

Ways of Reducing Environmental Issues

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Re-Using Items

What is re-using something?

Re-Using refers to using an old item again and again.

Examples of Re-Using Something (sourced from Unity College)

- Carrying a re-usable cup and/or water bottle. This is cost effective and reduces waste.
- Swapping plastic bags and sandwich wrappers for concealed, airtight food containers.
- Packing utensils, clothing, napkins and so on to create a waste-free lunch. This prevents damage to local wildlife and is cost-effective.
- Buying bulk containers for your favourite beverages instead of individual packed drinks. This allows you to transport more with you. Reduces waste through less packaging and is cost-effective and there is less packaging for money to be spent on per beverage.
- Using rechargeable batteries helps to prevent waste and spend money on purchasing new batteries, making it cost effective in a world of technology that often relies on batteries. Furthermore, it protects the environment because batteries contain chemicals for them to work.



Benefits of Re-Using Items

- It prevents waste because you are using the same item and sometimes re-purposing it.
- It is cost-effective because you do not need to waste money on new products.
- It gives you a chance to use sustainable materials such as glass jars etc, making being eco-friendly much easier in terms of lifestyle.

Recycling

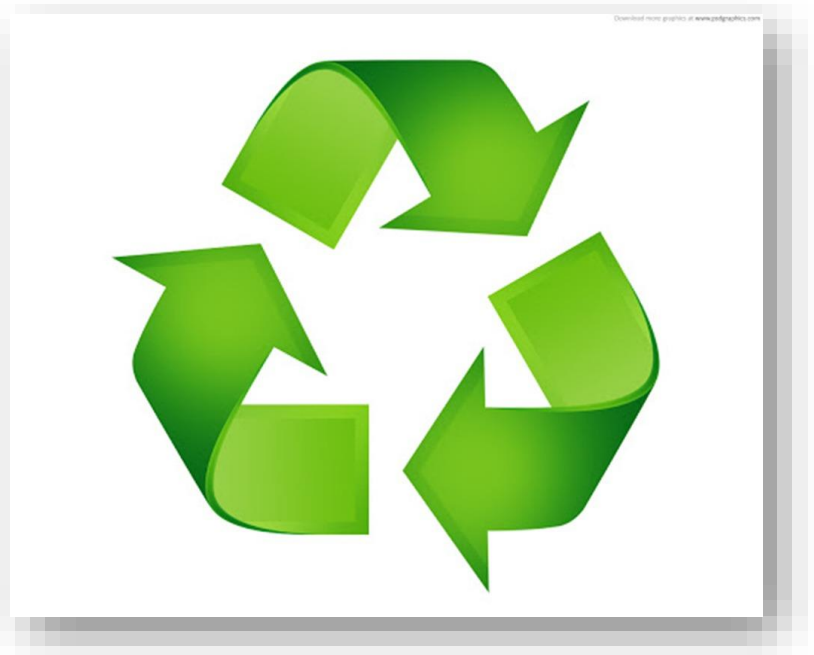
What is Recycling?

Recycling is when you give an old item a new purpose. For instance, an old glass bottle might become part of new coffee-jar – this is an example of recycling because that old glass is being given a new purpose and shape by becoming a coffee jar.

How do I know when something is recyclable?

Recycling Symbol – The symbol for if something is recyclable has three green arrows pointing clockwise, in a triangle shape. This tells you that the item is recycle and that it ought to be put into a Recycling Bin.

The recycling symbol is the same for all bins and relevant items: three arrows pointing clockwise with the colour green included.



What are the benefits of recycling, and why is it important?

It gives items a new purpose so that they are re-used and do not create waste in landfills. Nearly nine out of ten families claim to “regularly recycle” in an article by the Guardian and the average recycling rate for the UK is 45.5%.

According to “SaveMoneyCutCarbon”, some plastics can take 450 years to breakdown which creates waste and endangered wildlife. Recycling plastics creates less waste, making it less likely to tangle animals.

Landfills generated by a lack of recycling could create eye-saws on the natural habitat.

Recycling is cost-effective and more sustainable. This could be handy for business which may not have as much money and need cheaper imports to thrive.

