

Climate Change Programme
Secondary Schools Engagement - Campaign One

Topic: Climate Change	Duration: 1 hour
Session Title: ENERGY	
<p>Aims of session: Understanding different energy sources, renewable vs non-renewable and the different impacts on the planet.</p> <p>While also understanding how to be energy efficient in school/home and how to take action.</p>	
Themes: Climate change; Energy; taking responsibility for the planet; taking action.	
Example Session Plan for KS3/4:	
<p>Introduction to session and play both videos, both videos have a set of questions for each. For KS4 share both sets of questions to challenge which questions are for each video.</p> <p>'An introduction to climate change' – Young People's Trust for the environment - http://ypte.org.uk/videos/climate-change (6.15min)</p> <p>Present these questions to the students, to answer while watching the first video.</p> <ul style="list-style-type: none"> - How is weather described in the video? Weather is what is happening daily outside your window. - How is climate described in the video? Climate is in a particular area over a long period of time. - What is one way climate is measured? A climate normal - Name the 3 fossil fuels Coal, Oil & Gas - How can we combat climate change? <ul style="list-style-type: none"> - Switch lights off - Switch appliances of at the wall, - Put an extra layer on instead of turning up the heat, - Shut doors & windows to keep heat in & cold out. - Reduce food waste. - Travel more using public transport. <p>'Causes and Effects of Climate Change' - National Geographic https://www.youtube.com/watch?v=G4H1N_yXBIA (3.04min)</p> <p>Present these questions to the students, to answer while watching the second video.</p>	15min

<ul style="list-style-type: none"> - What greenhouse gases are there? Water Vapor, Carbon Dioxide, Nitrous Oxide, Methane, Chlorofluorocarbons. - What happens when there are too many of these greenhouse gases in the atmosphere? More heat gets trapped, which increases the earth's temperature. - Climate Change impacts what four things? Food, Oceans, weather, health. - What causes sea-levels to rise? Ice sheets melting. - How can we combat climate change? Stop burning fossil fuels. Switching from fossil fuels to renewable sources (Wind, solar, hydro, tidal, bioenergy, geothermal), reduce the amount of greenhouse gases we generate. <p>Provide and summarise the answers at the end of the video.</p> <p>Brief introduction to Non-Renewable & Renewable Energy: https://www.bbc.co.uk/bitesize/topics/z6wwxnb/articles/ztxwqty (1:01)</p>	
<p>The PowerPoint provides information on renewable and non-renewable energy, energy efficiency and looking at creating actions you can take as a class.</p> <p>The PowerPoint can be found on the FCC website, along with additional documents for the lesson.</p> <p>The tasks below are embedded within the PowerPoint:</p>	40 mins
<p>TASK 1- Learners to fill out the worksheet on the advantages and disadvantages of renewable energy – additional document with the answers.</p> <p>TASK 2 – Complete Environmental Assessment, instructions in document.</p> <p>All documents can be found on the FCC website.</p>	10 min 30min

Supplementary Resources:

1. **A guide to Climate Change for Kids** – <https://climatekids.nasa.gov/kids-guide-to-climate-change/>
2. **How we can adapt to climate change – All over the world? KS4 (5.15mins)** [How we can adapt to climate change - all over the world? | Start here with Climate Adaptation \(youtube.com\)](#)
3. **Environment (Wales) Act 2016 (2.40 minutes)** [Environment \(Wales\) Act 2016 \(youtube.com\)](#)
4. **Greta Thunberg TedXStockhom (11.02min) November 2018**
https://www.ted.com/talks/greta_thunberg_the_disarming_case_to_act_right_now_on_climate_change
5. **Dear Tomorrow – people promising to take action on climate change**
<https://www.deartomorrow.org/type/letter/>