

# Carbon Literacy for Healthcare

## Toolkit Overview

### Leadership pathway

This document gives you an overview of what's included in the Leadership pathway and includes extracts from the slide deck, trainer manual and other support documents.

For further details please visit our website:

<https://carbonliteracy.com/healthcare/>

## 2024

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The Carbon Literacy Project

  
Department for  
Business, Energy  
& Industrial Strategy

**GMCA** GREATER  
MANCHESTER  
COMBINED  
AUTHORITY



Carbon Literacy  
Project





# Toolkit explained

## Sector Specific

Co-developed by people in the sector & designed to be delivered by peers.

## Adaptable

Make it relevant to your organisation and area with customisable sections.

## User Friendly

You don't need to be a carbon expert but have some interest in climate change and training.

## Complete Kit

All materials needed for a day's worth of certified Carbon Literacy training are included.

## Accreditation

The Toolkit is only licensed for **certified Carbon Literacy training** – at the end of the training, all learners must complete an action pledge form – consisting of an individual and group action. The trainer must submit learners' evidence forms to [evidence@carbonliteracy.com](mailto:evidence@carbonliteracy.com) within approx. 2 weeks of the training along with a completed Certificate request form.

Becoming a Carbon Literate Organisation showcases commitment to a low-carbon culture.

## Before starting training

In our getting started pack you will find our bank details document and our invoicing setup form. Before starting training, please complete and return our invoicing setup form to [accounts@carbonliteracy.com](mailto:accounts@carbonliteracy.com) and set up The Carbon Literacy Trust on your accounting system. This allows us to issue invoices to cover certification costs and prevents hold-ups in returning certificates. Some organisations bulk purchase certificate applications in advance which reduces admin for both parties. Alternatively, we can invoice you for each batch of learners.

## What does the Toolkit include?

Getting Started Pack

Slide Deck

Trainer Manual

Pre & Post-Course Surveys

Evidence Forms

Activity pdf

# Running order for the course



- Blue** – slides that are designed to be customised by the trainer.
- Orange** – are activities or involve active learner engagement.
- Green** – contain videos that learners watch on their own devices.

The total time for the modules is an estimate. If the trainer finishes a section early, the time can be used for other sections and discussions.

		Activity Duration (Hrs:Mins:Secs)
<b>Intro</b>	Introductions/Tech check	<b>00:17:00</b>
	What is Carbon Literacy/ Why CL in our sector?	
<b>Module 1</b>	Introduction activity for leaders	<b>00:58:00</b>
	What does the science say?	
	Weather vs climate, Greenhouse gases	
	The basics of climate data	
	David Attenborough summary	
	How is everyone feeling?	
<b>Module 2</b>	Climate impacts	<b>00:36:00</b> + <b>(break 00:10:00)</b>
	Global impacts & health (including video)	
	Climate Impacts on our health	
	Climate change impacts in "your local area"	
	Impacts on Healthcare	
<b>Module 3</b>	Climate risks activity	<b>00:56:00</b>
	Equity and vulnerability	
	Climate vulnerability	
	Climate change and pandemics	
	Co-benefits of climate action	
<b>Lunch</b>		<b>00:45:00</b>
<b>Module 4</b>	The Policy position - COPs	<b>00:36:00</b>
	UK Policy aims and timeline	
	Carbon neutral vs Net zero	
	NHS & organisational policy	
<b>Module 5</b>	Leadership in the climate emergency	<b>00:15:00</b>
	Carbon footprints vs carbon handprints	
	NHS Carbon Footprint breakdown	
<b>Module 6</b>	Innovation cards	<b>01:02:00</b> + <b>(break 00:10:00)</b>
	Greener NHS Programme workstreams	
	Mitigation vs Adaptation	
	Imagine a zero carbon NHS	
<b>Module 7</b>	Power of the individual	<b>01:31:00</b>
	Climate conscious decision making	
	We are Trusted Messengers	
	Action pledges & Developing your action plan	
	Communicating climate change & Wrap up	
<b>Total Session Time</b>		<b>07:16:00</b>

# Greener NHS Programme Workstreams

**Purpose:** To gain knowledge on how innovations are change the nature of the services we provide.

**Material:** Slides

**Timing:** 08 minutes

## Research and innovation (01:00)

The NHS's net-zero ambitions will not be achieved without new research and innovation. This is essential to meeting net zero targets.

