

ENERGY *Heroes*







What about a little closer to home?





Extreme UK flood levels are happening much more often than they used to, analysis shows

Published: January 10, 2024 4:37pm GMT

River Ouse, York, 4th January 2024 after Storm Henk

Sheffield - Storm Babet, Winter 2023



Sheffield - Storm Babet, Winter 2023



Name	Date named	Date of impact on UK and/or Ireland and/or Netherlands
Agnes	25 September 2023	27 - 28 September 2023
Babet	16 October 2023	18 - 21 October 2023
Ciarán	29 October 2023	1 - 2 November 2023
Debi	12 November 2023	13 November 2023
Elin	9 December 2023	9 December 2023
Fergus	9 December 2023	10 December 2023
Gerrit	26 December 2023	27 - 28 December 2023
Henk	2 January 2024	2 January 2024

Dangerous storms



More extreme rain



r droughts



More wildfires



Longer, hotter heat waves



Because of this, global warming and climate change is causing:

- Destruction of homes and habitats
- Extinction of endangered species
- Food shortages
- Melting ice and Rising sea levels





What else needs energy?



Almost everything we do uses some kind of energy and most of it is created by burning **fossil fuels.**



What are **fossil fuels** and where do they come from?



Fossil fuels



Coal



Oil



Natural gas



Fossil fuels are becoming more scarce

- Harder to find
- Costs more to find and extract, forcing bills higher and higher
- Devastating to natural environments and habitats rich in biodiversity





The average adult polar bear weighs about 1 ton.



How many tons of carbon dioxide do you think humans produce each year?

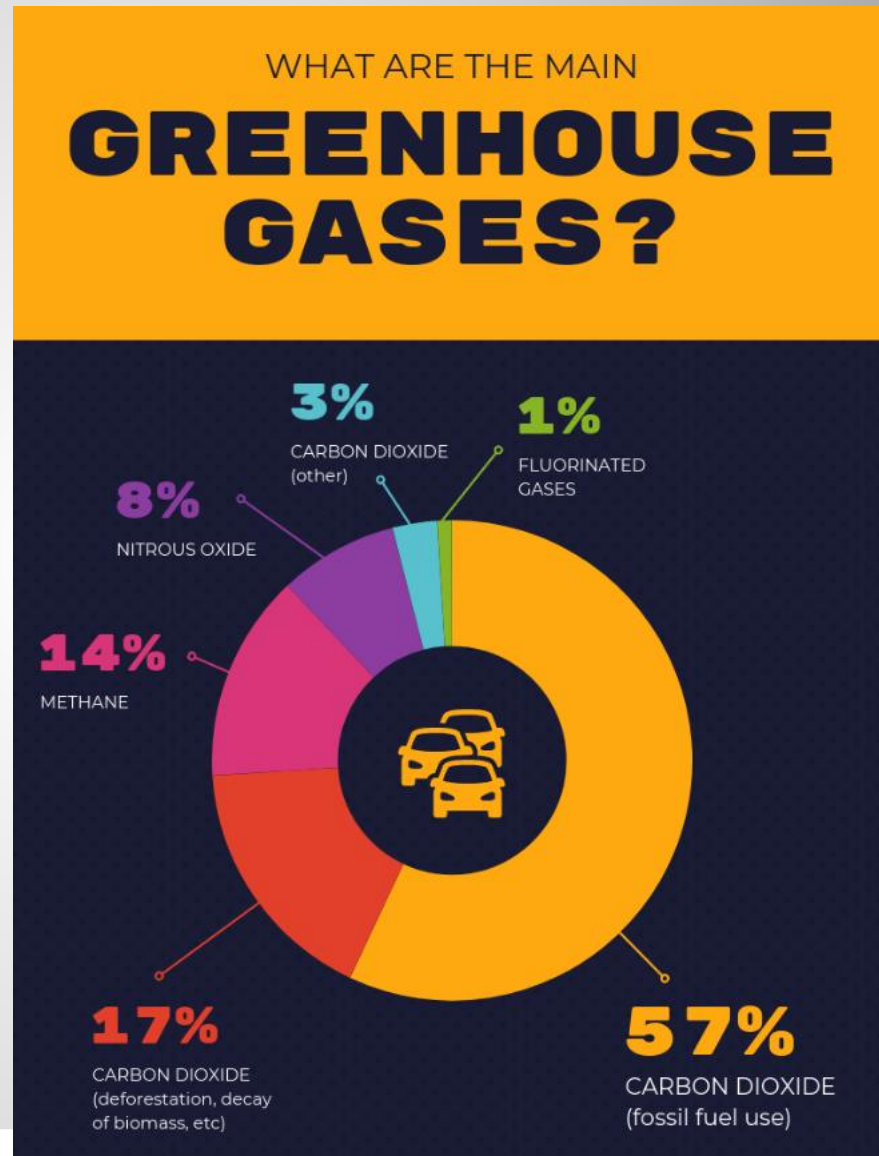


More than
50 billion
metric tons per year

([Climate.gov](https://climate.gov))



- There are other harmful gases, including **methane**, produced by animals during farming and **meat and dairy** production.







What alternatives are there to fossil fuels?



Renewable energy examples



HYDRO POWER



WIND



SOLAR



GEOTHERMAL



- **How can you become Energy Heroes ?**

A young girl with dark hair is looking upwards and to the right. Above her head is a large, orange, cloud-shaped thought bubble with a white outline. Inside the bubble, the text "What is a hero?" is written in black. To the left of the main bubble are two smaller, similar thought bubbles, one above the other, also with white outlines. The background of the entire image is a gradient from light yellow at the top to light orange at the bottom.

What is a hero?

Talk to everyone about climate change, with your friends, family and teachers. The more we learn about it, the more we can help.



What next?

- Year 5 Maths lessons
- Energy Audit
- Share knowledge and ideas

**Save
energy!
Save
money!**





ENERGY
Heroes

Quiz



- What is the name of the company we are from?

Answer 



Name 3 **fossil fuels**.





How many tons of carbon dioxide do humans produce each year?





How does this affect our planet?



What bad side effects can rising temperatures cause?

Answer 



- droughts
- floods
- wildfires
- extinction of endangered species
- and dangerous storms.



What alternatives are there to fossil fuels?

Answer 



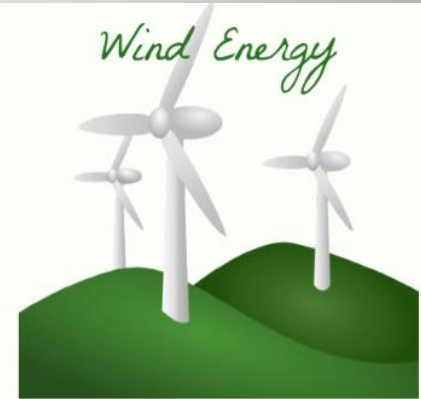
Solar Heat Energy



Solar Electricity Energy



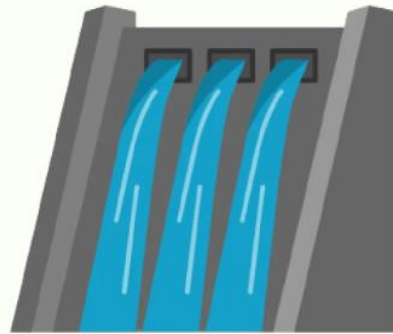
Wind Energy



SUSTAINABLE ENERGY EXAMPLES



Geothermal Energy



Hydropower Energy



Ocean Energy



● Why are renewable energy sources good?

Congratulations!



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