Getting Started

Welcome to your Carbon Literacy Training Pack. This pack contains all the information you need for your training. Please read the attached documents to understand more about your training pack, how your learners gain certification and what steps to take to ensure your learners get the best Carbon Literacy experience.

Our documents change from time to time. To ensure you're always using the most up-to-date version, please follow the links provided in this document.

This "Getting Started" guide is presented in two parts.

Part A covers the **Carbon Literacy process**

Part B introduces the **Nottingham Trent Carbon Literacy for Universities training materials**.

The Carbon Literacy Project
education@carbonliteracy.com | carbonliteracy.com

Part A – The Carbon Literacy Process

A1. The Trainer Documents Folder

The 'Trainer Documents' folder contains the following documents:

- CLP1 The Carbon Literacy Trust Bank Details
- CLP2 Trainer Code of Conduct
- CLP3 Certification Marking Guide

You will need The Carbon Literacy Trust Bank Details to get set up for certification (see A2 below).

Please familiarise yourself with the Trainer Code of Conduct and the Certification Marking Guide before starting your training.

A2. Getting set up for certification

The Nottingham Trent Carbon Literacy for Universities training materials are free to use as part of certified Carbon Literacy training.

Before getting started on your training, you will need to set up The Carbon Literacy Trust on your accounting system. This will allow us to issue invoices to cover certification costs and prevent hold-ups in returning certificates to your learners.

Please see **The Carbon Literacy Trust Bank Details** document (within the **Trainer Documents** folder) for the information you will need to set up The Carbon Literacy Trust as a vendor.

Some organisations chose to bulk purchase certificates in advance, based on the total number of participants they plan to train in a given timeframe (e.g. a year). This allows straightforward tracking of learners and certification, and reduces the administration for both parties. Alternatively, if you would prefer to invoice for each batch of learners, we can accommodate this.

The cost per learner is £10 per certificate application, and further details can be found here.

A3. Collecting & submitting participant details & learner evidence

A3.1 Participant details & learner evidence – information required

In order for a learner to be certified as Carbon Literate, we require:

- Basic details from each of your learners - this helps us to collect information confidentially for possible future studies on the effectiveness of CL.
- Evidence that your learner has completed and understood their CL course, and created an individual action and a group action (requirements of the CL Standard).

We provide a standard **Participant Details and Evidence Form** that collects the *minimum* evidence the Project needs to receive (preferably electronically) per learner, to determine whether your learner has met the Carbon Literacy Standard, and so can be certified as Carbon Literate.

Download the most up-to-date versions of the Participant Details and Evidence Form here.

A3.2 Collecting your participant details & learner evidence

When delivering training remotely you may wish to move the information requested in our **Participant Details and Evidence Form** (this is the minimum amount of evidence needed for the certification of learners. See A3.1) onto an online form or survey platform. How you collect evidence from learners is your decision, but we recommend doing so within the training, usually at the end of the last session. This avoids having to chase learners for details and evidence after the session, potentially resulting in fewer learners being certified.

A3.3 Reviewing your learner evidence

Prior to submitting learner evidence for certification, we strongly recommend that trainers take the time to review evidence. You should check for mistakes (e.g. not completing a section) and potential areas of weakness that may prevent a certificate from being awarded (please review the **Certification Marking Guide** in the Trainer Documents folder).

A3.4 Submitting your participant details & learner evidence for certification

After you have collected and reviewed your learner evidence, you will need to submit it for certification.

The trainer (or training organisation) should complete the **Certificate Request Form** for each group for whom Carbon Literacy certification is being requested. This form must be submitted along with the batch of participant details & learner evidence and the relevant payment information. Submit the completed documents and the appropriate certification fees (if not already purchased) to evidence@carbonliteracy.com, and we'll do the rest.

Download the most up-to-date versions of the Certificate Request Form here.

Please note the following:

- What is on the Certificate Request Form is what will appear on the certificates – so please take care to ensure correct spellings of learner's names and that the correct organisation is identified.
- You also need to state the course ID number to demonstrate that you have used an accredited course to conduct your training. The ID number for the Nottingham Trent Carbon Literacy for Universities course is **CC000194**.
- Please ensure that everyone handling your learner data has undergone GDPR training and that you abide by all GDPR requirements. For example, sending information in password protected documents and sending passwords under separate copy. If in doubt, check with your in-house GDPR advisors.

A3.5 Receiving certificates & feedback

Assuming we have all the evidence and documentation needed, please allow two weeks for us to get back to you with:

- Certificates in PDF format for those who have met the CL Standard
- Feedback for any learners who've not yet passed

Certificates will always be issued to the trainer. The Carbon Literacy Project never distributes certificates to individual learners.

Any learners who do not gain certification on their first attempt have 28 days, from our response, in which they can reapply by addressing the feedback provided to the trainer. All resubmissions should come via the trainer, and we ask that these are submitted as a group alongside a new Certificate Request Form. Resubmissions are classed as new applications, and therefore the £10 certificate application will apply.

A3.6 Keep a record of your activities!

We recommend that you keep a record of what you have done in a Trainer Log, how many Carbon Literacy 'graduates' you have, and your learners' actions, as this will form the foundation of your application to become an accredited Carbon Literate Organisation, Carbon Literacy Facilitator/Trainer/Consultant, or Carbon Literacy Training Organisation, should you wish to apply.

Information on these supplementary accreditations, and documents to support you in keeping a record, or making an application, can be found here.

A4. Further information about Carbon Literacy

Education Sector
What On Earth Is Carbon Literacy?
Introduction to Carbon Literacy
Frequently Asked Questions

All online resources can be found at www.carbonliteracy.com.

If you have any questions about this pack, please contact us at education@carbonliteracy.com.

Part B – Nottingham Trent Carbon Literacy for Universities (NTU CLU)

B1. Authors

Molthan-Hill, P., Jackson, D., Mifsud, A. and Odell, Vanessa (2020), NTU Carbon Literacy Toolkit for all staff and students at universities. NTU Green Academy.

The 'NTU Carbon Literacy Training for all staff and students' was designed by NTU's Green Academy adapting the 'Carbon Literacy training for Business Schools' to a wider audience. The 'Carbon Literacy training for Business Schools' was developed by Nottingham Business School (Nottingham Trent University) in collaboration with the UN PRME Champions, Oikos International and The Carbon Literacy Project. It also includes an introduction to En-ROADS developed by Climate Interactive in collaboration with MIT Sloan and Ventana Systems.

B2. Audience

These training materials have been designed to be accessible and engaging for all university members, and are equally suitable for academic or professional services staff, and for undergraduate and postgraduate students from any discipline.

B3. Modular Structure

The training materials are structured in four Modules:

- **Session 1:** High Impact Climate Solutions
- **Session 2:** Climate Justice and Future Scenarios
- **Session 3:** Climate Science and Carbon Footprint Calculations
- **Session 4:** Climate Change Mitigation – A Systems Approach

B4. Delivery Options

Please follow the order of modules, and the order of activities within modules, as ideas and concepts are built up across the training programme.