Key measures on research that will be progressed are:

- Net Zero NHS small business research initiative competition
- Inclusion of Net Zero in the NHS' research strategy
- New net zero research calls with research councils, e.g., the National Institute for Health Research call

## Models of care (02:00)

*\*Click to reveal the different parts of the table.*

Quality care = low carbon care: By looking after people's wellbeing and delivering the best care we reduce carbon emissions.

Carbon savings will mainly come from reduced presentations in A&E, primary care, outpatients, reduced staff and patient mileage, reduced bed days, fewer pharmaceuticals prescribed, and less intensive procedures. This is because all healthcare activity has an associated carbon footprint, so typically more acute and intensive healthcare = higher emissions.

The tools are there to make an impact NOW: We can quantify the carbon impact of models of care e.g. via these carbon calculators [for GPs](#) and [for care pathways](#).

Net Zero aligns with current NHS priorities, such as the NHS's LongTerm Plan, COVID-19 recovery and transformation. In order to achieve Net Zero, future care will need to include carbon reduction as part of business as usual.

*This is a snapshot of the Greener NHS Programme Workstreams.*

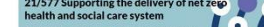
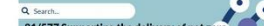
There is detailed guidance on how to facilitate and deliver the training when it is a Face-to-Face vs Online session separately.

The topic focuses on how innovations and digitisation can change the nature of services provided within the healthcare sector.

*Images: Trainer Manual on left, Slide deck below.*

## Research and innovation

- Embedding **environmental impact assessments** into national innovation funding competitions
- Work with Academic Health Science Networks to **embed net zero into business as usual**
- Working with the Accelerated Access Collaborative to **identify future net-zero innovations**







## What have we learnt from the pandemic? (01:00)

Read out the points on the slide to add some context for the lessons learnt you may use the text below.

- Happen more frequently
- Spread more quickly
- Effect our economies more
- Become more deadly

As a healthcare system there's lots that can be learnt from the Covid – 19 pandemic, by understanding the impacts climate change will have on our healthcare systems we can create more resilient and better prepared systems which are able to effectively cope with future pandemics. We should be changing the way our systems function to better manage in the future.

## Co-benefits of climate action

**Timing:** 25 minutes

**Purpose:** To ensure learners understand that climate action has more than just environmental benefits.

**Online materials:** Slide deck, activity pdf, breakout rooms

**Face to face materials:** Slide deck, print out pack

## Why focus on the co-benefits of climate action? (00:30)

Read out the key points on the slide to set the scene for the following activities.

- Taking action on climate change can have wider benefits for our health, communities, economy and environment.
- As healthcare professionals and trusted messengers we have a duty to communicate information to our patients and communities relating to what is best for their mental and physical health.
- We want to create a more efficient NHS to reduce demand on our services, increase capacity and improve the quality of care and its delivery.
- By focusing on the additional benefits that climate action brings we can engage individuals who aren't already taking action to reduce their emissions. This can support us to reduce health inequalities and work towards a better quality of life for everyone.

## Co-benefits case study? (02:30)

*Before the training: There are four case study slides in this section. Choose ONE relevant case study for your cohort from the next four slides. Unhide the case study you want to use, delete the rest.*



*This is a snapshot of an Activity slide.*

There is an activity pack included in the Toolkit package that can be used for both Online and Face-to-Face training delivery.

This activity reflects on the wider benefits of acting against climate change on the health of people, economy, environment, and communities.

