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See sustainability

Workbook for Online Carbon Literacy Training Healthcare



## Workbook for Online Carbon Literacy Healthcare Training

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Module 1. Questions

**THIS DOES NOT NEED COMPLETING AS PART OF THE PLEDGE FOR OR CERTIFICATION PROCESS**, but are questions which can be considered and reflected upon for your own benefit.

**Session 1**

1. What are the expected impacts of climate change?
2. What is the tipping point?
3. What is the main manmade factor contributing to climate change?
4. What has the rise in atmospheric carbon dioxide levels been?
5. What are the causes of ecological breakdown?
6. Why is more flooding expected with climate change?
7. Which was the first country to introduce legislation with legally binding targets to reduce carbon emissions?
8. What has prevented policies to reduce carbon emissions being enacted over the last few decades?
9. How long can a house be powered by the single turn of an offshore wind turbine blade?
10. What is the average UK carbon footprint?

**Session 2**

1. What are the main greenhouse gases?
2. Why should we be concerned about the rise in global fluorinated gas use?
3. Why is there a monthly variation in carbon dioxide levels?
4. How do greenhouse gases affect global temperature?
5. What are the likely global impacts of the predicted temperature rise?

**Session 3**

1. Which areas of the world are most vulnerable to the effects of the climate crisis?
2. What is the difference between consumption-based footprints and direct footprints?
3. What are the three main aims of the Paris 2015 agreement?
4. What has happened to UK temperatures according to the Met office based on historic records?
5. What are some of the predicted future impacts in the UK?
6. What has the UK Climate Change Act (2008) achieved?

**Session 4**

1. Which three sectors have made most reductions to their carbon footprints over the last couple of decades?
2. What has happened to the transport sector in the last 20 years?
3. What has been happening to the energy sector?
4. By what percentage do we need to reduce our carbon emissions to achieve the targets from the Climate Change Act if we start a) 2021 and b) 2025?
5. What are the biggest challenges we still face?

Module 2. Action planning

# At home

You have probably come up with a list of things you already do from the second module. Write them here

**What we already do**

1.

2.

3.

4.

5.

**What do we want to do next?**

*What works for me?*

*What must I do?*

*What should I do?*

*What could I do?*

Firstly, calculate your own footprint

There are many carbon footprint calculators available, but these two are suggested

Either

[www.carbonindependent.org](http://www.carbonindependent.org/)

or

[www.carbonfootprint.com/calculator.aspx](http://www.carbonfootprint.com/calculator.aspx)

With your information, complete the following table

|  |  |  |
| --- | --- | --- |
| Area |  | My personal footprint |
| Energy use | Electricity |  |
|  | Gas |  |
|  | Other |  |
|  |  |  |
| Travel | Car 1 |  |
|  | Car 2 (if applicable) |  |
|  | Car 3 |  |
|  | Flights |  |
|  | Rail and Bus |  |
|  | Bike |  |
|  |  |  |
| Food | Meat |  |
|  | Local/seasonal |  |
|  | Packaging |  |
|  | Food waste |  |
|  |  |  |
| Other | Other spending |  |
|  |  |  |
|  |  |  |
| Total |  |  |

Think of the ideas of actions you and your household could take based on your carbon footprint. Think about who in the family/home might take responsibility for taking the action and when might it be done by? There is a table of examples on the next page. Please add your own thoughts and idea.

Over to you….

