



# Carbon Literacy

FAITHS4CHANGE

Carbon literacy is...



...“an awareness of the carbon dioxide costs and impacts of everyday activities, and the ability and motivation to reduce carbon emissions, on an individual, community and organisational basis.”



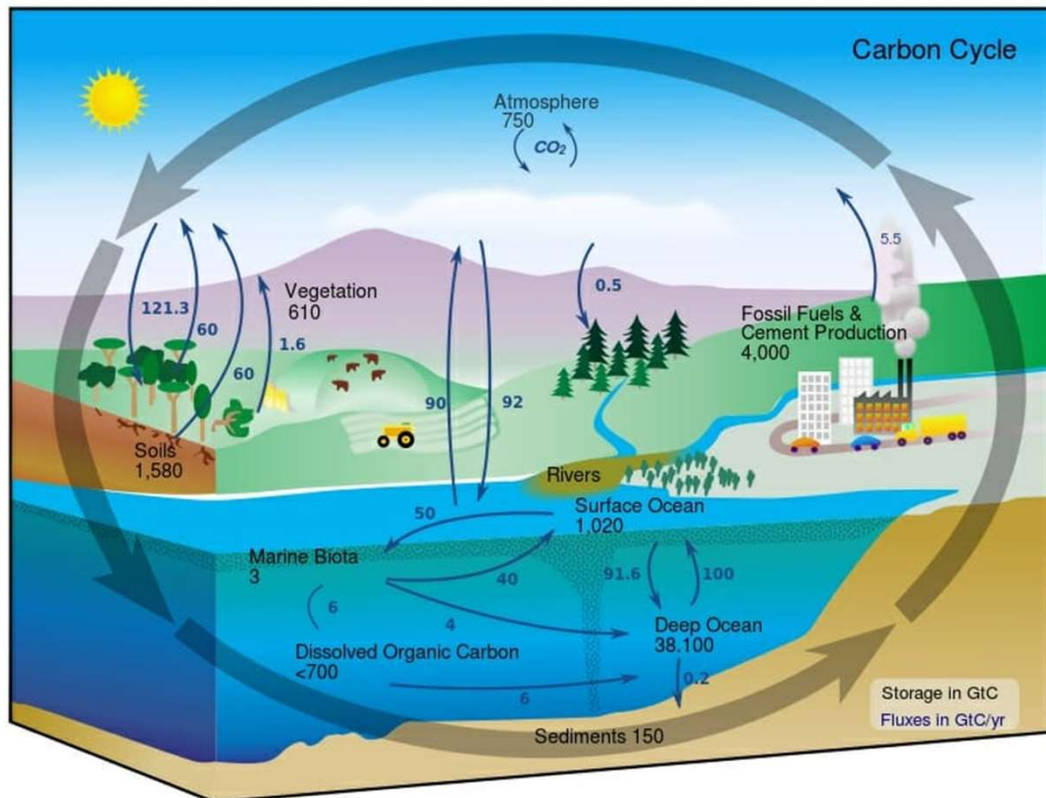
Carbon literacy enables us to:

To make change - by rapidly cutting emissions of greenhouse gases we can lessen the risks of dangerous climate change.

Knowing the consequences and the impact of our actions helps us direct effective action.

Within faiths there are strong motivations to care for Creation, those who don't have a faith maybe motivated by science, beliefs and values too.

It's an issue of social justice - across the world, we know there is disproportionate input to and impact of climate change.



This slide gives you a picture of the Carbon Cycle

Carbon is an essential element for all life forms on Earth. Whether these life forms take in carbon to help manufacture food or release carbon as part of respiration, the intake and output of carbon is a component of all plant and animal life.

Carbon is in a constant state of movement from place to place. It is stored in what are known as reservoirs,

and it moves between these reservoirs through a variety of processes, including photosynthesis, burning fossil fuels, and simply releasing breath from the lungs. The movement of carbon from reservoir to reservoir is known as the carbon cycle.

Carbon can be stored in a variety of reservoirs, including plants and animals, which is why they are considered carbon life forms. Carbon is used by plants to build leaves and stems, which are then digested by animals and used for cellular growth. In the atmosphere, carbon is stored in the form of gases, such as carbon dioxide. It is also stored in oceans, captured by many types of marine organisms. Some organisms, such as clams or coral, use the carbon to form shells and skeletons. Most of the carbon on the planet is contained within rocks, minerals, and other sediment buried beneath the surface of the planet.



## Everything has a carbon footprint

Slide 5: Everything has a carbon footprint. We need to understand the footprints of different activities to be able to take effective action to reduce carbon emissions – which is what needs to happen to tackle climate change. Mike Berners-Lee in *How Bad Are Bananas* explains that a Carbon Footprint measurement is a ‘carbon dioxide equivalent’ total that takes into account all greenhouse gas emissions and presents that as a more easily understandable and comparable total.



**HIGHER**



**LOWER**

Slide 9: Which has the higher carbon footprint – a veggie burger or a cheeseburger?