*Images: Trainer Manual on left, Slide deck below.*

## Activity: Co-benefits of climate action

- Spend time working through the cards in the activity pack
- Tick the co-benefits which are associated with the low carbon actions on each card





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## Climate impacts on Health

**Timing:** 15 minutes

**Purpose:** To understand how climate is impacting on the health of our communities

**Online materials:** slide deck, activity pdf

**Face to face materials:** slide deck, print out pack

### The global impact of healthcare (02:00)

- Emissions from hospitals, health services and the medical supply chain in OECD countries, China and India = 4% of global emissions
- Healthcare contributes a larger share of global emissions than either aviation or shipping
- In most countries only the heaviest polluting sectors contribute more emissions
- Healthcare itself is a "significant cause" of emissions

References:

<https://iopscience.iop.org/article/10.1088/1748-9326/ab19e1/meta#erlab19e1s3a>  
<https://www.carbonbrief.org/healthcare-in-worlds-largest-economies-accounts-for-4-of-global-emissions>  
<https://www.carbonbrief.org/corsia-un-plan-to-offset-growth-in-aviation-emissions-after-2020>  
<https://www.carbonbrief.org/in-depth-will-countries-finally-agree-climate-deal-for-shipping>

### Impacts on healthcare headline (02:00)

Feel free to insert your own example of a news article detailing how climate change is impacting on healthcare services here. If not read out the example on the slide from July 2022.

### How does climate change impact health? (01:00)

\*This slide is interactive (it appears blank but this allows you to click through area of impacts separately)

With each click read through the climate impacts that are presented.

Climate change and healthcare are inextricably linked, with rising global temperatures associated with everything from the spread of infectious diseases to the impact of dangerous weather events.

This slide illustrates the most significant climate change impacts globally and their effect on health. In the following slides, we're going to focus on 2/3 of the main impacts within the UK.

- Air pollution

35

*This is a snapshot of a Blue slide.*

Blue slides are embedded where trainers should include information that pertains to their organisation.

This slide is used to showcase the climate impacts on healthcare in your local area to your local area. The trainer can adapt this slide to enter any local headline or deliver as it is.

*Images: Trainer Manual on left, Slide deck below.*

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## Climate impacts on Healthcare

T O D A Y S   N E W S

### Surgeries cancelled because operating theatres are too hot

Miriam Deakin, the interim deputy chief executive of hospitals group NHS providers said;

*"The NHS Estate is not built to cope with extreme weather. Over the past 48 hours, we've heard some trusts are having to scale back on the number of planned surgeries as operating theatres are too hot."*

18th July 2022



### What does this mean for us? (02:00)

**Global contributions:** Some nations have more of a responsibility to act on climate change as they have contributed more to the global greenhouse gas concentrations. For example, the United States has emitted more CO<sub>2</sub> than any other country to date: at around 400 billion tonnes since 1751, it is responsible for 25% of historical emissions.

**High Income nations:** Higher income nations are usually some of the biggest contributors to the global GHG mix. Higher income countries (HIC's) therefore have a responsibility to support lower- and middle-income countries (LICs). Legislation is being explored to ensure HIC's are supporting LICs with climate finance measures (more on this later in the training).

**High income individuals:** higher income individuals are often able to afford more luxuries. This usually means their individual carbon footprint is greater than lower income individuals. Luxuries such as larger cars, consumption of higher-carbon animal products, more holidays and flights per year.

**Healthcare systems:** As a world leading healthcare system the NHS is one of the largest contributors to the global healthcare contributions. We therefore have a responsibility to lead the way in carbon reduction and set a zero-carbon example to smaller, less developed systems.

### What is climate justice? (01:00)

Read through the points on the slide.

The climate justice movement recognizes that those who have contributed the least to the climate crisis are often those who are most impacted. Seeking justice for this issue involves ensuring individuals who are most impacted receive additional support.

### Climate Vulnerability (04:00)

<https://www.bbc.co.uk/news/av/embed/p079s2j4/48373540> (Video is 3 minutes 13 seconds long)

Copy and paste the link to this video into the chat box and ask learners to turn their microphones and cameras off to watch the video.