Green Travel

Vehicle Emissions

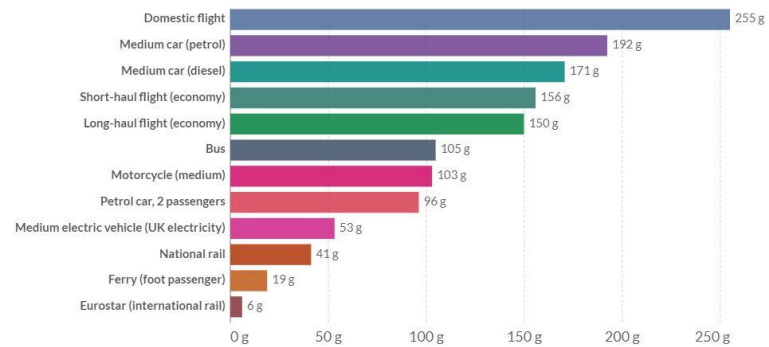
According to a UK government report on emissions, the UK emitted some 455 MtCO₂e of Greenhouse Gas emissions. Greenhouse Gases include Methane, Sulphur Dioxide, Carbon Dioxide and Carbon Monoxide etc. They trap the sun's heat in the atmosphere, which is called the "Greenhouse Effect", leading to global warming which then leads to climate change.

Carbon footprint of travel per kilometer, 2018

The carbon footprint of travel is measured in grams of carbon dioxide equivalents per passenger kilometer. This includes carbon dioxide, but also other greenhouse gases, and increased warming from aviation emissions at altitude.

Our World in Data

[Add travel mode](#)



Source: UK Department for Business, Energy & Industrial Strategy. Greenhouse gas reporting: conversion factors 2019. Note: Data is based on official conversion factors used in UK reporting. These factors may vary slightly depending on the country, and assumed occupancy of public transport such as buses and trains.

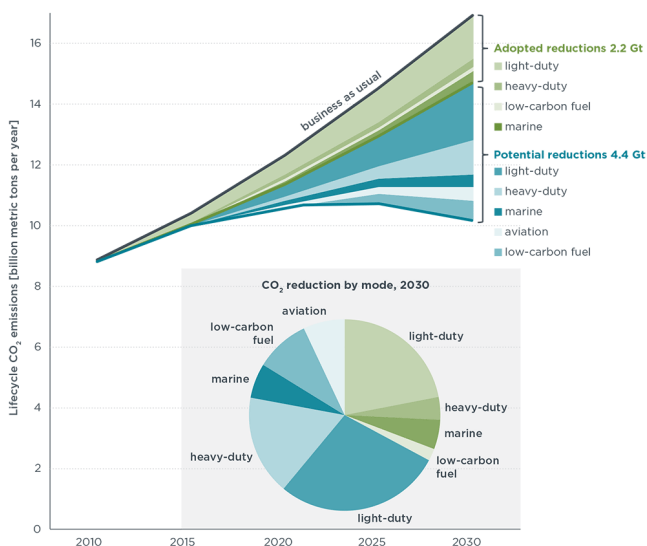
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[CHART](#) [TABLE](#) [SOURCES](#) [DOWNLOAD](#) [Related: Which form of transport has the smallest carbon footprint?](#)

Reducing Emissions in Developed Countries

Below is a selection of ways for preventing environmental issues:

- Walking for Short Journeys – As cars can emit between 96 to 192g/km, it is better to walk short journeys. Walking creates 0.058g of CO₂ and cycling creates around 0.025g CO₂ according to Globe Scientist Blogs.
- Driving Safely and Sensibly – Driving incorrectly uses more fuel, leading to more emissions and pollution.
- Public Transport – Try using National Rail and bus as (according to Our World In Data), buses release 105g of CO₂ per kilometre whilst National Rail only releases 41g per km. Did you also know that Eurostar only releases 6g of Carbon Dioxide per km and Ferries only 19kg per km (handy for travelling overseas).
- Avoid Planes – Perhaps the downside of using public transport for holidays is the emissions generated by planes: Domestic Flight generate 255kg of CO₂ per km (making them the highest emission-emitter of the referenced chart).



Green Travel

Reducing Emissions in Developed Countries (Continued)

- Greener Cars – In a world of hanging technology, electric cars are becoming more commonplace very gradually. In 2017 for instance, the world had 1.9 million electric cars and as of 2020, there are now over 6.9 electric cars worldwide. Electric Cars also produce some 53g of CO₂ per km whilst petrol cars for two passengers produce 96kg per km, diesel cars reaching 171g CO₂ p/km and larger petrol cars releasing 192g/km.
- Hybrids – Another alternative to electric is Hybrid vehicles: Camaloo claims “Hybrid car owners can drive their vehicle using electricity alone, especially at short distances and slower speeds... These cars are ideal for city driving and since they don’t produce as much exhaust emissions as diesel or petrol cars, hybrids reduce the overall pollution significantly.” Similarly at the Great British Motor Show, I learnt that the Honda Jazz uses its braking to recharge its Hybrid battery and has a mile range of 536 miles.

