Climate Change 101

An introduction to climate change and the ACE Award









What is climate change?

Climate change refers to a large-scale, long-term shift in the planet's weather patterns and average temperatures.

-Met office

Its caused by an increase in greenhouse gases (Carbon Dioxide, Methane...) in the atmosphere creating the 'greenhouse effect'

Why is it a problem?



Flooding
Land loss for
farming & housing



Economic damage
Jobs loss



Water & air pollution

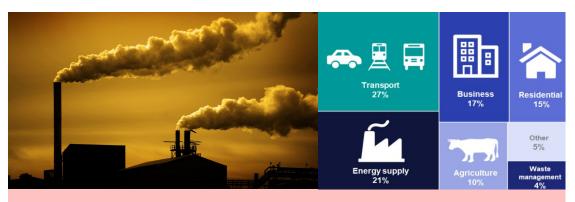


Food shortages



Extreme weather events
Hurricanes, heat waves,
droughts...

What causes it?



Emissions of greenhouse gases (human activity)

- From burning of fossil fuels and hydrocarbons (e.g. petrol & coal)
 - Farming (methane)
 - Deforestation



Natural factors

- Volcanoes erupting
- Solar flares

Overwhelmingly human activity

Climate terminology

Net Zero

Emission are reduced to such a low amount that they can be fully absorbed so they can't add to the greenhouse effect

Paris Agreement

This was a landmark agreement signed in Paris, 2015, where countries set out their goals to combat climate change

Greenhouse Gases (GHG)

Toxic gases that add to the greenhouse effect that traps infrared waves from escaping into space causing the Earth to heat up and climate change. The biggest is carbon dioxide (CO₂) so many climate actions are based around CO₂

Carbon Footprint

The amount of carbon dioxide a person, place, company or organisation emits

Solutions Think personally, locally, nationally & internationally



Solutions Some of the things we've come up with



Electric Vehicles
Introducing EVs and
the right infrastructure
(charging points)



Insulation
Buildings need to be able to keep as much heat in as possible so they don't waste energy



Clean Energy
Making sure that all energy
is from clean sources like
renewables



Increasing & improving public/active transport



Introduce more sustainable crops and increase farming efficiency



Building Flood Defences

These are only a few examples. Climate action often differs from place to place

What is ACE and what can we expect from these lessons?

ACE stands for the 'Advocates for the Climate & Environment'

Calderdale Youth
Council has
partnered with
Calderdale Council,
Solar 4 Schools and
the Regional Youth
Climate Assembly
(RYCA)



ACE promotes climate education, green jobs and schools being as eco friendly as possible

Later lessons go into more detail about certain areas of climate change. This was a brief introduction to it.

RYCA

ryca.official@gmail.com official_ryca

Calderdale Youth Council

youthvoice@calderdale.gov.uk

Or speak to the teacher incharge of youth voice