B4.1 Online Training

The online version comprises four 2 hour webinars. We would not recommend delivering these back to back equating to a full day webinar as this is tiring for both trainers and participants.

B5. Navigating the Toolkit

B5.1 Modular folders

Within the main folder there are separate folders for each of the four Modules. Within each Module folder you will find the PowerPoint Presentation, Trainer Guide and any 'handouts' and additional resources to send to learners before and/or after the session as per the email template suggestions in each Trainer Guide.

B6. Creating your Slide Stack & Co-branding the Slides

We understand that you will want to add your logo to the slides for your training – and we've set up the slides to facilitate this – please follow the guidance below.

Step 1: Edit the Slide Masters

- On the 'View' tab, select the Slide Master view.
- In each of the Slide Masters (colour sets and layouts) in use in the slide stack, replace the space holder shape with your logo.
- Your logo should be of a similar size (occupy a similar area) to the Nottingham Trent logo.
- The Nottingham Trent logo on the content slide layouts should not be reduced.
- There must be space between your logo and the Nottingham Trent logo – and space between the Nottingham Trent logo and the edge of the slide.

B7. Licensing information

This ‘NTU Carbon Literacy Toolkit For All Staff and Students at Universities’ can be used and adapted under a **Creative Commons 4.0 Attribution-NonCommercial-NoDerivatives 4.0 International (CC BY-NC-ND 4.0) Licence** Please give credit to the authors of each session, which you can find on the last slide in the sets provided. Please do not remove the logos.

If you refer to the whole toolkit, please cite it as follows: **Molthan-Hill, P., Jackson, D., Mifsud, A. and Odell, V. (2020), *NTU Carbon Literacy Toolkit For All Staff and Students at Universities -A Systems Approach.* NTU Green Academy.**

Please mention at least once in your invitation to participate in training using this course the following: The ‘NTU Carbon Literacy Training For All Staff and Students’ was designed by NTU’s Green Academy adapting the ‘Carbon Literacy training for Business Schools’ to a wider audience. The ‘Carbon Literacy Training for Business Schools’ was developed by Nottingham Business School (Nottingham Trent University) in collaboration with the UN PRME Champions, Oikos International and The Carbon Literacy Project. It also includes an introduction to En-ROADS developed by Climate Interactive in collaboration with MIT Sloan and Ventana Systems.

This toolkit and materials are designed and curated **for the purpose of certified Carbon Literacy training within UK universities, further education colleges and approved partner organisations.** The contents are **distributed free of charge** and **licenced and in many cases sub-licenced by many contributing organisations for that purpose only.** The **rights and copyrights of contributing parties still apply.**

The decision as to what constitutes an approved university, further education college or partner organisation rests exclusively with The Carbon Literacy Trust and its delivery partner(s).

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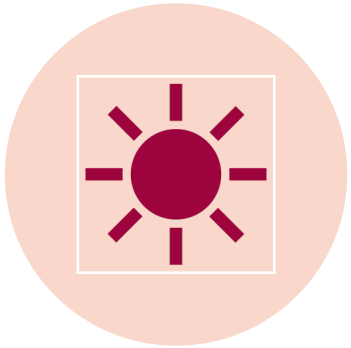
You can find the terms of the licence https://creativecommons.org/licenses/by-nc-nd/4.0/

Any questions or requests for adaptation please contact info@carbonliteracy.com

What is Carbon Literacy?

*"AN AWARENESS OF THE **CARBON DIOXIDE COSTS** AND IMPACTS OF EVERYDAY ACTIVITIES AND THE ABILITY AND MOTIVATION TO **REDUCE EMISSIONS** ON AN INDIVIDUAL, COMMUNITY AND ORGANISATIONAL BASIS".*



THE FOCUS OF THIS COURSE IS **TO EMPOWER YOU** TO CHOOSE YOUR OWN CLIMATE SOLUTIONS.

THE STANDARD REQUIRES **ONE DAY** OF TRAINING TO GET A CERTIFICATE.

NTU

www.ntu.ac.uk

You will learn:

- **Possible future scenarios**
- **Climate justice**
- **Science behind it**
- **Solutions**
- **Individual Strategies**
- **Group Strategies**

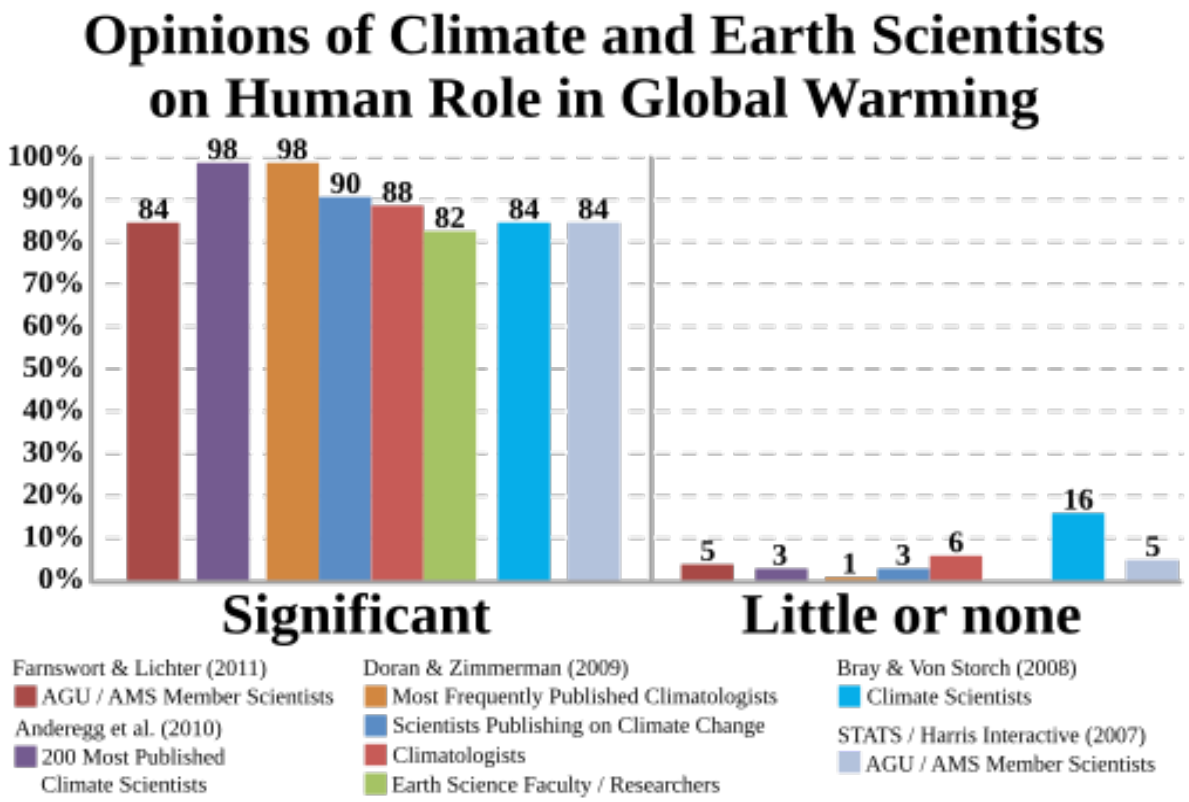
Part 1: The problem

- Explore the challenge of climate change, how it affects the planet and how it can be prevented.

