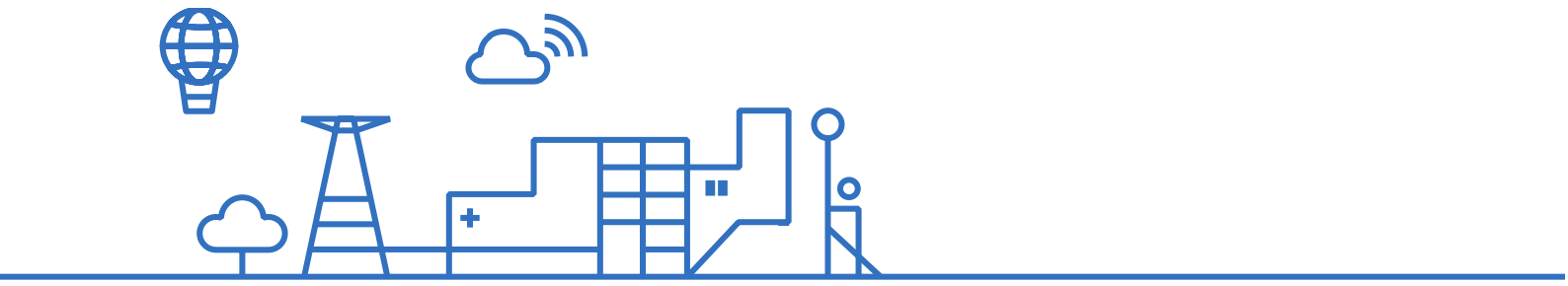
IEMA Transforming the world to sustainability

Course Specification

Carbon Footprinting and Reporting
v2.0



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1. ABOUT US

IEMA is the membership body for more than 20,000 environment and sustainability professionals worldwide.

We support individuals and organisations in setting and achieving globally recognised standards for sustainable practice, in turn driving the development and uptake of sustainability skills.

We add value for our members by providing the knowledge, connections and recognition necessary to lead change within organisations at all levels.

We are independent and international. We apply the combined expertise of our members to provide evidence and influence decision-making, working towards our vision of transforming the world to sustainability.

2. BACKGROUND

The IEMA Carbon Footprinting and Reporting course provides clear and practical guidance on current practices in carbon quantification. Its primary focus is on establishing an organisational carbon footprint, as the basis for developing pathways to Net Zero, and can be taken in conjunction with that course.

It also provides an overview of other forms of quantification, including product footprinting, and explains how carbon footprints can help organisations plan for emissions reduction and developing pathways to Net Zero.

This course is not intended to provide detailed explanations of the background to climate change, or to provide extensive guidance on emissions reduction and working towards Net Zero. These need to be addressed in outline only.

This course should serve as a standalone training offering, but also should allow progression to the IEMA Pathways to Net Zero course. The course also is intended to be useful for individuals who have taken the IEMA Pathways to Net Zero course and are seeking to improve their knowledge of carbon footprinting and reporting.

3. COURSE DURATION

7 Guided Learning Hours/1 day.

4. WHO IS THIS COURSE FOR?

This course is for any individual tasked with developing an organisation's carbon footprint. This includes individuals undertaking or managing the project.

While it is desirable that participants have some existing knowledge of environmental issues and management processes, this is not essential, and there are no formal entry requirements.

5. MATERIALS AND CERTIFICATION

There are no IEMA materials available for this course and course providers must develop materials for approval by IEMA.

This course is IEMA Certified and certificates are provided by IEMA to learners who have successfully completed the course. Dual branding of certificates to include training partner logos is available as an option.

Please contact training@iema.net for further details.

6. ASSESSMENT

The course provider should develop a methodology for assessing learners and include this in their submission to IEMA for approval.

The end-of-course examination should examine the learners' understanding and application of the course topics – it should not be a test of memory of the course discussions or literature.

7. TRAINER REQUIREMENTS

In addition to the trainer requirements set out in the policy manual, Guide to becoming an IEMA Training Centre, trainers delivering this course must have recent relevant experience in carbon quantification and demonstrate technical competence in this area.

8. LEARNING OUTCOMES

1. Introduction and background
2. Drivers for carbon quantification
3. Carbon quantification standards and schemes
4. Principles and techniques of carbon quantification
5. Communicating carbon data
6. Reducing emissions and Net Zero

There are six Learning Outcomes for the IEMA Carbon Footprinting and Reporting course, which correspond to the sections of the course.

Learning Outcome 4 requires the development of implementation skills, and it is expected that training courses will reflect this by devoting substantial time and practical exercises to this element.

Learning Outcomes 1 and 2 are intended to be introductory and not detailed. Learning Outcome 6 similarly is intended to provide an overview and an introduction to the IEMA Pathways to Net Zero course, for those who have not yet taken that course.

