

CIHT CLIMATES CPD guidance note: Helping you plan your Climate Action CPD

December 2025

This guidance note will help you plan Climate Action Continuing Professional Development, covering both transport decarbonisation, and adapting transport infrastructure and services to improve their resilience to climate change impacts.

It is also part of the Institution's contribution to implementing the findings of the <u>CIHT CLI-MATES</u> initiative and is supported by a curated set of learning resources on the <u>CIHT Learn</u> platform.

How to use the guidance note to help plan your CPD

You are not expected to cover every topic in this note in your CPD plan! <u>CIHT does however encourage</u> all members to dedicate some of their annual efforts to Climate Action.

You can this guidance to select one or more topics that are most relevant to your current role, long-term goals, and the challenges you expect to face over the coming years. If you are in a leadership role, you can use this guidance to help your team plan their Climate Action CPD programmes.

Once you have identified a suitable CPD topic, we recommend that you define a learning goal that can be included in your personal <u>Development Action Plan (DAP)</u>.

You then need to identify activities or learning materials that will help you meet that goal. Annex A provides links to some relevant CPD resources but you can also use the topics listed as search terms to help identify other materials.

After you have completed your CPD you should reflect on what you have learnt and how you will apply the learning to your day to day professional activity. Here is an example:

Goal (Specific)	Objective	Knowledge Gain
Learn how to incorporate	To improve my knowledge	Use this learning to inform
nature-based solutions into	of how to integrate na-	my work on the early-stage
infrastructure design.	ture-based solutions into	design of a scheme during
	highways infrastructure	the next year.
	design by completing the	I will also write a short sum-
	CIHT Learn module <u>An In-</u>	mary of what I have learnt for
	troduction to Green & Blue	my CPD log and look for op-
	<u>Infrastructure</u> , and reviewing	portunities to discuss design
	at least 2 recent case studies.	options with our landscape
	I will complete this by the end	consultant during design
	of september	reviews.

How the guidance is structured

Section A covers fundamentals. These topics will be useful if you need to improve your knowledge of the basics of Climate Action. If you have not done so already a great first step is to complete the short CIHT Learn e-learning course <u>An Introduction to Transport Decarbonisation</u>.

Section B covers role specific skills and knowledge. These topics are intended to help you go beyond the fundamentals and start exploring what Climate Action means for your role.

Working with CIHT's Technical Champions we have selected topics relevant to members with

roles in transport planning & strategy, service design & operations, and the design, construction, operations & maintenance of transport infrastructure.

We plan to update and expand the guidance over time, so if you feel your role is not adequately covered please get in touch via education@ciht.org.uk

Annex A provides links to CPD resources linked to each section of the guidance to help you get started.

Section A: Decarbonisation, Climate Adaptation & Resilience Fundamentals

A.1 Climate Science & Climate Policy

Suggested CPD Topics:

- UN Sustainable Development Goals
- Intergovernmental Panel on Climate Change assessments of the science of climate change, its impacts, future risks, and options for adaptation and mitigation
- The Paris Agreement of 2015 and Nationally Determined Contributions (NDCs)
- UK Climate Change Act 2008 & the 2050 Net Zero target
- UK 6th (2033 to 2037) and 7th (2025 to 2042) Carbon Budgets
- UK National Adaptation Programme
- UK Climate Change Committee balanced pathway for surface transport decarbonisation
- UK Climate Change Committee annual progress reports on emissions reduction & adaptation to climate change
- UK Government Carbon Budget Delivery Plan
- Emissions reduction and climate adaptation goals & policies in national, regional and local transport strategies and policies in your area

A.2 Key Decarbonisation & Adaptation Concepts and Terminology

Suggested CPD Topics:

- Net zero & carbon neutralit
- Scope 1, 2 and 3 emissions
- The sustainable transport hierarchy
- The carbon reduction hierarchy
- Whole-life carbon & whole life carbon assessment
- Embedded/capital, operational and end user carbon
- Science based targets and carbon budgets
- The circular economy
- Carbon offsetting
- Climate hazards, risk, vulnerability, and resilience
- Climate risk assessment
- Climate change adaptation planning
- Barriers to and opportunities for adaptation
- Adaptation measures
- Disaster and emergency management
- Nature-based solutions for climate adaptation