Part 2: The solutions

- Discuss the ways that we are already taking action as individuals and in organizations.
- Make a commitment to change something as an individual and within the context of your discipline or/and your work.

Anthropogenic climate change



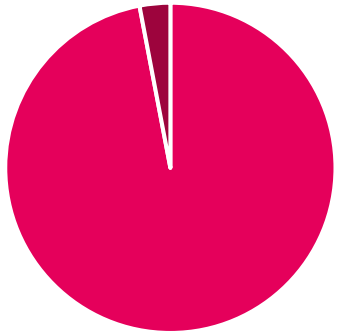
ipcc
INTERGOVERNMENTAL PANEL ON climate change

Intergovernmental Panel on Climate Change

"Warming of the climate system is unequivocal, and since the 1950s, many of the observed changes are unprecedented over decades to millennia. The atmosphere and ocean have warmed, the amounts of snow and ice have diminished, and sea level has risen."[13]

"Human influence on the climate system is clear, and recent anthropogenic emissions of greenhouse gases are the highest in history. Recent climate changes have had widespread impacts on human and natural systems."[14]

Scientific consensus that climate change is caused by humans is 97%

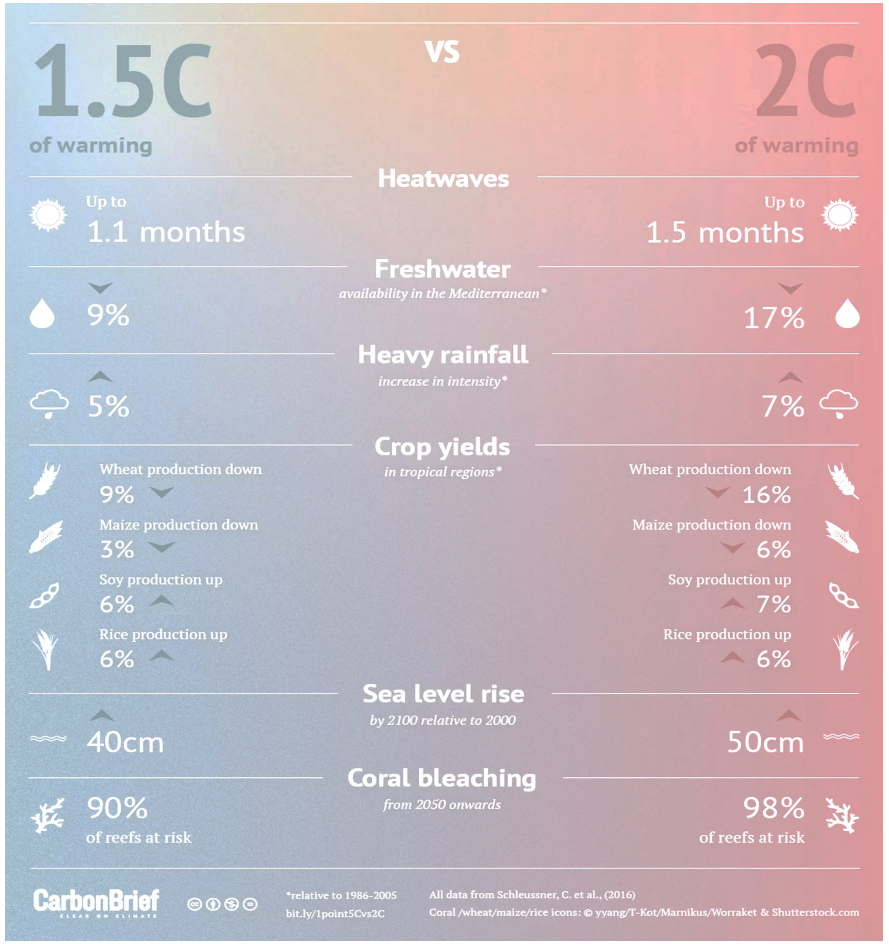


NTU

www.ntu.ac.uk

1.5 or 2 degrees?

We are nearing 1.5 degrees of warming now



Warming of more than 2 degrees will result in **catastrophic climate change**

What is the Greenhouse effect?