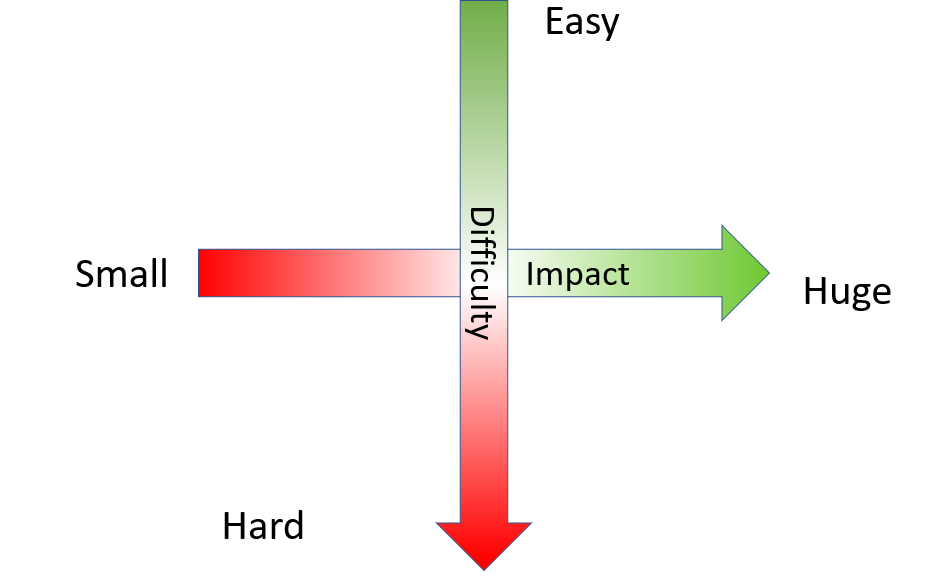
|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Idea** | **Action** | **When** | **Who** | **Completed?** |
| Transport |  |  |  |  |
| Energy |  |  |  |  |
| Flights |  |  |  |  |
| Food |  |  |  |  |
| Recycling |  |  |  |  |
| Single use plastics |  |  |  |  |
| Other |  |  |  |  |
| Promote and influence |  |  |  |  |

Example:

|  |  |  |
| --- | --- | --- |
| **Idea** | **Action** | **Completed?** |
| Transport | Work out how many miles I travel  How many are essential?  Are there other ways?  Can I be more active?  Do I know the bus or train times?  Can I car share?  Can I do more things on the phone or online? |  |
| Energy | Can I change supplier to a 100% green one?  How can I reduce my use?  Can I do an energy audit of my electricity use?  E.g., Can I find out cost of energy use monitors?  Would motion sensors or auto-switches work?  Would energy awareness stickers/labels (e.g., by lights/kettle/equipment) be useful?  Have I only got energy-efficient light bulbs?  Can we reduce the temperature or duration of heating at home?  Can I generate my own energy?  E.g., Can I find out cost of solar panels? |  |
| Flights | What are my options?  Can I find online sites for train travel? |  |
| Food | Can I go meat free one day a week?  Can I try recipes from a vegetarian recipe book?  Can I check out local sources of fruit and veg?  Can I only buy food in season? |  |
| Recycling | Do I recycle everything I can in the kitchen? In the bathroom?  Do I recycle my printer cartridges?  Can I find out what goes in my bin?  E.g. Carry out a waste audit |  |
| Single use plastics | Can I buy things without the, being wrapped in plastic? E.g., Investigate cost of milkman versus current milk supplies |  |
| Other | Fashion – how long could I go without buying something new?  Electricals – can I update rather than replace?  Paper and printer – can I set all printers to print double-sided? |  |
| Promote and influence | Can I talk to friends and family about what I do?  Can I pass on savings from an energy company for getting them to sign up? |  |

Next, take the top ideas and put them in the table to form a 10-year plan. Some actions might be done quickly like changing energy supplier, but other actions will take longer – for example changing travel patterns or trading in for a less polluting car.

The online calculators can be used again for example, changing from a less efficient car to a more efficient car shows the amount of carbon

Once the household has a list of thoughts and ideas, it is important to prioritise these for your 10-year family plan to reduce your carbon footprint. Which have big impacts and are easy to achieve?

|  |  |  |  |
| --- | --- | --- | --- |
| **Year** | **What to do** | **Estimated CO2e savings (kg)** | **% reduction** |
| 2022 |  |  |  |
| 2023 |  |  |  |
| 2024 |  |  |  |
| 2025 |  |  |  |
| 2026 |  |  |  |
| 2027 |  |  |  |
| 2028 |  |  |  |
| 2029 |  |  |  |
| 2030 |  |  |  |
| **Total** |  |  |  |

You can use the most impactful, most significant action in the first few years of the plan for the form for submission on page 12.

# At work

What are the co-benefits for carbon reducing actions in the health sector?

Consider the following areas:

* Health and well being
* Economic opportunity and job creation
* Nature and green space
* Community and equity

You have probably come up with a list of things you already do in your practice from the second module. Please, make a note of them here.

**What we already do**

1.

2.

3.

4.

5.