↓ LOWER

1 KG



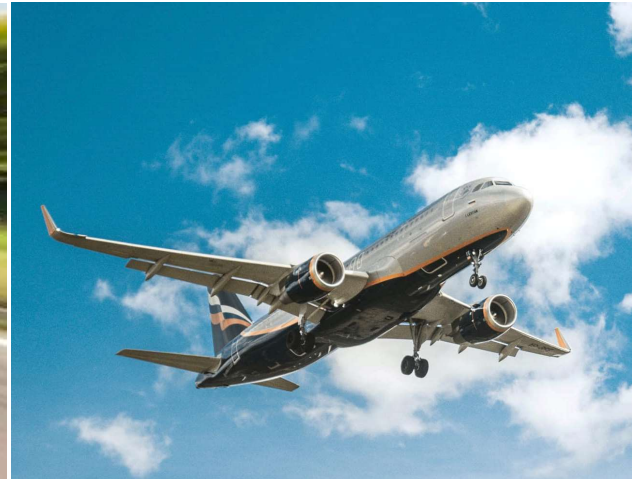
↑ HIGHER

2.5  
KG

Slide 10: Answer: a cheeseburger



Driving 10,000 miles - annual average for the UK

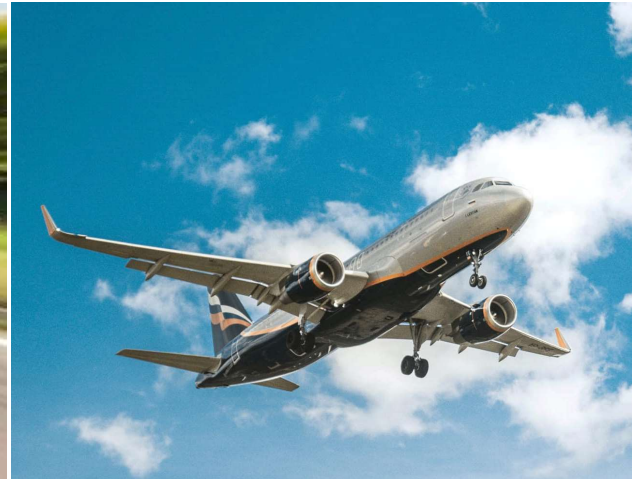


Return flight from London to Sydney

Slide 11: Which has the higher carbon footprint – driving 10,000 miles or a return flight from London to Sydney?



