

# Climate Change

## - A brief introduction

Climate Change is something which effects all of us, in small ways every day, and in big ways which change our future. Many predictions talk of an increase in global temperatures of at least 2 degrees Celsius this century (Intergovernmental Panel on Climate Change (IPCC) 2007). It could even rise by up to 4°C. The threshold for irreversible and potentially catastrophic changes is thought to be 2°C. The likely effects of an increase in global temperature include:

- Changes in weather patterns
- Melting of snow and ice, including the polar ice caps
- Rising sea levels—threatening low lying countries such as the Maldives, and coasts around the world
- An increase in the occurrences of extreme weather events—such as storms, flash floods and droughts

The causes of climate change are widely linked to 'greenhouse gases' produced by humans. Greenhouse gases include carbon dioxide, produced by burning fossil fuels and made worse by de-forestation (as trees absorb carbon dioxide), and they contribute to climate change by remaining in the atmosphere and trapping heat from the sun.



If we all begin to make significant changes this can be avoided.

The European Union (EU) has recognized the need for action on the issue of climate change, and have been working to reduce the impact we all have on the environment. They signed up to the Kyoto Protocol (1997) as an organization, as well as seeing most of the then members sign up individually. The Kyoto Protocol was introduced by the

### Did you know:

- 15 of the hottest years on record have been within the last 20 years
- Increases in the global temperature have already led to many ski resorts having to buy snow
- Many plants and animals will be extinct within years if climate change is not slowed
- Water resources will become more pressured as rainfall patterns change, affecting drinking water supplies
- Sea levels could rise between 88cm and 6 metres by 2100

United Nations and saw 175 Parties sign up. It introduced legally binding targets to reduce greenhouse gas emissions to at least 5% below 1990 levels by 2008-2012. The EU committed to an 8% overall reduction from its member countries by this time. At the present time it is on target to achieve this.

Kyoto is a big step forward in global climate change limitation, but further steps are needed to ensure the effects don't continue to worsen, and the threshold for catastrophic change is not passed. To this end the EU proposes to voluntarily reduce its emissions by 20% by 2020, and has produced a proposal for a follow up to Kyoto. The proposal suggests that developed countries should aim for a 30% reduction in emissions from 1990 levels by 2020. To keep the global temperature rise within 2°C it would be necessary for developing countries to begin to slow their emissions of greenhouse gases, and eventually begin to reduce them.

There are many things going on to support this target. Increased investment and research into renewable sources of power have been supported by the EU. An emissions trading scheme has been introduced, which allows companies who are exceeding their targets of emissions to 'sell' the remainder of their target to other companies who aren't meeting theirs.

The Stern Review (2006) outlined the costs of action to combat climate change now as being just 1% of GDP. If we do nothing, the changes in the climate will result in a reduction in global GDP of between 5% and 20% a year.



Europe Direct-Coventry and Warwickshire offer access to information on Europe. From information on the workings of the EU, to advise on working and studying in European countries, we have the answer. Europe Direct-Coventry and Warwickshire are based at Coventry TechnoCentre on Coventry University Technology Park. The walk-in centre has flyers and booklets to take away as well as the chance to find the information you need on the internet, or via a connection to experts in European matters over the phone.

We are also very interested in your thoughts on Europe. All feedback is taken on board and, where appropriate, it will be passed on to the European Commission.

Europe Direct-Coventry and Warwickshire run events on a variety of subjects every year, so watch out for a subject which interests you. Though if you want to see something specific why not come along and tell us about it.

### How we can all help

We can each do a little bit each day to help combat climate change. Below are just some of the changes we can make, which may also save us money in the process!

- Turn your electrical items off, rather than leaving them on standby (make sure the red light is off)
- Recycle your glass, paper, cans, plastic, clothes etc... Even if your council doesn't collect these there are collection points around the country where you can take them
- Buy energy saving light bulbs. They use 5 times less electricity and last a lot longer than conventional bulbs
- Check the insulation in your house. Energy could be escaping from your house where it is not properly insulated and costing you and the environment
- Taking a shower rather than having a bath uses four times less energy
- Walk to the shops rather than drive. Cars are one of the biggest polluters and you can get healthy too
- When making a hot drink, only boil the water you require
- The charger for your mobile phone uses 95% of the electricity required to charge your phone. When you are not doing so make sure you unplug it to stop this waste
- Turning the heat down by 1°C in your home can save you 7% off your energy bill
- Flying is one of the fastest growing methods of emissions, can you catch the train or bus for the shorter distances?
- Planting a tree can soak up 1 tonne of carbon dioxide in the lifetime of the tree
- So we can all do our part to save our planet, why not make that small change today?



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Individuals are advised to carry out their own research, and seek legal advice where appropriate.

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