



CLIMATE CHANGE – SOME FACTS!

The impacts of climate change will affect everyone

The UN developed a scenario for **2080** that predicts the following types of impacts, if no action is taken on Climate Change

- Sea levels could increase by 50cm – Almost twice as many people as now would be exposed to severe flooding from storms- 18 million people.
- Water shortages – Over 3 billion people in the Middle East and the Indian sub-continent could be facing severe shortages of water
- Drought and floods could increase, but the most damaging change would likely be caused by the quite small changes in rainfall which, collectively, could dramatically decrease global capabilities to produce crops; areas such as sub-Saharan Africa, South East Asia could face extreme food shortages
- The frequency and intensity of extreme weather events (such as hurricanes) could increase – Leading to loss of life, injury, large amounts of people being made homeless, and economic devastation of poor countries
- Human health could suffer from a combination of effects – People's resistance to disease could be weakened by heat stress, water shortages, and malnutrition.

CO2 emissions and the link to Climate Change

The Earth's climate is heating up and the reason is down to us. Almost all modern day machines use [oil, gas or coal](#) which produces pollution.

Much of this is a gas you can't see called carbon dioxide (CO₂). It's this gas which is the main cause of the trouble.

What happens when you go into a greenhouse on a sunny day? It's hot, isn't it? That's because the glass in the greenhouse traps the heat from the sun. This [carbon dioxide](#) does the same in the earth's atmosphere. It acts like glass in a greenhouse, the glass in the greenhouse keeps the plants inside warm, and the carbon dioxide keeps the planet warm. Without it, we'd freeze.

Too much of it means that we boil! Because people are burning fuels with carbon in like oil, gas and coal which is used in cars, aeroplanes, power stations (which generate electricity) and so on, all this carbon gets dumped into the air, mixed with the oxygen we all breathe, and so adds to our greenhouse gas problem and the planet warms up even more.

"God placed the human in the Garden of Eden, l'ovdah (to serve/till) u'l'shomrah (and to guard/tend it)." (Gen. 2:15)

Diesel cars use around one third less fuel to travel the same distance as a car which uses gasoline. Less fuel means less carbon dioxide.

A carbon footprint is a measure of how much CO₂ we emit into the atmosphere – the smaller the footprint, the better it is for the planet.

10 Simple Steps to reduce our CO₂ emissions

1) Change a Light

By buying an energy efficient light bulb rather than the other alternatives, you can cut energy wastage by over three quarters.

2) Drive Less

Walk, bike, or take public transport more often. You'll save one pound of CO₂ for every mile you don't drive! Why not share car journey's with friends.

3) Have a shower not a bath!

A shower uses around two-fifths of the water needed to run a bath – so that's less water to be heated up!

4) Avoid products with a lot of packaging

You can save 1,200 pounds of CO₂ if you cut down your rubbish consumption by 10%

5) Plant a tree

A single tree will absorb one ton (2,000 pounds) of CO₂ over its lifetime

6) Switch Off!

Simply turning off your television, DVD player, CD player and computer when you're not using them will save thousands of pounds of CO₂ from being emitted each year.

7) Fly Less

Aircraft emissions are the fastest growing source of CO₂. Holidaying in Britain, or taking the train not the plane to Europe, are greener holiday options.

8) Make your own climate!

Turn the heating down in winter. If you're cold, wear more clothes! Turn the air conditioning down in summer or use a fan.

9) Reduce, reuse, recycle: Remember your three Rs!

Reduce: the most important. If you don't buy so much stuff in the first place, then you don't need to reuse or recycle it.

Reuse whatever you can (like plastic supermarket bags). If you can't reuse something, **Recycle** it!

10) Shop locally

Ask your family to buy food from local farm shops and try to avoid imported goods. Trucks and planes bringing in food and stuff from other countries, or from distant parts of your own country, use huge amounts of fuel.

Bal Tashchit: "When you besiege a city... do not destroy any of its trees..." (Deuteronomy 20:19)

Many charities recycle mobile phones, printer cartridges and computers to raise money. Why not start up a collection in your school?

Turning the heating down by just one degree saves 240kg of CO₂ a year. It would take eight trees to soak up this amount of CO₂!