A.3 Decarbonisation & Climate Adaptation Tools, Codes & Standards

Suggested CPD Topics:

- PAS 2080: 2023 Carbon Management in Infrastructure
- ISO 14064 & 14069 Quantifying and reporting on greenhouse gas emissions and removals
- ISO 14090: 2019 Adaptation to climate change principles requirements and guidelines
- BS 8631:2021 Adaptation to climate change. Using adaptation pathways for decision making. Guide
- Principles for Resilient Infrastructure UNDRR
- Climate Adaptation Toolkit and Risk and Opportunities Matrix Local Partnerships UK (https://localpartnerships.gov.uk/resources/climate-adaptation-toolkit/)

A.4 Leadership for Climate Action

Suggested CPD Topics

- Vision & Influence: communicating a clear vision of how teams, organisations or projects can contribute decarbonisation, adaptation and resilience
- Decision Making: embedding climate considerations into formal and informal decision making, and balancing them with cost, safety, performance and other requirements
- Target setting, monitoring and evaluation: establishing and maintaining frameworks for assessing progress on decarbonisation, adaptation and resilience
- Stakeholder engagement and collaboration: Engaging clients, colleagues, supply chains and communities to build support for climate action, design solutions and ensure benefits and costs are shared fairly
- Navigating complexity and working with uncertainty: Developing flexible and adaptative approaches to planning and decision making that can deal with the uncertainties and trade-offs inherent to climate action.

Section B: Role specific skills and knowledge

B.1 Transport Planning, Policy & Operations

Transport Strategy & Policy - Suggested CPD Topics

- Embedding climate mitigation and adaptation goals in local and regional transport strategies and plans
- Coordinating land use and transport planning to reduce emissions and increase resilience
- Communicating climate risks and solutions to the public
- Supporting Equity & Climate Justice by taking into account how climate impacts vary across communities.

Transport Planning for Sustainable Development – Suggested CPD topics

- Maximising accessibility through proximity to local facilities for active travel, mobility for all and connectivity to transport infrastructure
- Developing transport strategies to encourage low carbon travel behaviour
- Inputting to masterplans to prioritise sustainable transport

Modelling & Appraisal - Suggested CPD Topics

- Conducting Climate Risk Assessments for transport systems, including mapping and modelling climate hazards.
- Integrating whole-life carbon & resilience assessments into cost-benefit analysis
- Scenario planning for climate uncertainty and resilience

Service Design & Operations – Suggested CPD Topics

- Optimising routes and schedules to reduce emissions and energy use
- Planning for decarbonised bus, rail and shared mobility systems
- Evaluating service performance against carbon emission indicators
- Identifying climate risks to public transport operations (e.g. heat, flooding)
- Planning for service continuity during extreme weather and climate disruption
- Designing networks with redundancy and recovery capacity
- Using GIS, AI, and big data for climate modelling and decision-making.
- Digital twins for infrastructure resilience planning.

B.2 Infrastructure Design, Construction & Maintenance

A summary of learning resources for this section of the framework is available here (in progress insert link when completed).

Infrastructure Design - Suggested CPD Topics

- Understanding the requirements of PAS 2080: Carbon Management in buildings and infrastructure
- Integrating emissions reduction and climate adaptation into design governance and review processes
- Selecting low carbon construction materials and structural solutions

- Incorporating climate adaptation, including nature-based solutions into engineering design
- Working with design standards and justifying deviations where needed to secure decarbonisation or adaptation benefits
- Incorporating inclusivity and equity considerations into design

Operations & Maintenance - Suggested CPD Topics

- Integrating adaptation and decarbonisations goals into asset management plans
- Assessing climate risk for existing assets and applying retrofit solutions
- Recording and reporting lifecycle emissions for asset management and maintainance
- Developing operational resilience and mitigation plans; emergency planning in conjunction with emergency services

