

THEME: Being an Energy Hero

BACKGROUND

This week is Wales Climate Week and in celebration of that, today the pupils learned all things energy:

- What types of energy there are.
- Difference between renewable and non-renewable energy.
- Impact that non-renewable energy has on the planet.
- How to identify good and bad energy saving practices.
- Identifying trends in energy consumption graphs.
- Ways to support the school in reducing its energy consumption.

The pupils took part in an energy survey of the school and assessed how much energy the school is consuming by creating their own graph and discussing why at different times of the year more energy is being consumed by the school. They then discussed together as a class how the data they have collected could support the school to reduce their energy consumption.

Term	Definition
Non-Renewable Energy	Taken from a finite natural resource including coal, oil and natural gas also known as fossil fuels. They are consumed much faster than they can be replenished.
Renewable Energy	Derived from natural resources which cannot be depleted quicker than there consumed, which includes sunlight, wind and geothermal heat (Underground heat).
Climate Change	It is the long-term shift in the Earth's average temperatures and weather conditions.
Energy Efficiency	Using less energy to perform the same task eliminating wasted energy.
Energy Consumption	The amount of energy used overall or for a specific activity/process.

Home activity

Home Energy Hunt

This Home Energy Hunt is an activity for you to do in the house by yourself or in competition with somebody at home. You will look to find as many items in your house which use energy, and rank these items by those that use the most electricity, to the lowest amount of electricity.

Equipment:

- Notepad

- Pen

Instructions

This could be done as a game or all together, and see who finds the most items.

- Go around the house and list all the items that you know use energy.
- Rank them from the highest electricity usage to the lowest.
- Check your answers either from a product label, parent, book or the internet.
- From here you can write down a red, amber, green traffic light system for the items listed:
 - Red = Never to be turned off
 - Amber = Turn off when an adult says you can
 - Green = Turn off when not in use

LINKS & RESOURCES

Videos & Webpages

[How is Electricity Made](#) (9:44 minutes)

[Fossil fuels & Renewable energy](#) (1:50 minute)

[How to Save Energy BBC Bitesize – This also includes a video on energy saving](#) (2:37mins)

Activities to do at home

[What's Guzzling the Power? KS2](#)

[National Energy Action Online Activities include:](#)

- Become an energy detective
- Become a junior energy expert

Winter Warmth at Home: Energy Tips and Support for a Warmer, More Efficient Home

Flintshire County Council Energy Saving Tips

Simple guide on ways to save energy in the home all year round.

Nest or freephone 0808 808 2244

The Welsh Government Warm Homes Nest scheme makes Welsh homes warmer and more efficient places to live. Nest provides all households in Wales with free impartial advice to help you reduce your energy bills, maximise your income and lower your carbon footprint.

You could also be eligible for free home energy efficient improvements such as insulation, heating or solar panels.

Eco 4/flex

A National scheme allowing energy efficiency improvements in low income and vulnerable households. If your home is energy inefficient depending on your circumstances you could be entitled to funding for home energy efficiency measures such as heating upgrades and insulation.

Energy Saving Trust: Top 10 Energy Saving Tips

Flintshire County Council's Domestic Energy Team Contact

The team can provide impartial free advice on energy saving, signposting to various funding streams, and various referrals for different services which encompass energy saving. Find more information on how they can help on [the council's website](#).