

# Sustainability Week at Walsall College

Climate Change



**Sustainability  
Week**

 **Walsall College**

Climate change is one of the most important issues facing the world today. The worldwide use of fossil fuels (like oil and coal) today is higher than ever before. Industry, business, transport, and households all rely on energy from gas, oil and coal. When fossil fuels are used, greenhouse gases are emitted. Greenhouse gases trap heat that would otherwise be lost to space, so more greenhouse gases in the atmosphere mean that the global climate gets warmer. Carbon dioxide is one of the main greenhouse gases and is at the highest concentration in the atmosphere for 650,000 years.

If we can't or won't change the way we live, work and travel then we will not be able to avoid the worst effects of climate change and life in the future will be miserable, with poverty, disease, conflict, famine, storms and flooding becoming commonplace.

If we can make the changes that are urgently needed then the future will still be different, but not necessarily worse than it is today, and perhaps even better. Energy would be produced from renewable technologies and used more efficiently than it is today. Much of the food available would be local and seasonal because shipping food from the other side of the world would no longer be economic or even possible. Cars would be electric or run on hydrogen fuel cells, but walking, cycling and public transport would be used more widely than cars.

## Did you know?

The Earth is warming faster than it has for thousands of years.

The 10 hottest years on record have happened since 1998.

As well as hosting the 2022 World Cup Qatar has another claim to fame – the world's largest carbon footprint per person – 55.4 tonnes per person or more than 5 times higher than a person in the UK.

The UK government have committed to reducing UK carbon emissions by 80% by 2050 – which would bring the national emissions down to same level they were in 1850.

Sea levels around the UK have risen 10 cm since 1900.

If the Greenland ice cap melted altogether the sea level would rise by six metres, enough to flood most of the world's major cities, (but not Birmingham!)

If emissions continue to grow at present rates global temperature could rise as much as 7 °C above pre-industrial temperature by 2100.

Even if global temperatures rise by only 1.5 to 2.5 °C it could mean that a quarter of plant and animal species could become extinct.

# What can you do?

- Find out what your carbon footprint is and work out how it could be reduced
- Avoid unnecessary car journeys and walk, cycle or take the bus instead
- When shopping for food check where it has come from, and try to choose items that are produced as locally as possible
- Make sure your home has low energy lightbulbs and learn how to use energy at home in a more efficient way – see the 'My Energy Learner Pack' for some ideas on how to do this
- Reduce, Reuse, Recycle, and cut down your own contribution to the waste problem and the emissions it causes.
- Avoid flying as much as possible; take a holiday in the UK or go to Europe by ferry or the Channel Tunnel.

# Climate Quiz

**1) Greenhouse gases got their name because:**

- a) they make plants grow faster
- b) they trap heat in the atmosphere like the glass in a greenhouse
- c) they were first recognised inside commercial greenhouses

**2) The ten hottest years on record have all occurred since when?**

- a) 1904
- b) 2001
- c) 1998

**3) What is the carbon footprint for an average person in the UK?**

- a) 14.6 tons of carbon dioxide
- b) 1.4 tons of carbon dioxide
- c) 9.7 tons of carbon dioxide

**4) Which country has the biggest carbon footprint per person?**

- a) The United States
- b) Qatar (55.4 tons per person!)
- c) China

**5) Carbon dioxide concentrations in the atmosphere are at the highest level since when?**

- a) 650,000 years ago
- b) 230 years ago
- c) 120,000 years ago

**6) If the Greenland ice cap completely melted how much would the sea level rise by?**

- a) 3 metres
- b) 4 centimetres
- c) 6 metres

## Competition

Join in our competition to win £40 worth of vouchers. All you have to do is e-mail the four sustainability resource packs available on GOAL and like the Walsall College Sustainability Week Facebook Page to a minimum of three people and cc sustainabilityweek@walsallcollege.ac.uk that you know that are not studying at Walsall College and you will automatically be entered.