36%*



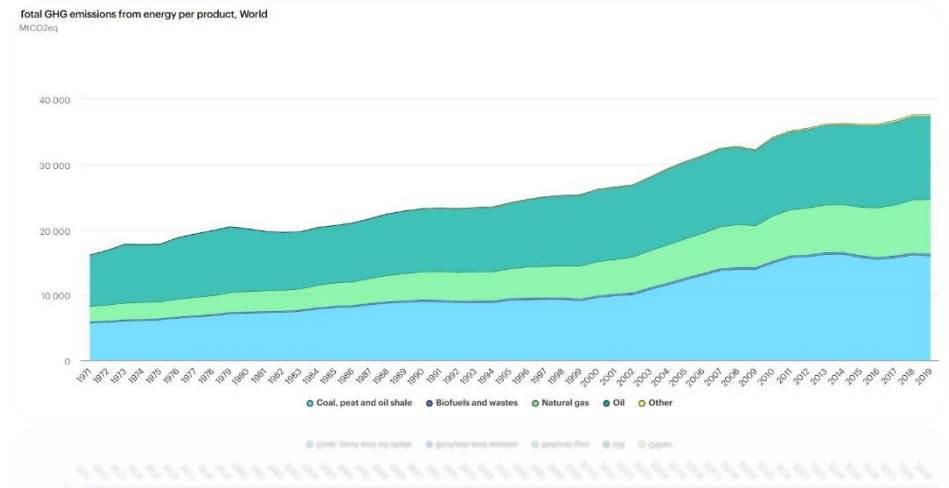
Of surveyed millennials find hybrid or electric vehicles are most appealing.

4.7%

Current global market share of hybrid or electric vehicles.

* millennial set (n) - 2,150

Energy Sources



Fossil Fuels

According to Offshore Technology, some 84% of energy consumption necessities worldwide are met through Fossil Fuels – a group of energy sources including Coal, Oil and Gas. A site called Client Earth also proves that Fossil Fuels and the industry are responsible for 89% of CO₂ emissions, which causes Global Warming, leading to Climate Change Coal (the worst offender) is responsible for raising the earth's temperature by 0.3 Celsius which has caused more severe weather and other phenomena.

Renewable Energy

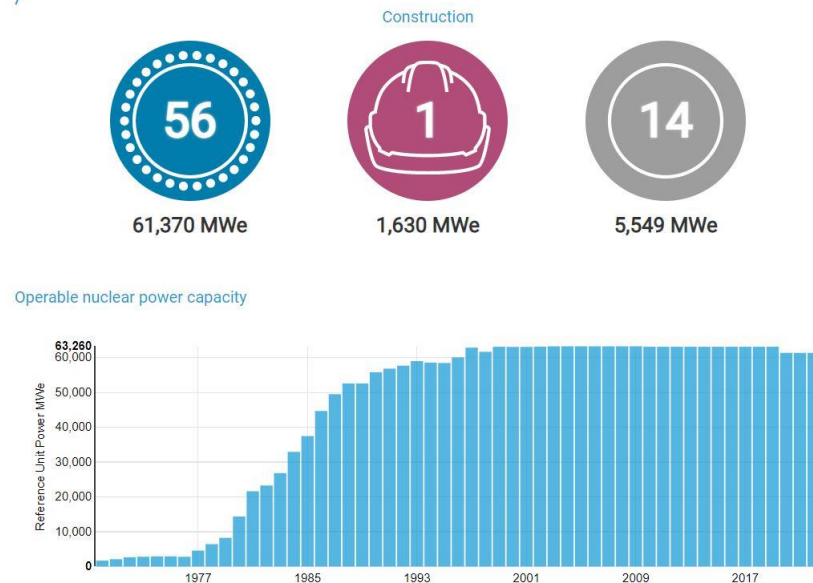
An article by "Climate Action" uses data to estimate that by 2050, Renewable Energy could be reduced by around 70%. This is a major benefit because Renewable Energy is much cleaner than Fossil Fuels in that refers to when energy is gathered from sustainable energy sources. Because of this, prices for Renewable Energy are falling between -7% and -16%. Statistics from the International Renewable Energy Agency also demonstrate that 62% of the Renewable Energy were cheaper than the newest Fossil Fuel.

