

## **Carbon Footprinting and Sustainability Certification Training Program**

Sofsource International Limited, a duly registered energy servicing and consulting firm specialized in providing tailored engineering management solutions. Our offerings encompass a range of services, including Distributed Fibre Optic Sensing for leak detection, Optical Gas Imaging for Fugitive Emission Leak Detection and Repair (LDAR) services, and GHG Emission Measurement/Quantification for Carbon Credit acquisition.

We extend globally recognized environmental sustainability services and training, meticulously crafted for both private enterprises, notably within the oil and gas industry, and public institutions, including Government MDAs. Our bespoke training initiatives are meticulously designed to meet the precise needs of your workforce, fostering capacity development and enhancement. Leveraging our extensive experience, expertise, internal resources, and robust partnerships with local and international educational entities, we deliver specialized training and support aimed at elevating the competencies, skills, and capabilities of your personnel.

Our portfolio of environmental sustainability training programs bears accreditation from esteemed bodies such as IEMA and CPD. IEMA, the premier professional organization for environment and sustainability practitioners, offers a suite of resources, tools, research, and formal training tailored to professionals across all career stages. Notably, the IEMA Certificate in Environmental Management furnishes a comprehensive grounding in environmental and sustainability principles. CPD accreditation ensures that our training modules meet stringent standards of quality and integrity. Completion of select modules, qualifies participants for CPD certification.

We pride ourselves on our adaptable delivery approaches, enabling us to tailor courses precisely to meet the unique training needs of your workforce. Our benchmarking training sessions are conducted by specialists with a deep understanding of benchmarking methodologies.

### **Some features of our specialist trainings are:**

- Courses can run at any location of your choice, locally or internationally (Nigeria, UK, USA, Dubai, Singapore, etc.)
- Courses are designed to run for 5-Days but can be modified to run for shorter/longer periods depending on program and clients' requirements.
- This course has competency assessments followed by certification.

### **Learning Outcomes:**

Upon completion of the training program, participants will be able to:

- Understand the fundamentals of carbon footprinting, including its importance in climate action and the methodologies involved.
- Conduct organizational carbon footprint assessments, determine boundaries, prioritize data collection, and adhere to verification and certification processes according to ISO 14064-3 and PAS 2060 standards.
- Develop product carbon footprints aligned with international standards, utilize footprinting software effectively, and report emissions accurately, including renewable energy reporting.
- Set science-based targets for carbon reduction, engage stakeholders, and develop action plans in line with the route to net-zero emissions, considering the organization's specific business needs.
- Effectively communicate progress on carbon reduction efforts to stakeholders, utilize marketing communication resources, and implement learned strategies in their organizations to drive meaningful climate action.

## **Program Objectives:**

- **Understanding Carbon Footprinting Fundamentals:** To provide participants with a comprehensive understanding of the principles, methodologies, and significance of carbon footprinting in the context of climate action.
- **Organizational Footprinting and Verification:** To equip participants with the knowledge and skills required to conduct organizational carbon footprint assessments, verify the accuracy of footprint data, and obtain certification according to international standards.
- **Product Footprinting and Renewable Energy Reporting:** To enable participants to develop product carbon footprints aligned with international standards, report emissions accurately, and assess options for utilizing renewable energy sources.
- **Setting Science-based Targets and Net Zero Strategies:** To guide participants in setting science-based targets for carbon reduction, engaging stakeholders effectively, and developing action plans aligned with the route to net-zero emissions.
- **Communicating Progress and Next Steps:** To empower participants with strategies for effectively communicating carbon reduction efforts to stakeholders, utilizing marketing communication resources, and implementing learnings in their organizations.