Procurement and Commercial Strategies – Suggested CPD Topics

- Embedding carbon and adaptation requirements into procurement and evaluation documentation and processes
- Developing KPIs and other contractual incentives to drive emissions reductions and adaptation
- Early supplier engagement to support emissions reduction and adaptation

Construction & Site Practices – Suggested CPD Topics

- Reducing carbon emissions from logistics, plant, and equipment use
- Managing construction waste through circular economy principles
- · Implementing adaptive construction methods for climate-vulnerable sites
- Coordinating climate risk management across contractors and subcontractors

Final Tips

- Choose CPD learning aims that align with your role, goals or project challenges.
- Track and update your learning via the CIHT Learn platform.

Annex A - Selected CPD Materials to get you started

Section A – Decarbonisation, Adaptation & Resilience Fundamentals

CIHT Learn

<u>An Introduction to Transport Decarbonisation</u> is a 2-hour accredited e-learning course that covers many of the topics in the Climate Science and Climate Policy section of the CLIMATES CPD Framework including:

- The latest assessments from the Intergovernmental Panel on Climate Change and their implications for transport
- The UK Climate Change Act 2008 and the Net Zero target
- The 7th Carbon Budget and the balanced pathway for surface transport decarbonisation
- Climate policy in different parts of the UK
- Key decarbonisation concepts and terminology.

Module 1 of the CIHT Learn course <u>An Introduction to the Future Highways Research Group</u>

<u>Carbon Calculation and Accounting Standard</u> includes an introduction to key codes and stndards:

- PAS 2080: 2023 Carbon Management in Infrastructure
- ISO 14064 & 14069 Quantifying and reporting on greenhouse gas emissions and removals

<u>Climate Change Committee Annual Progress Reports – What do they mean for transport</u> is a 1-hour webinar recorded on 1 August 2025. It includes a presentation from the Climate Change Committee on their 2025 progress reports on climate mitigation and adaptation, followed by an expert panel discussion exploring the implications for transportation professionals.

Other CIHT Resources

<u>Doubling Down on Climate Action in the Highways & Transportation Sector</u> the final report of the CIHT CLIMATES initiative provides material on the current state of climate science and the implications for the transport sector (Section 3) and insight into using scenarios to take climate action decisions in the face of uncertainty (section 5).

The CIHT report <u>Reducing Emissions by 63% in Decade</u> includes a 2 page summary of the key features of PAS 2080 and a case study of its use through the project life cycle of the London Borough of Southwark's Walworth Low Traffic Neighborhoods scheme.

Other Resources

UN Sustainable Development Goals

The United Nations website's <u>Sustainable Development Goals</u> pages includes text and video explainers of the 17 goals, alongside annual implementation progress reports dating back to 2016.

Intergovernmental Panel on Climate Change assessments

The IPPC's <u>Summary for Policy Makers</u> (2023) provides a condensed review of its latest assessment of the state of knowledge of climate changes, its impacts and risk, and climate change mitigation and adaptation. The IPPC has also published <u>Climate Change 2023</u> a 10-minute video providing a high-level summary of the 2023 assessment.

Climate Change Act 2008, Carbon Budgets & CCC Progress Reports

The Climate Change Committee have produced a useful short <u>explainer</u> setting out how the Climate Change Act works, the 2050 target, the role of carbon budgets in reaching the target, the Climate Change Risk Assessment & National Adaptation Programme, and responsibilities for climate policies across government departments and the Devolved Administrations.

Other useful material from the CCC includes the latest <u>7th Carbon Budget</u> and the 2025 annual progress reports on <u>reducing emissions</u> (and <u>a 30 minute video summary</u>) and <u>adaptation</u> (and a <u>25 minute video summary</u>).

National Adaptation Programme

All the documentation relating to the 3rd National Adaptation Programme (2023-2028) is

available at Gov.UK

Standards

<u>A formal guidance document for PAS 2080</u>, sponsored by The Green Construction Board, Construction Leadership Council and the Institution of Civil Engineers was published to coincide with the 2023 update to the standard.