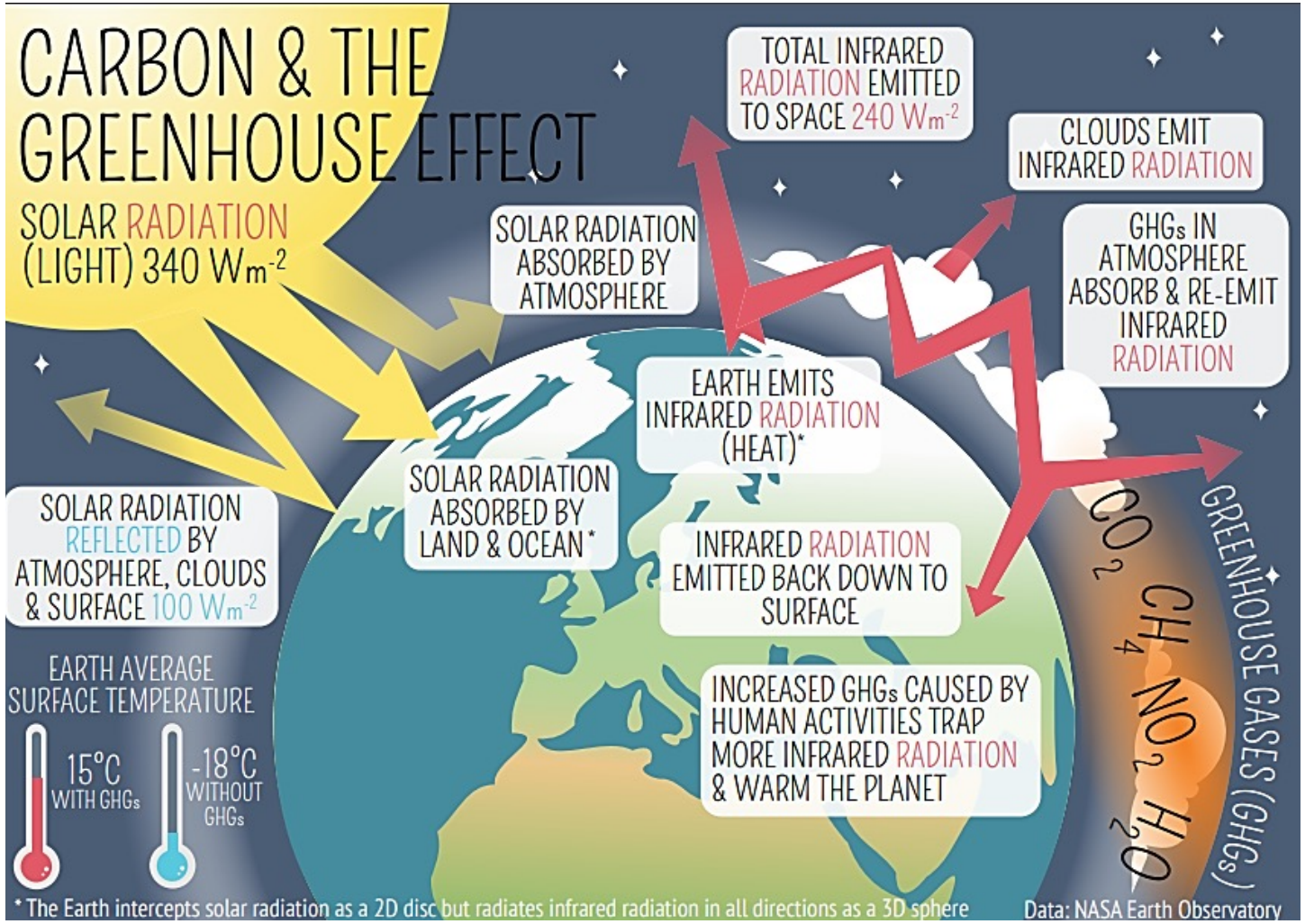
Go to www.menti.com

Use the code:

Insert number you get when you set up the mentimeter

and create a word cloud.

Greenhouse Gas effect



What is a Carbon Sink?

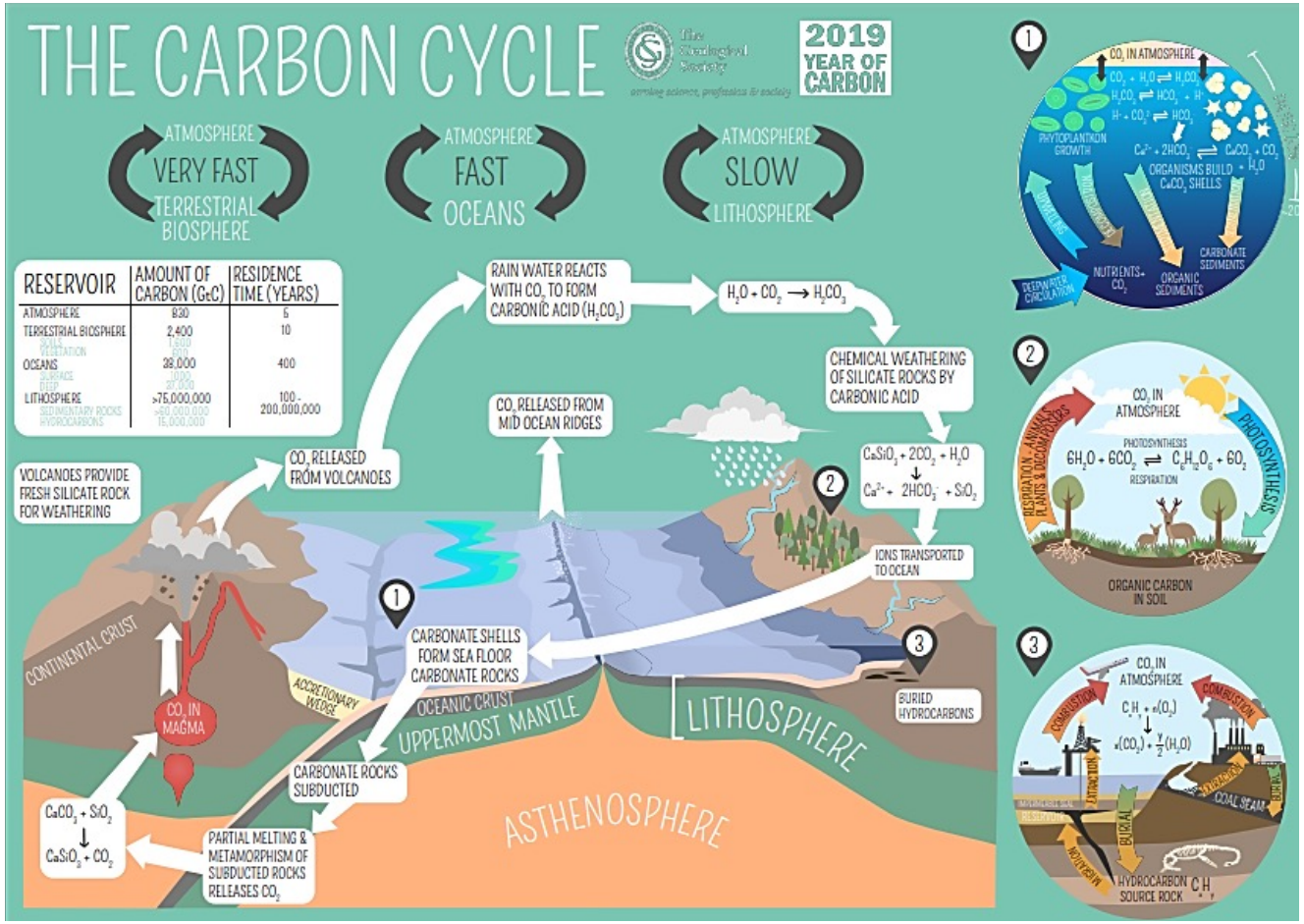
Go to www.menti.com

Use the code:

Insert number you get when you set up the mentimeter

and create a word cloud.

Natural Carbon Cycle and Sinks



Soil and Carbon Sinks

- Estimated that 50% of the carbon stored in soil has been released into the atmosphere in the last century due to long-term conversion of grassland and forest into cropland.
- Estimated that 1/3 of GHG emissions are from agriculture (FAO, 2019).
- Therefore agriculture has potential to mitigate climate change through increasing soil carbon.
- It is predicted that soil can sequester 10% of total anthropogenic emissions of carbon in 25 years (FAO, 2019).

A sink is defined as a process or an activity that removes greenhouse gas from the atmosphere (FAO, 2019)