## **Our Foundation Certificate in Environmental Management course encompasses a comprehensive range of topics, including:**

- Analysis of global trends and their implications for the environment, society, the economy, and organizational operations.
- Principles of sustainable business and governance, focusing on ethical and responsible practices.
- Core environmental principles guiding sustainable development and resource management.
- Exploration of major policies and legislation shaping environmental management practices.
- Utilization of key tools, techniques, systems, and practices aimed at enhancing sustainability performance within organizations.
- The pivotal role of innovation in fostering the development of sustainable products, services, and solutions.
- Methods for data collection, analysis, and evaluation to inform decision-making processes.
- Strategies for conducting research and planning initiatives to address environmental challenges and promote sustainability.
- Effective communication strategies and mechanisms for providing feedback on sustainability initiatives.
- Engagement with stakeholders to foster collaboration and garner support for sustainability efforts.
- Utilization of tools and techniques for identifying opportunities and mitigating risks related to environmental management.
- Implementation of measures to enhance environmental and sustainability performance within organizational settings.
- Assessment for the Foundation Certificate in Environmental Management is conducted through a 1-hour multiple-choice exam, administered online.

### **Five-Days Training Syllabus: Carbon Footprinting and Climate Action**

This training syllabus is designed to provide participants with comprehensive knowledge and practical skills in carbon footprinting, verification, certification, and climate action strategies. Each day will include a mix of theoretical sessions, practical exercises, case studies, and interactive discussions to enhance learning and application of concepts.

#### **Day 1: Understanding Carbon Footprinting Fundamentals**

##### **Morning Session:**

- Introduction to Carbon Footprinting

- Importance of Carbon Footprinting in Climate Action
- Overview of GHG Protocol Standards
- Scope 1, 2, and 3 Emissions: Definitions and Examples
- Carbon Footprinting Methodologies and Tools

**Afternoon Session:**

- Practical Exercise: Building an Organizational Process Map
- Discussion: Determining Boundaries and Prioritizing Data Collection
- Case Study Analysis: Collecting Data for Carbon Footprinting
- Q&A Session

**Day 2: Organizational Footprinting and Verification**

**Morning Session:**

- Organizational Footprinting Overview
- Tailoring Footprinting Analysis to Organizational Needs
- Verification and Certification Processes
- ISO 14064-3 and PAS 2060 Standards: Requirements and Benefits

**Afternoon Session:**

- Value Chain Carbon Footprints: Risks and Opportunities
- Independent Verification and Certification of Carbon Claims
- Case Study Analysis: Applying Verification and Certification
- Q&A Session

**Day 3: Product Footprinting and Renewable Energy Reporting**

**Morning Session:**

- Product Footprinting Principles and Models
- Aligning Product Footprints with International Standards
- Introduction to Footprint Expert Software
- Case Study: Developing Product Footprints

**Afternoon Session:**

- GHG Protocol Scope 2 Guidance and Renewable Energy Reporting
- Assessing Low-Carbon Energy Options
- Practical Exercise: Reporting Emissions Correctly
- Q&A Session

**Day 4: Setting Science-based Targets and Net Zero Strategies**

**Morning Session:**

- Introduction to Science-based Targets (SBTs)
- Aligning Carbon Reduction Targets with SBTi Requirements
- Stakeholder Engagement Strategies
- Submission Process to the SBTi

**Afternoon Session:**

- The Route to Net Zero Standard: Framework and Objectives
- Certification Tiers: Taking Action, Advancing, Leading
- Developing Action Plans and Measuring Progress
- Case Studies and Group Discussions

## **Day 5: Communicating Progress and Next Steps**

### **Morning Session:**

- Marketing Communication Resources for Stakeholder Engagement
- Case Study: Effective Communication of Carbon Reduction Efforts
- Developing Strategies for Transparent Reporting

### **Afternoon Session:**

- Review and Assessment of Training Content
- Action Planning: Implementing Learnings in the Workplace
- Graduation Ceremony and Distribution of Certificates

### **Target Audience for the Training Program:**

- Environmental Managers and Sustainability Officers: Professionals responsible for implementing sustainability initiatives within organizations, including carbon footprinting, verification, and reporting.
- Supply Chain Managers: Individuals involved in managing supply chains who need to understand the importance of carbon footprinting and its implications for identifying emission hotspots and opportunities for improvement.
- Corporate Sustainability Teams: Members of sustainability teams tasked with developing and implementing carbon reduction strategies, setting science-based targets, and aligning organizational goals with international standards.
- Quality Assurance and Compliance Officers: Professionals responsible for ensuring compliance with carbon footprinting standards, verification processes, and certification requirements.
- Product Managers and Designers: Professionals responsible for product development and design who need to integrate environmental considerations, including carbon footprinting, into product lifecycle management.
- Marketing and Communications Professionals: Individuals responsible for communicating environmental initiatives and product sustainability to internal and external stakeholders, including customers, investors, and the general public.
- Business Leaders and Decision-makers: Executives and decision-makers interested in understanding the business case for carbon footprinting, its impact on corporate reputation, risk management, and long-term sustainability.
- Consultants and Advisors: Independent consultants and advisors working with organizations to develop and implement carbon management strategies, verify carbon footprints, and obtain certification.
- Students and Researchers: Individuals studying environmental science, sustainability, or related fields who want to gain practical knowledge and skills in carbon footprinting and climate action strategies.

