REQUEST FOR PROPOSAL

DEVELOP AND INSTRUCT A NEW ASHRAE LEARNING INSTITUTE (ALI) COURSE ON WHOLE LIFE DECARBONIZATION STRATEGIES IN NEW BUILDINGS DESIGN

ASHRAE is a professional engineering association with more than 50,000 members from over 130 nations dedicated to advancing the arts and sciences of heating, ventilation, air conditioning, refrigeration, and building systems to serve humanity and promote a sustainable world. To address urgent industry needs in reducing carbon emissions from the built environment, ASHRAE is seeking proposals from qualified individuals to develop and deliver a custom instructor-led ASHRAE Learning Institute (ALI) course focused on whole life decarbonization strategies for new building design.

Course: How to Apply Whole Life Decarbonization Strategies to New Buildings Design

Proposal Due Date: February 23, 2026 (5:00 PM Eastern Time)

Anticipated Selection Date: March 9, 2026

All proposals must be received in electronic format prior to 5:00 PM (Eastern Time) on the due date.

Electronic copies must be submitted to **kmurray@ashrae.org**.

Questions should be directed to **edu@ashrae.org**.

ASHRAE reserves the right to reject any or all proposals or to not proceed if circumstances dictate.

STATEMENT OF WORK

Background and Vision

The design and construction community faces increasing pressure to reduce greenhouse gas emissions across the entire life cycle of buildings. While ASHRAE members are actively engaged in operational efficiency and energy reduction strategies, there remains a critical

gap between **whole life carbon theory** and **practical application in new building design**. This course will provide technical professionals with actionable methods for integrating whole life decarbonization strategies into design practice.

By focusing on both embodied and operational carbon, this training will advance the knowledge and capacity of engineers, architects, contractors, and facility managers to design buildings that minimize carbon emissions throughout their full life span. The course aligns with global standards, including EN 15978, and complements ASHRAE's broader decarbonization education initiatives.

Objective

The goal is to develop a **two-part (3 hours each) instructor-led course** that provides technical professionals with the frameworks, tools, and case studies needed to apply whole life decarbonization strategies in new building design. Participants will learn to:

- Understand the framework of whole life carbon based on EN 15978.
- Identify common MEP decarbonization strategies at each stage of the building life cycle.
- Apply life cycle assessment (LCA) techniques to evaluate trade-offs between embodied and operational carbon.
- Communicate design decisions and carbon impacts to organizational leadership.
- Manage refrigerant-related emissions and evaluate funding options for decarbonization.
- Incorporate case studies across multiple building types, from office to hospital to data center.

Scope

Targeted Audience

- Design engineers, consulting engineers, and architects
- Facility managers, contractors, and other building professionals involved in design decision-making

Course Length

Two linked parts (3 hours each), which may be delivered sequentially or independently.

Content Level

Intermediate to Advanced

Content Focus

The course will emphasize practical methods for reducing carbon emissions throughout the building life cycle, equipping participants with applied strategies that extend beyond operational energy efficiency. The focus areas include:

1. Whole Life Carbon Frameworks
    - Application of EN 15978 to new construction projects
    - Integration of carbon considerations from design through end-of-life

2. MEP and Design Trade-offs
    - Evaluating embodied vs. operational carbon in HVAC and building systems
    - Right-sizing equipment and selecting low-carbon options, including refrigerants
3. Construction and Operations
    - Strategies for reducing carbon during construction and early-stage operation
    - Best practices for refrigerant management and operational audits
4. End-of-Life and Beyond
    - Circular strategies for MEP equipment
    - Recycling, reuse, and recovery pathways
5. Tools, Metrics, and Case Studies
    - Early energy modeling and embodied carbon calculators
    - Case studies from multiple building sectors (offices, hospitals, data centers, schools, etc.)
6. Funding and Policy Considerations
    - Overview of funding mechanisms and resources available for decarbonization projects

Together, these content areas will help participants bridge the gap between theory and application, preparing them to integrate decarbonization strategies into real-world projects.

Content Outline
The full outline is attached [link provided in source materials], but course content will include:

1. Introduction and overview of whole life decarbonization
2. Carbon in buildings across design stages (EN 15978 framework)
3. MEP strategies for reducing embodied and operational carbon
4. Construction practices and operational strategies
5. End-of-life and circular economy considerations
6. Whole building life cycle assessment and tools
7. Onsite power and utility carbon considerations
8. Case studies by building type
9. Funding options and resources for owners
10. ASHRAE resources for decarbonization

CONTENT DEVELOPER/INSTRUCTOR QUALIFICATIONS
The selected course developer/instructor must demonstrate expertise in decarbonization strategies, life cycle assessment, and sustainable building design, along with proven experience in adult learning and professional training. Familiarity with ASHRAE standards and participation in related technical committees is strongly preferred. The ability to design engaging, technically rigorous instruction that includes case studies, tools, and interactive activities is required.

PROPOSAL REQUIREMENTS

Proposals must include:

- Resume with company/consultant profile and relevant experience
- Examples of similar course development projects (particularly on decarbonization or sustainable design)
- Sample course materials (e.g., slides, outlines, or exercises)
- Proposed approach and methodology
- Draft timeline with milestones and review points
- Sample course materials (e.g., slides, outlines, or exercises)
- Summary of project costs

PROPOSAL EVALUATION CRITERIA

- Understanding of the Statement of Work and proposed approach (25%)
- Past performance in developing technical training and/or decarbonization materials (20%)
- Experience with design and engineering audiences (35%)
- Qualifications and expertise of proposed personnel (20%)

In addition to these technical criteria, cost will be a factor. Selection will be based on best value for ASHRAE.

ADDITIONAL INFORMATION

- This project is considered **"Work for Hire."** ASHRAE will market and hold the exclusive copyright and intellectual property rights to the training, including any associated software and source code.
- As this is a two-part (3+3 hour) course, development compensation may be negotiated. Instructors will also receive an honorarium each time they deliver the course.
- Only ASHRAE may license use of the training to third parties.
- All course materials must comply with ASHRAE's commercialism policy: https://www.ashrae.org/about/governance/ashrae-commercialism-policy-and-guidelines
- Developers must obtain permission to reprint any third-party images or content; ASHRAE will not secure permissions on their behalf.