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CERTIFIED DECARBONIZATION PROFESSIONAL - CDP OVERVIEW ONLINE TRAINING BY KRISHNAJI PAWAR

LEED AP(BD+C),GSAS CGP,GCP,ISO 14001

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MODULE

5

Professional Certification for Decarbonization Audits

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CERTIFIED DECARBONIZATION PROFESSIONAL - CDP OVERVIEW

The American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE) is an international organization dedicated to advancing heating, ventilation, air conditioning, and refrigeration for a sustainable world, and its Certified Decarbonization Professional certification program validates job competency.

Learning Objectives

- Introduction
- Climate change and sectoral decarbonization approaches
- Strategies for a decarbonization-built environment
- Building Operational and Embodied Carbon, Kyoto Protocol, and Beyond.
- Professional certification for decarbonization audits
- Carbon, GHG, and Sustainability Accounting
- Summary and Resources
- ASHRAE CDP Practice Test V.4.1: Test Your Knowledge!



INTRODUCTION

- ASHRAE is an international organization dedicated to advancing heating, ventilation, air conditioning, and refrigeration.
- The CDP certification program validates job competency in internationally recognized technical information.
- ASHRAE does not discriminate based on race, color, sex, religion, disability, or national/ethnic origin.
- The CDP certification validates competency in assessing, analyzing, and developing sustainable strategies to reduce/eliminate the life-cycle carbon footprint of buildings.
- Over 4,000 ASHRAE certifications have been earned in key built-environment fields.

ASHRAE CERTIFIED DECARBONIZATION PROFESSIONAL (CDP) CREDENTIAL BENEFITS

- Provides greater recognition (72%).
- Increases credibility (69%).
- Improves career opportunities (60%).
- Increases earning power (43%).
- CDP digital badge enhances visibility and recognition.
- Positions candidate for continued recognition and success.
- The ASHRAE CDP Exam Subcommittee developed the CDP Exam blueprint after an industry-wide job task analysis, involving over 800 respondents, and was approved by the Certification Committee in February 2024.



DECARBONIZATION AUDITING PROFESSIONALS' ROLE

- Assist companies and organizations in reducing their carbon footprint.
- Understand principles of the Paris climate agreement, Kyoto Protocol, and other guidelines.
- Interpret trends and legal requirements.
- Conduct carbon audits and emission inventories.
- Identify reduction opportunities.
- Set up a GHG emissions management program.
- Report carbon emissions in compliance with international standards.
- Structure financing and marketing for project success



DECARBONIZATION PROFESSIONAL CERTIFICATION EXAM BLUEPRINT

Section I: CDP Exam Weightings by Domain

Domain	Description	Weighting	Number of Exam Questions
1	Decarbonization Drivers	13%	13
2	Project Planning	14%	14
3	Project Development	13%	13
4	Construction and Renovation	15%	15
5	Passive Efficiency	11%	11
6	Active Efficiency	13%	13
7	Facility Management	12%	12
8	Distributed Energy Resources	9%	9
TOTAL		100%	100



ASHRAE Certification

ASHRAE offers six different certifications to provide value to professionals in the build environment

[ashrae.org](https://www.ashrae.org)

Section II: CDP Exam Weightings by Subdomain**Domain 1: Decarbonization Drivers**

Subdomain	Description	Weighting	Number of Exam Questions
1.1	Climate-Related Decarbonization Drivers	7%	7
1.2	Organization-Related Decarbonization Drivers	6%	6
TOTAL		13%	13

Domain 2: Project Planning

Subdomain	Description	Weighting	Number of Exam Questions
2.1	Building (Built Environment) Decarbonization Audit	4%	4
2.2	Policy and Regulation Review	3%	3
2.3	Financial Planning	4%	4
2.4	Emissions Reduction Roadmap	3%	3
TOTAL		14%	14

Domain 3: Project Development

Subdomain	Description	Weighting	Number of Exam Questions
3.1	Integrated Project Delivery	2%	2
3.2	Building Performance Simulation and Analysis	4%	4
3.3	Whole Building Life-Cycle Assessment	6%	6
3.4	Building Information Modeling (BIM)	1%	1
TOTAL		13%	13

Domain 4: Construction and Renovation

Subdomain	Description	Weighting	Number of Exam Questions
4.1	Building Material Reuse	2%	2
4.2	Low-Carbon Building Materials	4%	4
4.3	Low Global Warming Potential (GWP) Refrigerants	3%	3
4.4	Construction Material Waste Reduction	2%	2
4.5	Building Commissioning	4%	4
TOTAL		15%	15

Domain 5: Passive Efficiency

Subdomain	Description	Weighting	Number of Exam Questions
5.1	Building Envelope	7%	7
5.2	Natural Ventilation	4%	4
TOTAL		11%	11

Domain 6: Active Efficiency

Subdomain	Description	Weighting	Number of Exam Questions
6.1	High Performance HVAC&R Equipment	3%	3
6.2	Beneficial Electrification	2%	2
6.3	Building Management and Control Systems	4%	4
6.4	Lighting and Plug-Load Management	2%	2
6.5	Water Conservation	2%	2
TOTAL		13%	13

Domain 7: Facility Management

Subdomain	Description	Weighting	Number of Exam Questions
7.1	Indoor Environment Quality Management	2%	2
7.2	Refrigerant Management	2%	2
7.3	Integrated Facility Management	3%	3
7.4	Retrocommissioning	3%	3
7.5	Ongoing Commissioning	2%	2
TOTAL		12%	12

Domain 8: Distributed Energy Resources

Subdomain	Description	Weighting	Number of Exam Questions
8.1	On-Site Renewable Energy	2%	2
8.2	Energy Storage Systems	2%	2
8.3	Electric Vehicle Charging	1%	1
8.4	Demand Flexibility	2%	2
8.5	Off-Site Renewable Energy	2%	2
TOTAL		9%	9



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CERTIFIED
DECARBONIZATION
PROFESSIONAL
CDP EXAM
QUESTION BANK

On-demand Learning Courses and
Exam Question Banks

Learning Objectives

- Five practice exams with over 500 questions.
- Learn reasoning and knowledge for each question.
- Assess and create sustainable methods to reduce buildings' carbon footprint.
- Learn decarbonisation management and report carbon emissions.
- Recognize strategies for smart choices.
- Experience CDP exam and consider practice test part of education.
- Includes 121+ Key Terminology Flash Cards and CDP_Engineering and HVAC Design Equations.



Who can benefit?

- Carbon auditing professionals seeking ASHRAE CDP certification
- Industrial engineers, energy managers, facilities and business managers.
- Utility, consultant, contractor, financial officers, supply chain.
- Experts at energy service companies select and implement the best GHG reduction solutions.
- Young energy professionals eager to help their company reduce GHGs.





Benefits of our Certified Decarbonisation Professional- CDP Exam Question Bank

- Over 500 questions in 5 practice exams.
- Covers GHG emissions management program, international carbon emissions reporting, and emissions verification.
- Encourages understanding of reasoning and related knowledge areas.
- Encourages smart decision-making through strategies.
- Includes 121+ Key Terminology Flash Cards.
- Includes CDP_Engineering and HVAC Design Equations.





**ASHRAE'S CDP EXAM QUESTION
BANK**

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THANK YOU