Once learners have watched the video ask them to write in the chat what they noticed about the individuals in the video.

#### Discussion points:

1. Individuals who are the most vulnerable to climate change in the UK are often from deprived backgrounds.
2. Individuals who are most at risk from air pollution live nearer to main roads in cities.
3. These individuals are more likely to live in deprived areas and often have a lower carbon footprint due to their financial status.

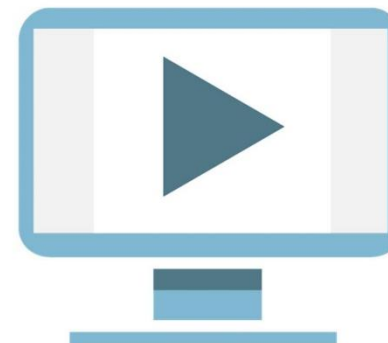
*This is a snapshot of a slide with video.*

There is step-by-step guidance on the links to follow for the video and what all points are to be discussed with the learners.

The video showcases the most vulnerable to climate change are individuals from deprived backgrounds and how their life is affected.

*Images: Trainer Manual on left, Slide deck below.*

## Climate Vulnerability





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This is something that involves others.

In pledging your group action, you should identify your specific role in the action.

Encourage learners to think about practice/ward wide examples here e.g., a ward or practice quality improvement initiative that focuses on carbon reduction.

**Both actions should ideally be actions to reduce carbon at work** - consider your influence over your organisation and how you can shape and mold the trust to be a low emission organisation. Emphasise that by committing to actions at work, learners are shifting the organisational culture to a low-carbon one, which will collectively make more of a difference than if everyone just took action at home.

### What makes a good action? (01:00)

Good actions:

- Have high emissions reduction potential.
- Are commensurate with your role and influence.
- Build people's confidence and empower them to take action.
- Engage the wider community in long-term behavioral change.
- Generate co-benefits.
- Are ambitious, but feasible and result in tangible outcomes.

### Complete your evidence form (40:00)

*Before the training:* If you are using our online Microsoft Form, you need to duplicate our template using your own email address. If you are delivering the training face to face and you are using the online Microsoft Form, after you have duplicated our template using your own email address, you need to email learners with the link to the form or you need to insert a QR code with the link to the form on the slide titled 'Online Microsoft Evidence Form'.

All learners must fill in an evidence form. It is best for learners to complete the evidence form during the training session, to ensure timely submission and reduce trainer admin.

There are two versions of our evidence form. Trainers should choose only one method of form completion to avoid confusion:

- 1) An online Microsoft Forms link:  
[https://forms.office.com/Pages/ShareFormPage.aspx?id=5h69uub\\_b0i4Oi28B7V\\_6i6vpvR5mW5EiBkZsQuk7TBUQUk1SVFGMDRJSkdUQkVZQlpYSDBXUIZTRI4u&sharetoken=cF19PBDJupg1jFuy5IFl](https://forms.office.com/Pages/ShareFormPage.aspx?id=5h69uub_b0i4Oi28B7V_6i6vpvR5mW5EiBkZsQuk7TBUQUk1SVFGMDRJSkdUQkVZQlpYSDBXUIZTRI4u&sharetoken=cF19PBDJupg1jFuy5IFl)

It's easy for trainers to collate learner evidence using our online Microsoft Form, especially for F2F training. **If you would like to use this form, you need to duplicate our template using your own email address.**

*This is a snapshot of section around completing the Evidence Form.*

There is guidance on the best suited method for learners to complete the action pledge form.

Learners are provided time to complete their action pledge forms to be eligible to submit for Carbon Literacy certification.

*Images: Trainer Manual on left, Slide deck below.*

## Activity: Complete your evidence form

- Please answer every question
- Give as much detail as you can
- Try to base your actions within your job role

### 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.

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