

# What is climate change?

Climate change is a change in temperature and weather across Earth that can be natural or caused by human activity. Research has shown that the current climate change is largely a result of human activities.

**Join us for a journey around the museum  
as we explore what our history can tell us  
about climate change...**



**What sort of world do you want to live in?**

**You can make a difference.**

# Newcastle Story

As you move through Newcastle Story look in the cases to see what objects people owned. What types of material were they made of?

## Plastic fantastic? 1960s

In the 1930s Bakelite, the first fully synthetic man-made plastic, was invented. It was light, strong, heat resistant and could be moulded into almost anything. Most early radios, telephones, household gadgets and even textiles all contain Bakelite. Take a look at what you can see in the 1960s case. How much of it is made of plastic?

**'Almost every piece of plastic ever made still exists today'.**

Can you see the red typewriter? It has been on the planet for over 50 years. How much longer do you think it will exist?

Scientists estimate it takes 450 years for one plastic bottle to break down. But no one really knows. Plastic doesn't degrade like other material because it's man-made.

By the 1980s the world wakes up to the problem with plastics.

There are five massive areas in the oceans of floating rubbish dumps. The largest is called the Great Pacific Garbage Patch, it is three times the size of France! It kills 100,000 sea animals and one million seabirds every year.



## How can you make a difference?

- **Reduce the amount of plastic you use by finding alternatives.**
- **Recycle plastic that is recyclable.**
- **Write to companies that you think use too much plastic in their packaging.**



# Science Maze

E-waste is everything from watches and phones to big household appliances like fridges and freezers. They can't be thrown in the normal recycling bin, they usually have to go to a specialist centre.

**Take a look around the gallery** - How many different telephones will you have in your lifetime?

It takes lots of energy to make electronics. If you throw them away when you are finished with them then that energy is wasted.



## How can you make a difference? You could...

- **Pass your old devices on to someone else.**
- **Fix it and keep as long as it works rather than getting the latest model.**
- **Take them to specialist recycling centres that will use the parts to make new electronics.**

# Destination Tyneside

## Climate change and migration

This gallery tells the story of people who have migrated to and from Tyneside.

None of the people in the gallery migrated because of climate change but did you know that an estimated 21.5 million people each year between 2008 and 2016 had to leave their homes due to extreme weather events, from floods and storms to heatwaves and drought.

# Story of the Tyne

## Water waste

Water is one of our most precious resources. The amount of water on Earth does not change. In many parts of the world people do not have enough water to drink. Can you find a case filled with objects that show how people on Tyneside have made safe drinking water through the ages?

**Clue:** you might notice this in it...



**Water is not just used for drinking.  
Did you know that...**

- **A cow raised for meat drinks 15 times the amount that humans do in a day?**
- **We use 80% of our water to grow crops?**
- **It takes the equivalent of 30 bath tubs of water to make a white shirt?**

**How can you make a difference?  
Save water by...**

- **Taking showers instead of baths.**
- **Using the small flush button on the toilet where there is one.**
- **Using rain water instead of tap water to water your plants.**

# Tyneside Challenge

## Energy consumption and production

Look for the panels that will tell you more about five of the museum's most significant objects through the climate change lens.

- Lightbulb**  **Armstrong car**  **Stephenson lamp**
- Mauretania model**  **Puffing Billy**

# Working Lives

## Fossil fuels and renewable energy

Can you find any objects in the gallery that tell you about what mining coal was like?

Coal is a fossil fuel. It takes 300 million years for coal to form. Fossil fuels are used to power vehicles, heat homes and make electricity. Once fossil fuels are gone we can't make more.

Burning fossil fuels release large amounts of carbon dioxide into the atmosphere. This causes a rise in temperature all over the world. The rising temperatures cause large areas of ice to melt causing rising sea levels. This has an impact on humans and animals.

We can use energy from sources that never run out (renewables) such as hydro-electricity (the power of moving water) and wind power.



## How can you make a difference?

- **You can find an energy supplier for your home that uses green energy.**
- **Turn off appliances, like lights and televisions, when you aren't using them.**



# You have the power to make a difference.

As well as following the tips throughout this leaflet you could email your local MP. Find their contact details online by using the search term 'Find my MP', then email them and ask them to take action on climate change.

**Get your friends to do it too!**