Examples

We have a ‘green coordinator’ within the workplace

We promote physical exercise for our staff and clients/customers

We scan and email documents when we can instead of print

We already recycle all our waste

**What do we want to do next?**

*What works for me?*

*What must I do?*

*What should I do?*

*What could I do?*

**How will we cope with the climate crisis?**

We can consider different aspects of our organisation

We can start to overlay the expected impacts of the climate crisis and think about what will happen to each area with

1. Change in heat patterns with hotter drier summers
2. Change in weather patterns with more frequent and more intense storms
3. Wetter winter, more likely to have flooding
4. Changes to food security, crime etc

Clients/ Patient

Budgets/Finance

Projects/Service delivery

Staff as individuals

# Action Plan for the next year

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Action** | **When** | **Who** | **Completed?** |
| **Energy use** |  |  |  |  |
| Gas |  |  |  |  |
| Electricity |  |  |  |  |
| **Travel** |  |  |  |  |
| Staff |  |  |  |  |
| Patient |  |  |  |  |
| **Goods** |  |  |  |  |
| Medical supplies |  |  |  |  |
| Office supplies |  |  |  |  |
| Medical equipment |  |  |  |  |
| Office equipment |  |  |  |  |
| **Services** |  |  |  |  |
| Waste and recycling |  |  |  |  |

Examples

Travel to work – how we can encourage car-sharing, cycling and public transport?

We will carry out an energy audit/waste audit/ paper audit

Advertise that we recognise our impact and are taking positive actions to reduce our footprint

Default all printers and instructions on printer to double sided and re-use one sided non-confidential paper

Recycle printer cartridges

**Example** table of actions

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **Action** | **When** | **Who** | **Completed?** |
| **Gas** | Space heating audit of facilities | Summer | Green lead |  |
| **Electricity** | Change energy supplier to 100% renewable for offices | Done | Director | Yes |
| **Client travel** | Explore ‘no travel’ option for client meetings.  Explore delivery options for most efficient single delivery route | End of June | Green lead |  |
| **Staff Travel** | Map staff homes and discuss personalised travel plans  Explore cycle racks, promote walking scheme | Feb | Office Manager |  |
| **Medical supplies** | Review all single use/disposable items and kits supplied. Discuss service rather than product supply | End of August |  |  |
| **Office supplies** | Have paper audit to see what is used where – what is being printed? | End of May | Office Secretary |  |
| **Business services** | Letter to our suppliers asking what they are doing, their current situation and future plans for meeting the net zero ambition | Summer | Director |  |
| **Waste** | Perform waste audit | Summer |  |  |
|  |  |  |  |  |

## Developing a 10-year decarbonisation action plan

Once the staff and team have met, constructed a list of thoughts and ideas, it is important to prioritise these for your 10-year plan to reduce your carbon footprint.

|  |  |  |  |
| --- | --- | --- | --- |
| **Year** | **What to do** | **Estimated CO2e savings (kg)** | **% reduction** |
| 2023 |  |  |  |
| 2024 |  |  |  |
| 2025 |  |  |  |
| 2026 |  |  |  |
| 2027 |  |  |  |
| 2028 |  |  |  |
| 2029 |  |  |  |
| 2030 |  |  |  |
| 2031 |  |  |  |
| 2032 |  |  |  |
| **Total** |  |  |  |

If you require assistance, please contact carbon@seesustainability.co.uk



**Participant Details Form**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Essential Information** (**Please write clearly** - What you write goes on your certificate): | | | | |
| Forename(s): Surname:  Postcode:  Email: | | | | |
| Job title: | | | | |
| Name of your organisation: | | | | |
| Name of the organisation delivering Carbon Literacy: | | | | |
| Additional Information **(Optional):** | | | | |
| To better understand the audiences for this project with the aim of improving the diversity and reach of Carbon Literacy, in line with our equal opportunities policy, we would like to collect some additional data **at your discretion**: Please circle or highlight your answer:  **Gender you identify as:** Male / Female / Non-binary / Other / Do not wish to disclose    **Age:** 0-10 11-15 16-20 21-30 31-40 41-50  51-60 61-70 71-80 81+ Do not wish to disclose    **How would you describe your working status?**  School student, University Student, Self-employed, Employed, Seeking Work, Retired,  Homemaker, Carer, Other:  **How would you describe your ethnic background / ethnicity?**  \* Trainers - If using outside the UK, please edit to better represent communities where you are.  Asian/Asian British, Black/ African/ Caribbean/ Black British, Mixed/multiple ethnic groups, White, Other ethnic background\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, Prefer not to disclose. | | | | |
| **We love to share brilliant actions pledged by learners, as a way to inspire others. Are you happy for your action to be shared with the wider CL community?** Please tick circle or highlight your answer  Yes Anonymously - yes No  **If we think your action is particularly outstanding, would you be happy for our team to follow-up with you?** Please tick circle or highlight your answer  Yes No | | | | |
| Permission to store and use this information: | | | | |
| I understand **the information I submit here will only be used in connection with The Carbon Literacy Project**. It will only be used to award and keep my certification up to date, keep me informed about enhancements to the Project, my certification, and opportunities directly arising from that, and aggregated, to allow the Project to monitor its performance. My information will never be sold or transmitted to a third party beyond the need to process it. | | | | |
| Signature:  (Signature of parent, guardian or teacher if participant under 18) |  | Date: |  |