The Institution of Civil Engineers is also working with the British Standards Institute on a <u>Publicly Available Standard (PAS) for Climate Adaptation Pathways</u> due to be published in 2026/

Section B.1 - Transport Planning, Policy & Operations

CIHT Learn

<u>An Introduction to Sustainable Transport</u> is a 1.5 hour online course authored by Professor John Parkin of the Centre for Transport & Society at the University of the West of England. Themes covered relevant to this section of the CLIMATES CPD framework include:

- The sustainable transport hierarchy
- The relationship of carbon reduction to other aspects of sustainability including health and the environment
- Sustainability principles for planning and design
- Communication & engagement skills and processes

<u>A Practical Guide to Carbon Literacy - Accounting</u> includes advice on how to carry out regional or development level carbon accounting to support strategy and policy making.

The <u>Planning for Cycling Bundle</u> is made up of four courses and covers:

- Fundamentals
- Strategy and planning
- Developing a cycling infrastructure plan
- · Promotion, monitoring and evidence

<u>CIHT Masterclass – Sustainable Travel</u> explores a range of sustainable transport case studies, recognised in the 2024 and 2025 CIHT Creating Better Places and Sustainability awards. It provides real world insight into barriers and enablers to designing and implementing sustainable transport schemes.

Other CIHT Resources

<u>The Role of Data and Artificial Intelligence in Achieving Transport Decarbonisation</u> is a CIHT report that looks at how data and AI can support key decarbonisation objectives including accelerating modal shift to public transport and active travel.

Other Resources

<u>Vision Led Planning – How to plan development and transport infrastructure more sustainability</u> is a guide by leading experts and endorsed by CIHT and the Transport Planning Society.

Section B.2 - Infrastructure Design, Construction & Maintenance

CIHT Learn

An Introduction to the Future Highways Research Group Carbon Calculation and Accounting Standard is a 1 hour CPD course. The FHRG standard helps Local Highways Authorities capture the carbon impact of their construction and maintenance activity and use this data to create robust carbon reduction plans.

<u>An Introduction to Green & Blue Infrastructure (GBI)</u> is a 1 hour CPD course covers topics including:

- The benefits and drivers for delivering GBI, including its legal context
- The function and benefits of GBI components for a highways & transportation professionals
- Understanding Sustainable Drainage Systems (SUDS) and the role GBI plays in their delivery – at different scales and in different locations
- How GBI relates to other aspects of sustainable transport infrastructure including nature based solutions, biodiversity net gain and the circular economy

<u>An Introduction to the Environment for Supervisors</u> is a hour CPD course designed to help supervisors understand common environmental matters on construction sites.

Other CIHT Resources

The Role of Data and Artificial Intelligence in Achieving Transport Decarbonisation is a CIHT report that looks at how data and AI can support key decarbonisation objectives including delivering and maintaining low carbon infrastructure.

<u>Building Carbon Reduction into the Procurement Process</u> is a CIHT report pulls together existing standards and guidance for embedding carbon reduction into procurement processes, and showcases best practice in other countries including the Netherlands, Australia and Sweden.

Reducing Emissions by 63% in Decade is a collection of case studies of carbon reduction in highways projects and programmes, covering themes including:

- Innovative materials and construction processes
- Transport, plant and logistics
- · Procurement and contracts
- Design and planning
- Collaboration and Early Contractor Involvement (ECI)
- Codes, standards and specifications

Other Resources

How to assess and include Net Zero carbon targets in procurement and contracts is a best practice guidance note produced by the Institution of Civil Engineers.

<u>ADEPT Live Labs 2 – Decarbonising Local Roads</u> is a 3 year, £30M, UK wide programme funded by the Department of Transport. Seven projects exploring different aspects of decarbonizing local roads are being led by local highways authorities alongside commercial and academic partners. Updates and new results from the programme are published regularly.