https://www.drawdown.org/solutions/food/regenerative-agriculture

Climate Justice Activity: Learning Outcome

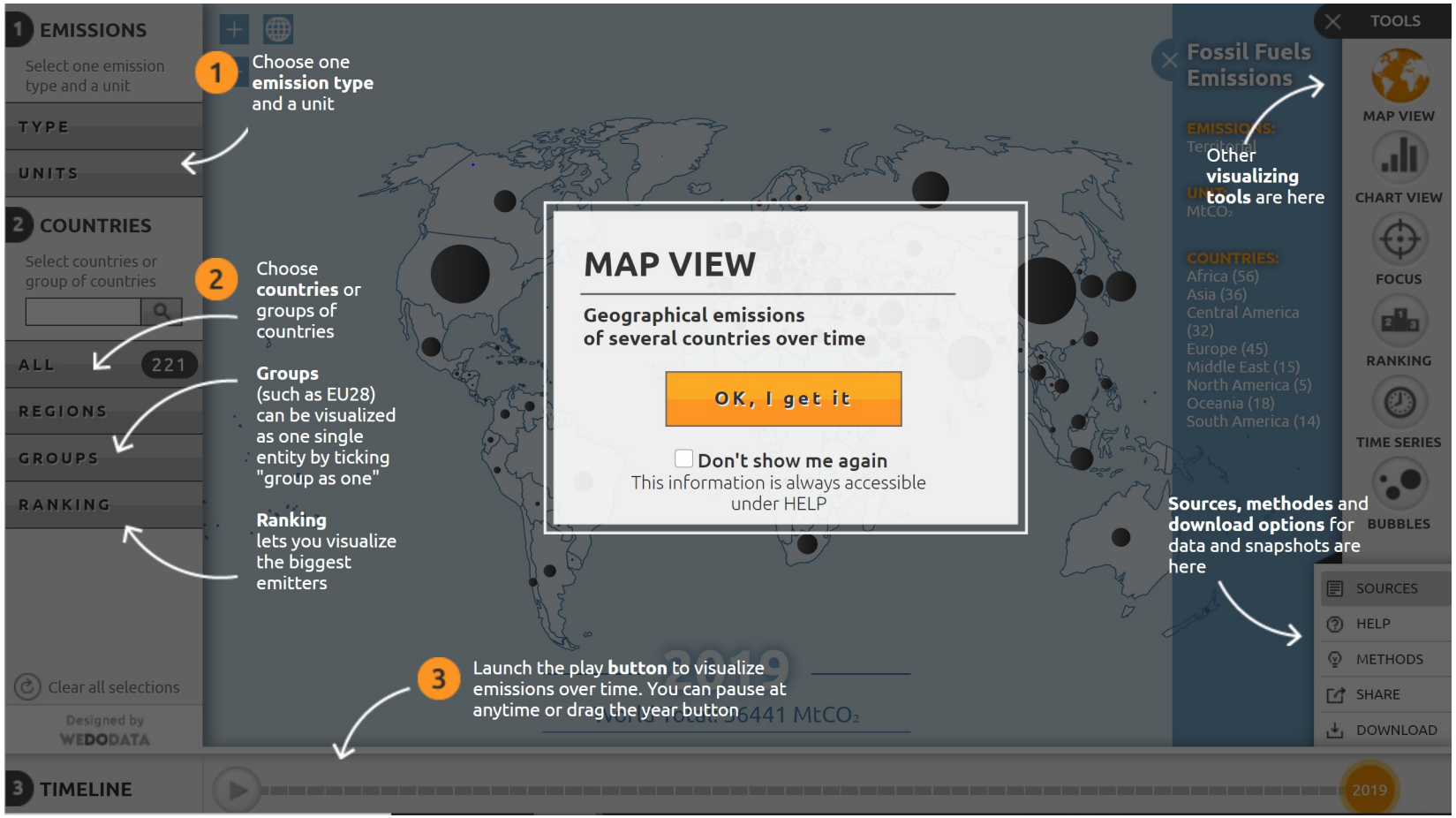
Learning Outcome:

- You will learn about the countries that emit the most carbon per person and the countries that are the most vulnerable to climate change.

Resources:

- Kahoot.it
- Climate Justice Interactive Tool

Climate Justice Interactive Tool Activity: Individual Work



Climate Justice Interactive Tool Activity: Individual Work

- **Vertical Menu on left hand side** of screen:

✓ Emissions;

✓ Type – Select **Consumption**;

✓ Units – Select **tCO_2/person**;

✓ Countries – **All, Regions, Groups, or Ranking**

- **Vertical Menu on right hand side** of screen:

✓ Tools – Select **Map View** or **Chart View**

✓ Bottom Right Hand Corner: **Sources, Help, Share, Download**

- **Bottom of screen** – Time Slider bar

Climate Justice Interactive Tool Activity: Individual Work

Questions from Interactive Tool:

- ✓ Identify the top 10 countries for CO^2/person.
- ✓ Can you offer possible reasons for the result?

Put your answers in the chat

Alternative exercise:

Go to
https://www.climatewatchdata.org/

- ✓ Identify the countries with the highest emissions.
- ✓ Then go to the country information and analyse how vulnerable these countries are.

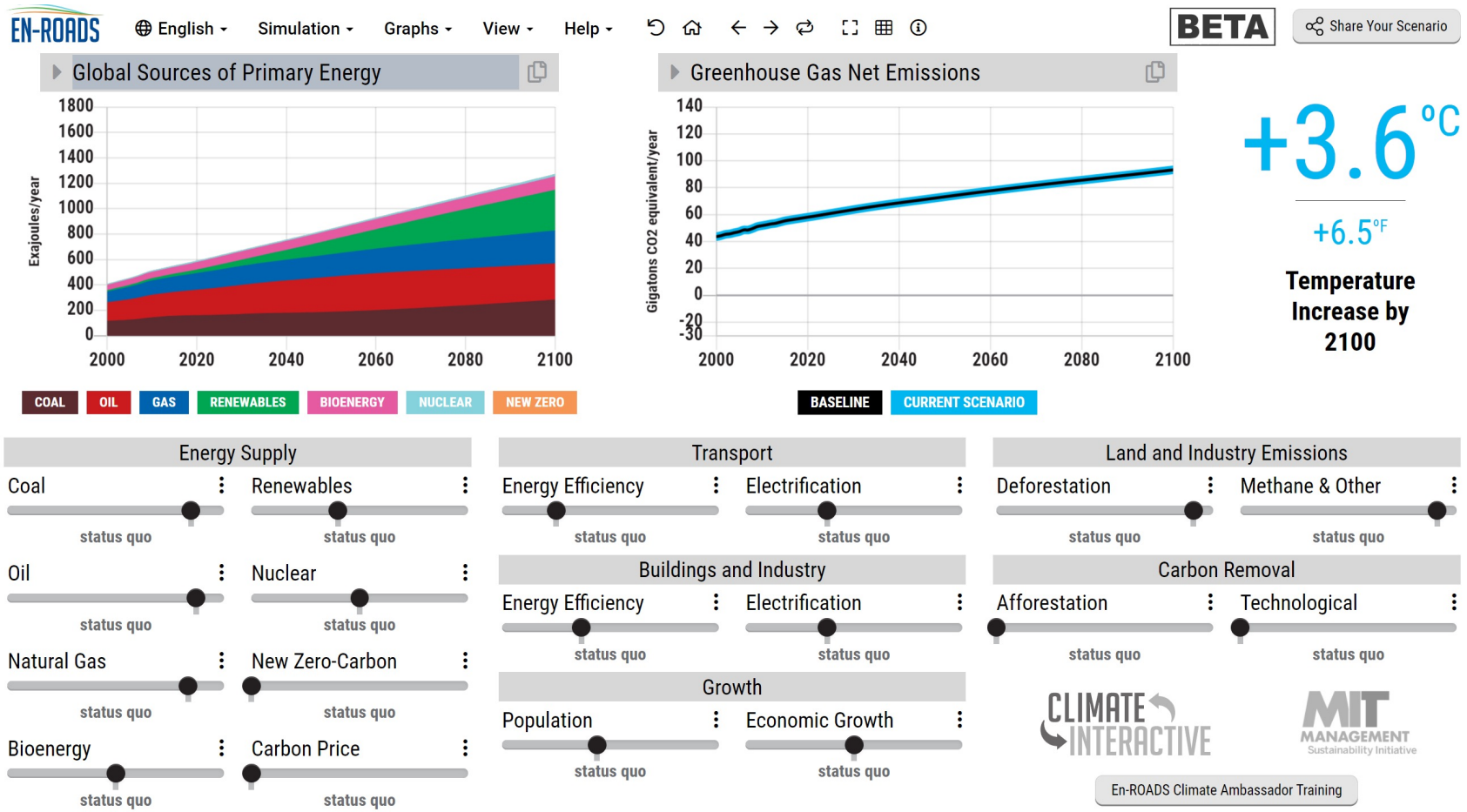
En-Roads Simulation: Preparatory Work (10 minutes)

