

CLIMATE CHALLENGE!

The government's Department For Energy And Climate Change (DECC) is challenging YOU to make a difference to our planet by 2050!



We all know that climate change is a big problem for our planet and that it affects the environment, animals and people living on it. So by the year 2050, scientists want the UK to significantly reduce the amount of carbon dioxide (CO₂) released into the air (carbon emissions), because high levels of CO₂ are warming up our world. Take a look at what DECC is doing to achieve this and then see how YOU can help, too...

CLEAN IT UP!

The UK has its own sources of oil, coal and gas (fossil fuels). However, when fossil fuels are burned they release carbon dioxide into the atmosphere. Fortunately, scientists have come up with a new type of power station that captures the carbon and transports it to a safe location, which is much better for the planet. This is a very new technology, though, and we'd need to build about 70 clean fossil fuel power stations to reach our targets for 2050.



Fossil fuel power stations don't need to be damaging to the environment!

WICKED WIND

Wind farms are great for reducing our emissions because they generate power without releasing any CO₂ into the atmosphere. As the UK and Ireland are windy islands, they could make great use of this clean form of energy. Wind turbines take up a lot of space, though, so we need to think carefully about where we put them so that the countryside doesn't get spoiled.

WHAT IS GLOBAL WARMING?



- The Earth is warmed by rays from the Sun, which are reflected back into space.
- Layers of natural gases surround the Earth (including greenhouse gases), acting like a thermal blanket, keeping the Earth at the right temperature.
- But if extra gases are made, the blanket gets thicker and the Earth gets warmer.



Solar power gives us a bright future!

SUPER SUN!

From the sun and the sea to hot rocks buried deep underground, lots of renewable energy sources in the British Isles are 'clean' and don't release emissions, which is great news for the planet! Solar panels, which use the sun's energy to generate electricity and hot water, can be placed on top of buildings. We can also get clean power from the sea by using machines that harness the power of waves to create energy. Clever!

DID YOU KNOW...?

A chain of restaurants in New York, USA, reuses its waste cooking oil to fuel its delivery van. What an ingenious idea!

HOW WE TRAVEL

Whether it's getting to school, going round to a friend's house or flying away on holiday, travel is a really important part of our lives. And changing the way we get around could make a HUGE difference to our carbon dioxide emissions. Plane and car travel produces higher emissions, so making more journeys by train – or even better, by bike or on foot – would help us reach our targets by 2050.



Get on your bike, explore and help save the planet!