heating can be lower in corridors as people are moving around)			
Is the heating on in rooms when they are not being used?			

Problem	Ideas for action	Impact of actions (Positive and negative)	Who is going to lead the action
Example: The doors have big gaps and let in a lot of cold air.	Draught excluder	Positive – Cheap and easy solution. Negative – Relies on people to place them at the door	Chris

Ideas for reducing emissions

- Draught Excluders
- All lightbulbs are low energy rated
- Radiator reflector foil/panels
- "A" of higher rated appliances (washing machine/fridge/freezer/etc)
- Smart Meter
- Cavity wall insulation
- "A" rated, or better, boiler
- Solar Panels
- Heat Pump

Behaviours for reducing emissions

- Turn thermostat down by at least 1 degree centigrade
- Turn heating off when not needed (in empty rooms or when the house empty)
- Use 100% renewable energy supplier
- Turn off all unnecessary lighting
- Turn off appliances when not used (TV/chargers/ games console/etc.)
- Generally, use "Eco" settings on all appliances (washing machine/dish washer/etc.)
- Do not overfill the kettle
- Cook with lids on pans