- **En-Roads Climate Change Solutions Simulator:**
- A policy simulation model
- Explores the consequences of energy, economic growth, land use, and other policies on the climate.

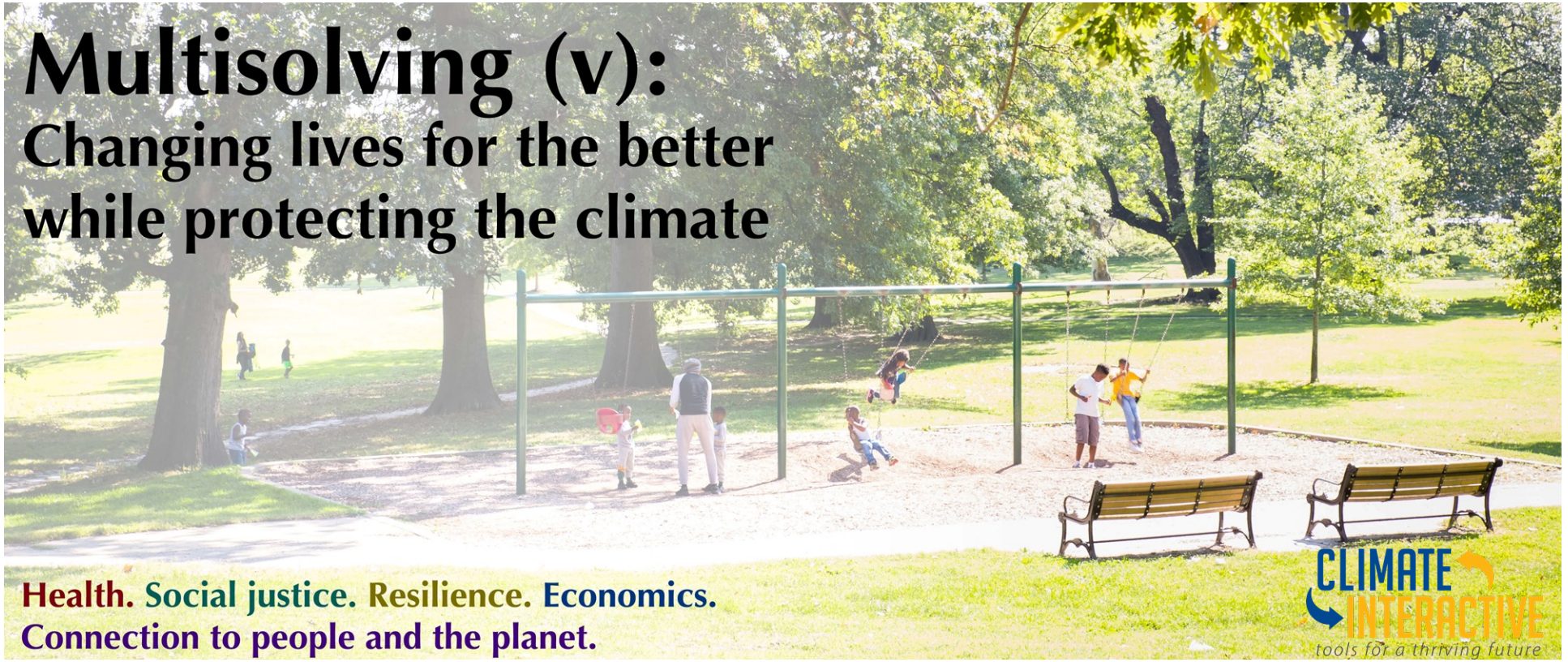
- **Preparatory work for Session 4:**
- Use the En-Roads Simulator in order to try and bring the scenario to 1.7C.

En-Roads 1.5 Degree Future Model

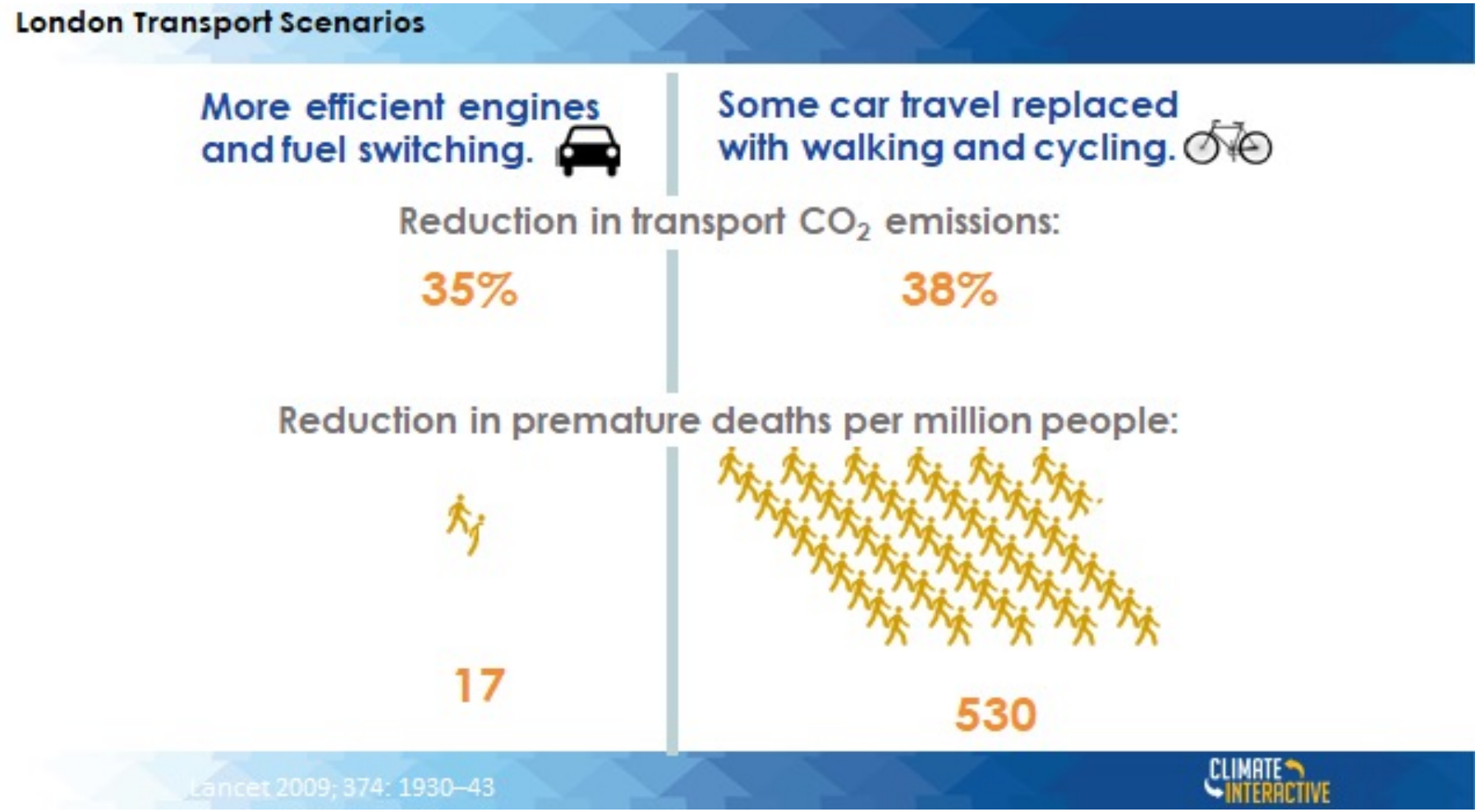
Online Climate Change Solutions Simulator from Climate Interactive: En-Roads Simulator