Energy Sources

WORLD NUCLEAR
ASSOCIATION

Nuclear Energy and Biodiesel

Aside from Renewables, a popular form of energy is Nuclear Energy which makes up 70% of France's main energy sources. The cheap costs of nuclear energy mean that France successfully achieves a profit of \$3 billion per year on this electricity source and 17% of the country's electricity is recycled from nuclear fuel. Nuclear fuel only emits a few grams of CO₂ – which is like emissions from wind and is lower than Solar energy sources.



However, Nuclear Energy creates a strong radiation called Gamma Ray, and Radiation can take millions of years to go away and can cause Radiation Poisoning in a severe meltdown – which can be life-threatening if over-exposed to immensely high levels of radiation. Furthermore, it creates Radioactive Waste, the US producing 160,000 cubic feet of Radioactive Waste annually and the said waste can take “hundreds of thousands of years” to break down.

Biodiesel is a diesel originating from plants and animals. Benefits of Biodiesel are that it helps to reduce wastewater by 70% And hazardous waste by 96%. This could make it suitable for cars and public transport as any compost rubbish (such as peelings or mouldy foods) can be turned into fuel globally which could be used for powering safer vehicles. This is reinforced by the expectation for biodiesel to rise by 40% by IEA, with biodiesel vehicle testing “already underway”.

The biodiesel mandate is expected to rise to 40% during the forecast period, with vehicle testing already under way.

During 2023-25, average yearly output of 10.5 billion L is therefore expected, with higher biodiesel consumption from the transport mandate spurred by 10% diesel demand growth over 2021-25. Increased production is delivered by new plants coming online and underutilised capacity ramping up output.

Over-Fishing

What is Over-Fishing?

Over-Fishing is when you catch too many fish, leading to a lack of biodiversity in the world's bodies of water: according to Sustainable Fishing, some 34.2% of fisheries have been overfished, 22.7% of which comprise of seafood (according to the United Nations Food and Agriculture Organization, also known as "FAO". Popular fish in the UK now endangered by overfishing included the Atlantic Halibut (whose numbers are expected "not to recover in the future"), Southern Blue Tuna and many more.

6 out of 10 fish-stocks in the UK are overfished – many of which can end up in UK supermarkets.

Preventing Over-Fishing

- Choose seafood/fish that is certified and sustainable. To learn more about this, please look at the logos on the left photo, which show whether a seafood is certified and sustainable.
- Reduce waste and learn better ways to cook and store seafood. The FOA estimates that some 27% of all the fish on earth is either lost or wasted after landing.
- Share real news from trusted sites by asking whether there are statistics and whether they are credible.
- Encourage the next generation to consider and act towards over-fishing.
- Donate to fund companies trying to stop over-fishing.
- Use existing research to improve our understanding of the oceans.

What should I look for on seafood labels?

The easiest things to look for are credible eco-labels such as the Marine Stewardship Council (MSC) for wild caught seafood, or Aquaculture Stewardship Council (ASC), Soil Association or Organic for farmed seafood.

Some examples of the labels to look out for are below.