Driving 10,000 miles - annual average for the UK

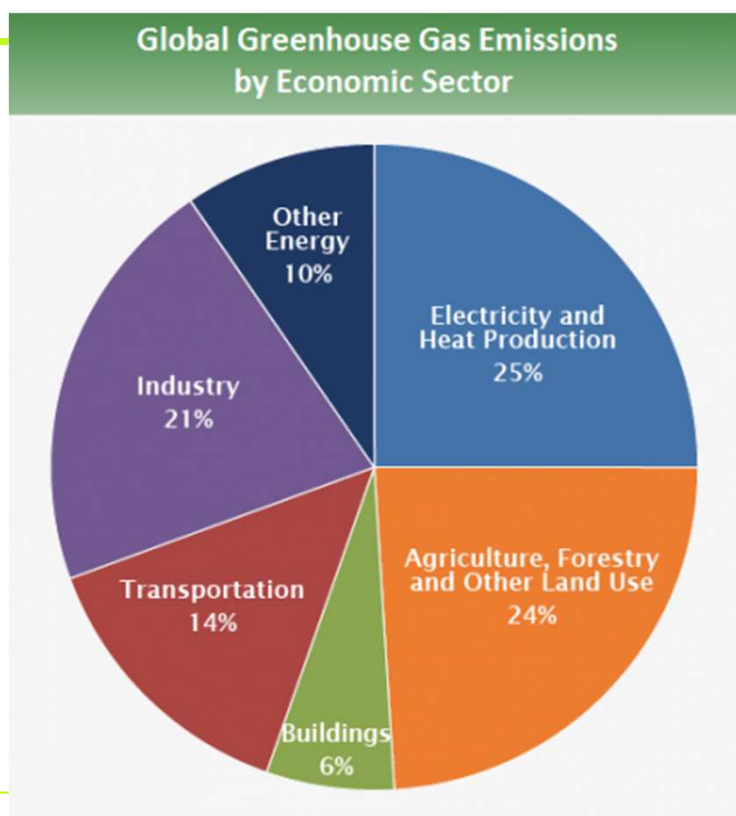


Return flight from London to Sydney

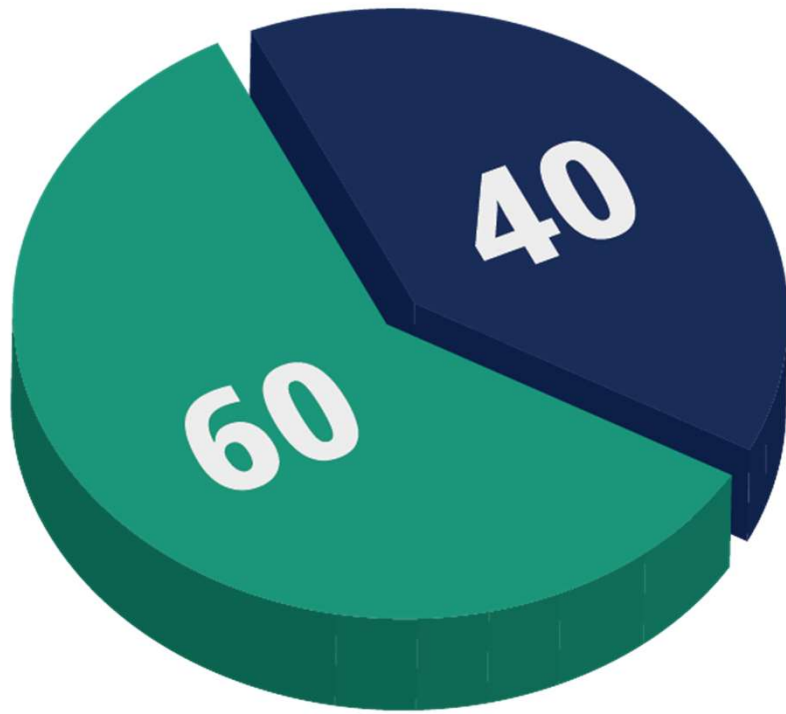
Equal - both 5 tonnes CO<sub>2</sub>e

Slide 12: Answer: equal.

## Key sectors for Greenhouse Gas emissions

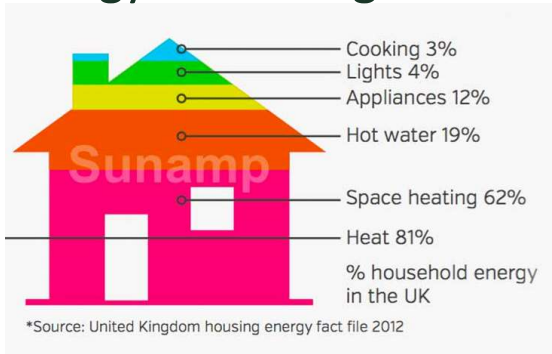


Slide 13: When thinking about reducing carbon emissions – we need to consider the key areas for action globally – the 2010 data shows that these are the highest carbon-emitting sectors.



Slide 14: You have a direct impact on 40% of your carbon footprint. Through the choices you make, the products you buy, how you travel, what you eat. The other 60% requires strategic and infrastructure action from the Government and from industry, you can influence the 60% of your footprint by lobbying, campaigning, holding government and local councils to account, organising as communities and being informed.

# Energy & Housing



# Transport



# Food



# Goods



Slide 15: Key areas for your 40% of carbon reduction actions are: Energy & Housing / Transport / Food / & Goods.



What significant actions can you & your faith community take to reduce your carbon footprint?

Could give examples: You might swap beef for chicken once a week or become a vegetarian for a month. Your faith community might commit to providing loaf meals / refreshments (local, organic, animal friendly, fair trade). You may decide to walk or cycle journeys under 1 mile; your faith community might introduce a lift share scheme and a walking bus for worship.... Challenge yourself to buy nothing new for a week (absolutely nothing new, except food), find out what your pension / money is



invested in...your church could do this too –  
check out

Module 1	Understanding Carbon	<ul style="list-style-type: none"> <li>• The Carbon Cycle - balanced and unbalanced</li> <li>• Greenhouse Gases</li> <li>• Carbon missions: by sector, by country, per head</li> <li>• The UK's carbon emissions</li> <li>• Climate Justice</li> </ul>
Module 2	Climate Change & Carbon Footprints	<ul style="list-style-type: none"> <li>• Weather vs Climate</li> <li>• Indicators of a Warming World</li> <li>• Climate Change effects in the UK &amp; across the world</li> <li>• What does a tonne of carbon look like?</li> <li>• What's the carbon footprint of different choices we make?</li> </ul>
Module 3	The World Taking Action, What Needs To Be Done	<ul style="list-style-type: none"> <li>• What if it's all a hoax?</li> <li>• Faith-led action</li> <li>• International, national and regional action</li> <li>• What would a 4 tonne lifestyle look like?</li> <li>• Q1: What does society need to do to become carbon neutral?</li> </ul>
Module 4	Ways to Reduce Carbon Emissions	<ul style="list-style-type: none"> <li>• Considerations when approaching Carbon Offsetting</li> <li>• Greenwashing</li> <li>• Imagining a low carbon world</li> <li>• What are high-impact carbon reduction actions?</li> <li>• How can you reduce your carbon footprint by 1 tonne?</li> </ul>
Module 5	Climate Change Commitment	<ul style="list-style-type: none"> <li>• Making a climate change commitment</li> <li>• Q2: What individual carbon reduction actions will you take?</li> <li>• Q3: What community carbon reduction actions will you take?</li> </ul>