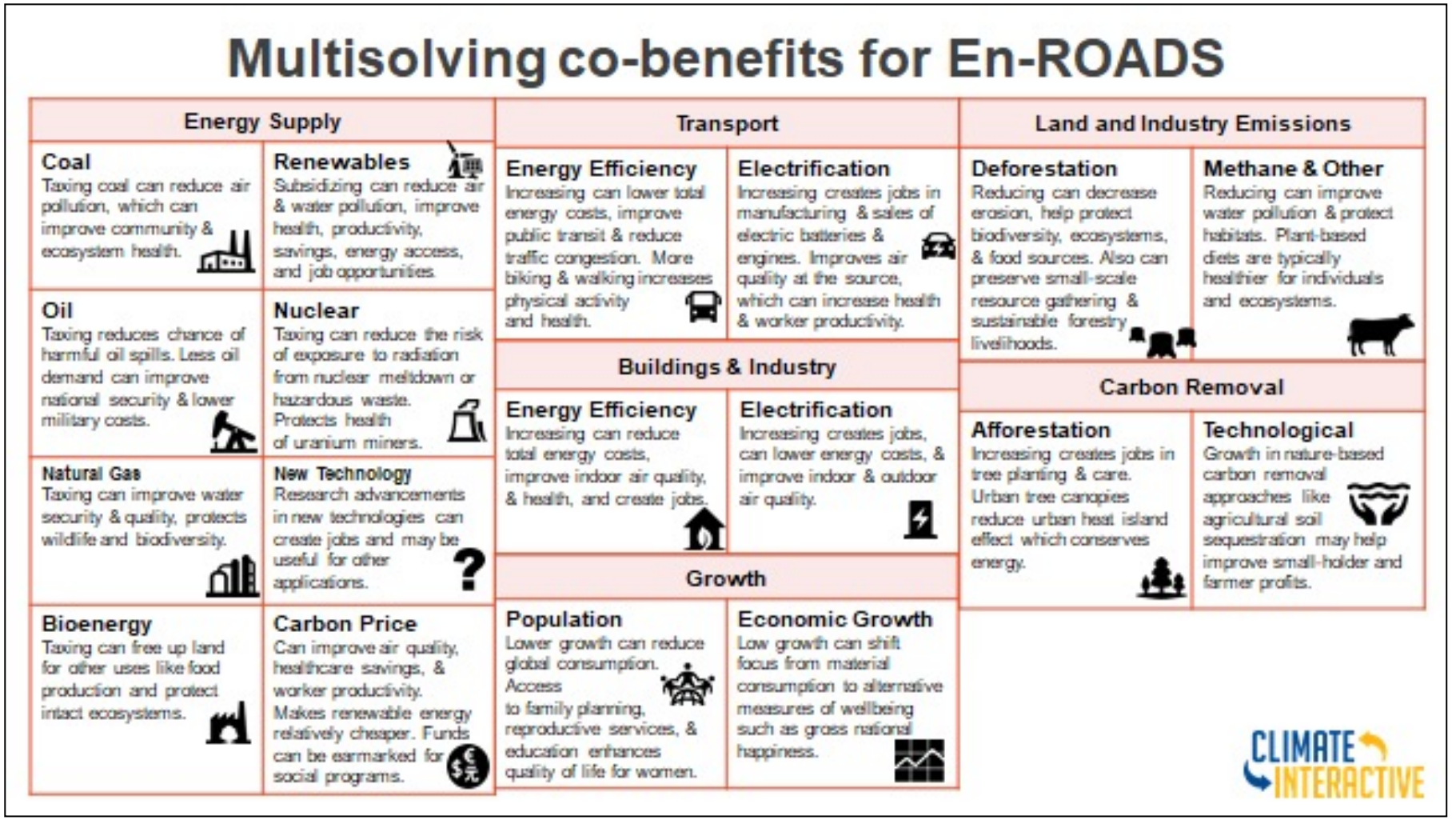
Climate solutions often have multiple other positive effects and solve multiple problems