Factory Farming

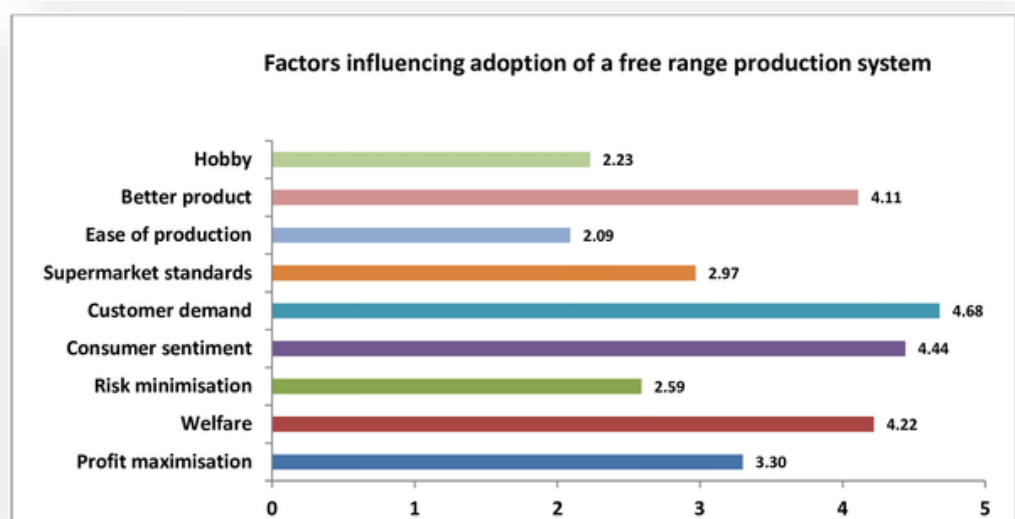
What is Factory Farming

In Factory Farming, cattle spend their lives indoors to be bred and eventually slaughtered at a slaughterhouse. Impacts of Factory Farming include a lack of biodiversity due to its being based on mass-production of raw meat, climate change, disease, poor hygiene and food insecurity. Even worse, it often ends up being sold in UK retail: For instance, 73% of high-street supermarkets in the UK sold Factory Farmed pork when surveyed by the group “Farms No Factory”.



How to Stop Factory Farming

- Shop Smart – Purchasing from farms and not factories is better because farms are more likely to have had produce made from free-range livestock.
- Purchase Local Meat and Dairy – Factory Farming is used for convenience by Supermarkets as it can mass-produce 70% of the world's meat. Local suppliers are nearer and will create much less of a Carbon Footprint. Alternatively, average supermarket-produce in the USA have a footprint of 48 tons of Greenhouse Gases attached to them which is much worse for the environment.
- Use your leftovers – Using your leftovers is cost-effective and it reduces waste.
- Don't overeat -This is cost effective and makes you less desperate to purchase unnecessary products.



Deforestation / Loss of Habitat

What is Loss of Habitat?

This refers to when certain environments are destroyed by factors such as deforestation, drought, pollution, global warming and so on.

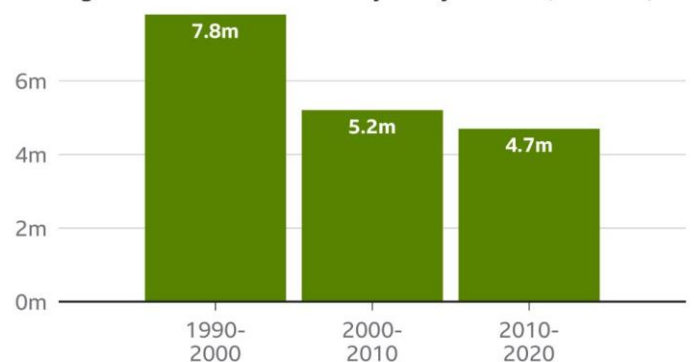
What is Deforestation?

Deforestation refers to the cutting down of trees which results in the destruction of woodland and forests. Loss of Habitat refers to the destruction of natural habitats.

How can we stop deforestation and loss of habitats?

- **Planting Trees** – 5 billion trees are planted per year whilst 15 million trees are cut down per year. This makes planting trees vital so that they can store CO₂ and so that our atmosphere has enough Oxygen and is less polluted.
- **Getting Rid of Paper / Moving Online** – Paper is what many trees are cut down resulting in a loss of 10 billion trees per year. However, moving everything online would help to prevent the need for paper. For instance, the Office for National Statistics says that advertisements for online jobs rose to three times above their February 2020 average in May 2021. Also, using online apps such as Microsoft Word allows you to do spelling checks or undo any errors. Could you ever do this on a piece of paper?
- **Recycling** – Paper can be recycled up to 10 times and one group that has been recycling is called Dalton: a site called Dalton claims that “Decreasing paper decreases the need for logging. If the entire amount recycled last month [August 2019] was paper, that would mean Dalton recycled enough paper to conserve 2122 trees. That is 53 acres of forest! This number of trees can absorb 101,856 pounds of Carbon per year.
- **Reducing Emissions** – The UN Environment Programme committed to a report whose results said the following: “Cut global emissions by 7.6 percent every year for the next decade to meet 1.5 C Paris target”. This could be done through using cleaner cars such as Hybrids (which – according to – have 15%-25% less tailpipe CO₂ emissions than conventional cars. Reducing emissions would prevent warming which would otherwise cause a drastic change in the environment and a loss of habitat.

The world's forests are still decreasing in size
Average area of forest lost each year by decade (hectares)



Figures are for net change in area

Source: UN Food and Agriculture Organisation, 2020

BBC

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