## **Specialised Training on Fugitive Emission Leak Detection and Repair (LDAR) Services**

**Sofsource International Limited**

**St. Annes Court 41 Jute Street AB24 3EX Aberdeen United Kingdom**

The objective of this training program is to equip participants with the knowledge and skills required to effectively detect, monitor, and repair fugitive emissions in industrial settings using advanced LDAR technologies.

## **Duration: 5 days**

### **Day 1: Introduction to Fugitive Emissions and LDAR**

- Understanding fugitive emissions and their impact on the environment and industrial operations.
- Overview of Leak Detection and Repair (LDAR) programs.
- Introduction to regulatory requirements and industry standards governing fugitive emissions management.

### **Day 2: Fundamentals of Fugitive Emission Detection**

- Principles of fugitive emission detection.
- Types of fugitive emissions and their characteristics.
- Overview of LDAR methodologies and technologies.

### **Day 3: Advanced LDAR Technologies**

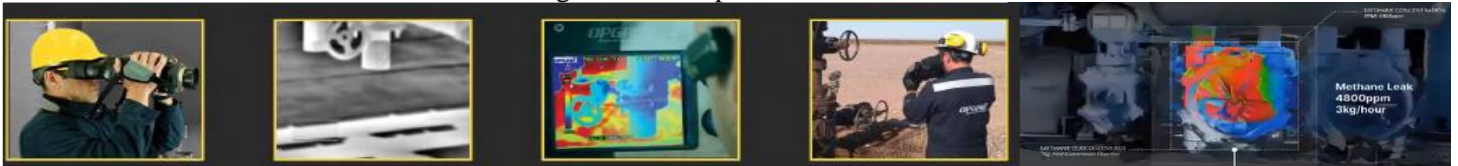
- In-depth exploration of cutting-edge LDAR technologies, including:
  - Infrared cameras
  - Gas analyzers
  - Optical gas imaging
- Hands-on training in the use and operation of LDAR equipment.

### **Day 4: Data Interpretation and Analysis**

- Techniques for interpreting data collected from LDAR inspections.
- Identifying fugitive emission sources and quantifying emission rates.
- Case studies and practical exercises on data analysis.

### **Day 5: Fugitive Emission Repair and Control**

- Strategies for prioritizing and scheduling repair activities.
- Techniques for fugitive emission repair, including:
  - Gasket replacement
  - Sealant application
  - Flange tightening
- Implementing preventive maintenance measures to minimize future emissions.
- Overview of emission control technologies and best practices.



### **Assessment:**

Participants will be assessed through a combination of written tests, practical demonstrations, and case study analysis to evaluate their understanding of LDAR principles, proficiency in using LDAR technologies, and ability to interpret and act on collected data effectively.

### **Training Methodology**

The Cost Benchmarking for Oil and Gas training course will combine; Presentations with engaging and interactive style Review of complex and dynamic software tools which aid benchmarking decision making Practical exercises, supported by

video materials, Break out sessions for syndicate group activities and case studies Review of current peer to peer baseline trends in the Petroleum Industry Value Chain.

### **Who Should Attend**

This training program is designed for individuals involved in industrial operations and environmental management, including:

- Environmental engineers and specialists
- Facility managers and supervisors
- Maintenance technicians
- Health and safety officers
- Compliance managers
- Regulatory affairs professionals
- Sustainability officers
- Process engineers.
- Environmental consultants
- Public consultants

Any professionals responsible for managing fugitive emissions and ensuring compliance with environmental regulations in industrial settings would benefit from attending this training.