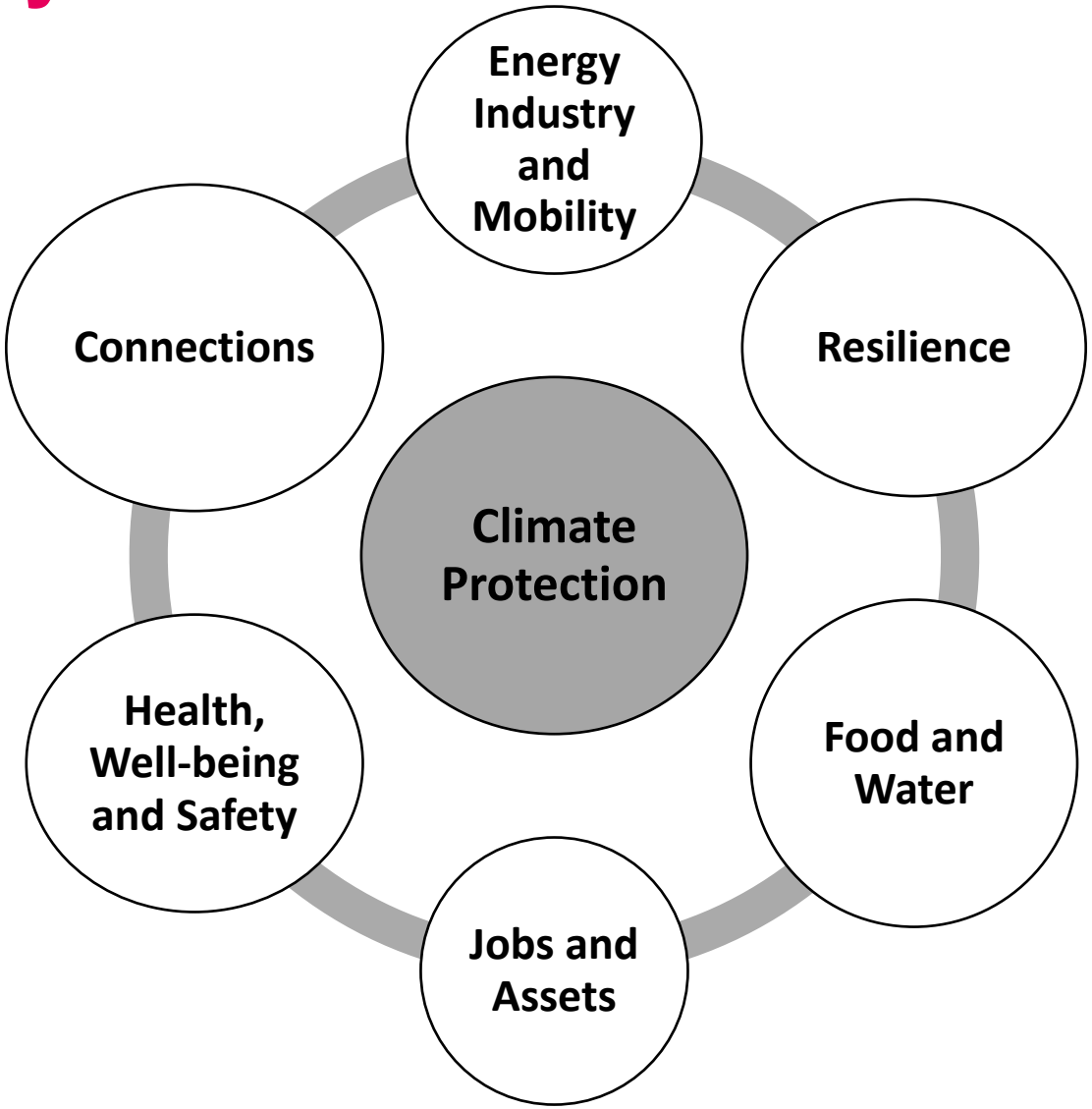
Multiple Impacts of Climate Solutions



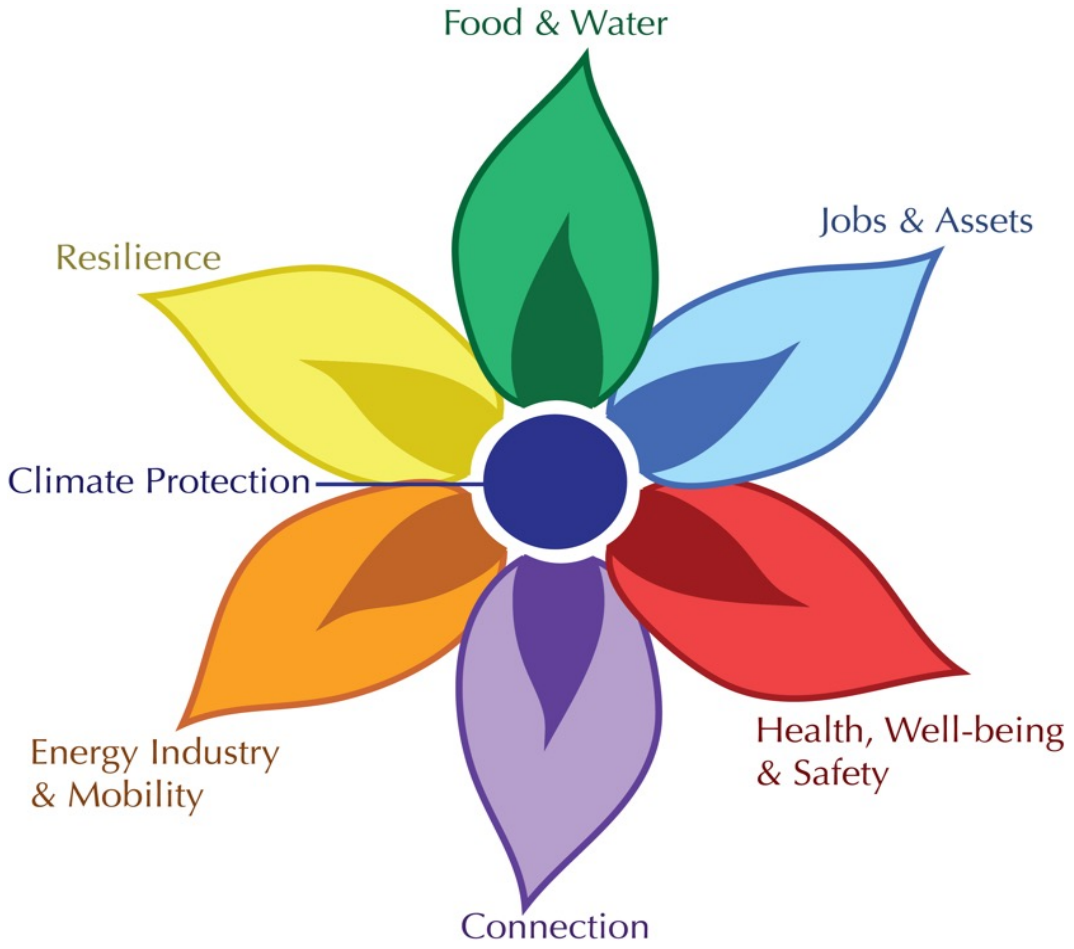
Multiple Impacts of Climate Solutions



FLOWER: The Framework for Long-Term, Whole-System, Equity-based Reflection



Flower Framework: Petals



Action Plan Tasks: Group Activity (1hr)

To be completed in your assigned groups using the Action Planning Doc

- Identify Climate Action Project Name & Target Audience.
- List CO_2 Reduction Targets and High Impact Solutions.
- Evaluate Action Plan using the Flower Framework.
- Complete the SMART Action Plan.
- Plan how to communicate your action plan using Climate Outreach REAL TALK principles.

Targets, Solutions and Action Plan: Group Activity (10 mins)

1. In your groups read through a selection of problem cards.
2. Based on the shared interest in your group, discuss and decide upon:
   - A Climate Action Project.
   - The target audience/community/setting for your project.
3. By using the problem cards, identify around 3 CO_2 Reduction Targets for your chosen Climate Action Project.
4. List a set of high impact climate solutions that address a selection of the problem cards.
5. Complete SMART action plan (following slide) based on your discussions.

Evaluating Your Action Plan: Group Activity (10 mins)

Using the Flower Framework and the shading in method of the petals, discuss how your climate action plan creates co-benefits for:

- your target group;
- your local community;
- marginalized groups;
- privileged groups.