LEARNING OUTCOME	ASSESSMENT CRITERIA (THE LEARNER CAN...)	PRESCRIBED CONTENT (THE LEARNER WILL BE FAMILIAR WITH...)	GUIDED LEARNING HOURS
1. Introduction and background	• Explain the essential mechanisms of climate change and the need to keep warming below 1.5^{0}C • Explain the types of GHGs and their global warming potentials, and typical sources • Explain key terminology used in carbon quantification and climate change mitigation • Explain relevant climate risks and opportunities	• Overview of the science behind climate change (its causes, the past rate of change and future projections) and the consensus for working towards a 1.5^{0}C Net Zero pathway • GHG categories (Kyoto and others) and their global warming potentials • Typical sources of GHGs, from industry, transport, land use, etc. • Climate change and quantification terminology (carbon neutrality, offsetting, Net Zero, emissions/removals, etc) • Impacts of climate change on business, including direct and supply chain • Introduction to terminology – sources/sinks, emissions reductions/removals, offsets, Scopes 1-4, etc)	0.75
2. Drivers for carbon footprinting and reporting	• Explain in outline the global frameworks for addressing climate change and their key mechanisms • Explain in outline the implications of UK government policy for organisations • Explain in outline the interrelationships between climate change and broader sustainability frameworks • Explain the importance of stakeholder and supply chain pressure in influencing organisational climate change strategy	• The global frameworks for addressing climate change: UNFCCC, IPCC, Paris Agreement, CoPs, SBTi, etc • Key mechanisms including national inventories and NDCs, market mechanisms (emissions trading), CDM, etc. • Overview of UK government policy including national carbon budgets, Net Zero Strategy, fiscal mechanisms, reporting and key legislation. Role of the Committee on Climate Change (CCC) • Interrelationships between climate change and other sustainability frameworks such as UN SDGs, GRI, etc.	0.5

LEARNING OUTCOME	ASSESSMENT CRITERIA (THE LEARNER CAN...)	PRESCRIBED CONTENT (THE LEARNER WILL BE FAMILIAR WITH...)	GUIDED LEARNING HOURS
		• Types (and examples) of stakeholder and supply chain pressure (applied to or by the organisation), and appropriate organisational responses • Taking account of the drivers in determining appropriate approaches to developing carbon footprints	
3. Carbon quantification standards and schemes	• Explain in overview the approaches of organisational quantification frameworks and UK Government requirements • Explain how an organisational carbon quantification strategy can be developed to meet these, together with any relevant sector codes • Explain that there are various standards for product and project quantification	• Overview of organisational quantification frameworks and standards (TFCD, GHG Protocol, CDP, ISO, etc.) • Overview of requirements of UK regulatory schemes (SECR, ESOS, etc.) • The existence of sector codes and standards (BRC, sector-specific GHG Protocol guides, etc.) • Overview of standards for product and project quantification	0.75
4. Principles and techniques of carbon footprinting and reporting	• Explain the relevance of the carbon quantification principles • Explain how to develop an organisational footprinting strategy, based on organisational and external drivers • Explain how to develop an organisational boundary • Explain the distinctions between the GHG Scopes and plan an applicable inventory, including relevant Scope 3 categories • Explain the hierarchy of methods for obtaining Scope 3 data • Implement a process for calculating emissions, based on selection of methods for acquisition of activity data and selection of appropriate emission factors • Manage the data collection process to ensure appropriate data quality, including addressing year-on-year changes in activities	• Principles (relevance, completeness, consistency, transparency, accuracy) • Approaches to establishing organisational footprint boundaries, including following the financial reporting boundary (based on examples included in the course materials) • Emission scopes (Scopes 1-3 and the emerging Scope 4 for avoided emissions) • Location vs Market based emissions factors • Factors in determining extent of Scope 3 emissions (boundaries), including stakeholder requirements (e.g. Cabinet Office PPN 06/21) • The decision-tree/hierarchy approach to selecting Scope 3 data quantification methods (supplier-specific, hybrid, average-data, spend-based) • Approaches to quantification activity data/emission factors, mass balance, etc. • Sources of emission factors	4

LEARNING OUTCOME	ASSESSMENT CRITERIA (THE LEARNER CAN...)	PRESCRIBED CONTENT (THE LEARNER WILL BE FAMILIAR WITH...)	GUIDED LEARNING HOURS
		• Good practice in managing data collection processes • The need to ensure inventory quality • Intensity reporting and benchmarks	
5. Communicating carbon data	• Identify appropriate methods for effective internal and external communications, taking account of reporting frameworks and standards (e.g. GHG Protocol, CDP, ISO 14064, etc.)	• Methods for effective internal and external communications (including in accordance with ISO 14001) • Using normalised data / intensity reporting • Advantages of effective communications of carbon data • Using financial arguments (ROI, whole life costing, etc) to support reduction initiatives • Benefits of external verification • Approaches to identifying applicable requirements of reporting frameworks (including regulatory, e.g. SECR) for footprint data	0.5
6. Reducing emissions and Net Zero	• Explain how carbon footprints are important in developing reduction and removals strategies, transition planning and demonstrating achievement • Explain approaches in outline for developing an emissions reduction strategy and working towards Net Zero • Appreciate how the IEMA Pathways to Net Zero course provides more detailed guidance	• Emissions reduction and removals options • Prioritisation of reduction scopes (Scopes 1 and 2, or Scope 3 if the supply chain is a priority) • IEMA GHG Hierarchy • SBTi approach to Net Zero • Benefits of the IEMA Pathways to Net Zero course	0.5

9. PROGRESSION AFTER THIS COURSE

Learners wishing to progress after this course should consider taking the following course:

IEMA Pathways to Net Zero

CONTACT US

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Thinking about quality training that focuses on environmental and sustainable solutions? IEMA provides IEMA Certified and Approved courses through our Training Centres. Whether you're looking for individual training or global business solutions, our team is on hand to help.

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