|  |
| --- |
| **Evidence Form** |
| The focus of Carbon Literacy is about empowering people to take action. To become certified as Carbon Literate you must:  **Page 1 – Getting to Carbon Neutral**  1. Explain clearly the steps we need to take as a society, to be **carbon neutral by 2038\***.   \* Edit date to fit with local or organisational zero-carbon target.  **Page 2 – Commitments**  2. Create at least one significant, new action **within your individual control** to reduce carbon footprint. This action should, wherever possible, be taken in the context in which the training takes place.  3. Create at least one significant, new action **involving other people** to reduce collective carbon footprint via your workplace, community or place of education. This is your **group action.**  **The information you write on this form alone will determine whether The Carbon Literacy Project can certify you as Carbon Literate or not.** |
| **Getting to Carbon Neutral** |
| Please complete this section to the best of your ability. You may choose to write, draw, or annotate diagrams to explain your answer fully. |
| 1. **As a society, what do we need to do to be carbon neutral by 2038\*?** |
|  |
| **Commitments – Your Individual and Group Actions** |
| Please justify your answers and note that the person reading your form may not be an expert in your particular field, so please give as much specific detail, as to how your actions will reduce emissions, as possible. **Parts a, b, c, d, (and e) must be completed.**  We are looking for evidence that you have an awareness of the carbon emissions/savings associated with the actions pledged. During your training, you will have discussed different emissions associated with various activities. Using the climate science you have learned, please explain and justify your actions and why you’re taking them.  Please ensure you pledge at least one significant individual and one significant group action, which are different. They can be on a similar topic or theme if you wish, but you must make it clear how they differ, so we can clearly see at least two different actions. When considering your group action, please make sure you have explained this in your own words, even if working with others from the same training. You must be able to place yourself within your group action, explaining your part and your role.  We have asked you to rate the action with a low (10s kg’s), medium (100s kg’s) or high (1000s kg’s) of CO2e ranking - please make sure that you use this to consider whether your action is significant enough in relation to your role or position. Your action could also cause others to save CO2e, making it an indirect saving. If you have pledged an action that you think will have a low CO2e saving, but this action is significant to you, please explain why it is significant in part 2c and 3d. |
| **2. Your Individual Action** (Please write clearly) |
| (a). What significant, new carbon reduction action are you committing to as an **individual**, **within your personal control** as a result of your Carbon Literacy training? This will normally be in the context (workplace, place of education, or community) in which you are receiving your training.  (b). Estimated CO2e saving per year:   |  |  |  | | --- | --- | --- | | **Low** | **Medium** | **High** |     (c). Please outline why your new action is significant to you (i.e. think about your role/position, and how much carbon can be saved through your action, directly or indirectly?):  (d). Please outline how it reduces a carbon footprint which is within your **individual** control. (Think specifically in relation to the climate science portion of your training and which actions reduce which GHG): |
| **3. Your Group Action** (Please write clearly) |
| (a). As a result of your Carbon Literacy training, what significant, new carbon reduction action are you committing to undertake, involving **a wider group of people**?  (b). What is the wider group of people?  (c). Estimated CO2e saving per year:   |  |  |  | | --- | --- | --- | | **Low** | **Medium** | **High** |     (d). In your own words, please outline why your new action is significant to this **wider group** (i.e. How will this action involve others? Think about your role/position, and how much carbon will be saved collectively, directly or indirectly).  (e). Please outline in your own words how it reduces the **wider group’s** carbon footprint (think specifically in relation to the climate science portion of your training and which actions reduce which GHG): |

Participant Details and ZCB Evidence Form V6.2.doc

Please return to carbon@seesustainability.co.uk on completion