

CERTIFICATION STUDY GUIDE

CERTIFIED DECARBONIZATION PROFESSIONAL (CDP)

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CONTENTS

INTRODUCTION 9

How to Use This Study Guide 10
CDP Exam Preparation Resources 14

DOMAIN 1: DECARBONIZATION DRIVERS 16

Overview 16
Section 1.A 18
Subdomain 1.1: Climate-related Decarbonization Drivers 18
Quick Quiz 18
Self-assessment 19
Section 1.B 21
Subdomain 1.2: Organization-related Decarbonization Drivers 21
Quick Quiz 21
Self-assessment 22
Practice Exam Questions 25

DOMAIN 2: PROJECT PLANNING 28

Overview 28
Section 2.A 29
Subdomain 2.1: Building (Built Environment) Decarbonization Audit 29
Subdomain 2.2: Policy and Regulation Review 29
Quick Quiz 29
Self-assessment 31
Section 2.B 35
Subdomain 2.3: Financial Planning 35
Subdomain 2.4: Emissions Reduction Roadmap 35
Quick Quiz 35
Self-assessment 36
Practice Exam Questions 38

DOMAIN 3: PROJECT DEVELOPMENT 42

Overview 42
Section 3.A 43
Subdomain 3.1: Integrated Project Deliver 43
Subdomain 3.2: Building Performance Simulation and Analysis 43
Quick Quiz 43
Self-assessment 45
Section 3.B 48
Subdomain 3.3: Whole Building Life-cycle Assessment 48
Subdomain 3.4: Building Information Modeling (BIM) 48
Quick Quiz: 48
Self-assessment 49
Practice Exam Questions 51

DOMAIN 4: CONSTRUCTION AND RENOVATION 55

Overview 55
Section 4.A 56
Subdomain 4.1: Building Material Reuse 56
Subdomain 4.2: Low-carbon Building Materials 56
Quick Quiz: 56
Self-assessment 57

Section 4.B 58
Subdomain 4.3: Low Global Warming Potential (GWP) Refrigerants 58
Subdomain 4.4: Construction Material Waste Reduction 58
Subdomain 4.5: Building Commissioning 58
Quick Quiz 58
Self-assessment 60
Practice Exam Questions 62

DOMAIN 5: PASSIVE EFFICIENCY 66

Overview 66
Section 5.A 67
Subdomain 5.1: Building Envelope 67
Quick Quiz 67
Self-assessment 68
Section 5.B 71
Subdomain 5.2: Natural Ventilation 71
Quick Quiz 71
Self-assessment 72
Practice Exam Questions 73

DOMAIN 6: ACTIVE EFFICIENCY 75

Overview 75
Section 6.A 76
Subdomain 6.1: High Performance HVAC&R Equipment 76
Quick Quiz 76
Self-assessment 78
Section 6.B 80
Subdomain 6.2: Beneficial Electrification 80
Quick Quiz 80
Self-assessment 81
Section 6.C 82
Subdomain 6.3: Building Management and Control Systems 82
Subdomain 6.4: Lighting and Plug-load Management 82
Subdomain 6.5: Water Conservation 82
Quick Quiz 82
Self-assessment 83
Practice Exam Questions 85

DOMAIN 7: FACILITY MANAGEMENT 88

Overview 88
Section 7.A 90
Subdomain 7.1: Indoor Environment Quality Management 90
Subdomain 7.2: Refrigerant Management 90
Quick Quiz 90
Self-assessment 91
Section 7.B 93
Subdomain 7.3: Integrated Facility Management 93
Quick Quiz 93
Self-assessment 94
Section 7.C 96
Subdomain 7.4: Building Retrocommissioning 96
Subdomain 7.5: Building Ongoing Commissioning 96
Quick Quiz 96
Self-assessment 97
Practice Exam Questions 99

DOMAIN 8: DISTRIBUTED ENERGY RESOURCES 102

Overview 102
Section 8.A 104
Subdomain 8.1: On-site Renewable Energy 104
Subdomain 8.2: Energy Storage Systems 104
Quick Quiz 104
Self-assessment 105
Section 8.B 107
Subdomain 8.3: Electric Vehicle Charging 107
Subdomain 8.4: Demand Flexibility 107
Subdomain 8.5: Off-site Renewable Energy 107
Quick Quiz 107
Self-assessment 109
Practice Exam Questions 112

MY CDP CERTIFICATION EXAM STUDY MAP 114

Task Notes 114
Study Plan 128

PRACTICE EXAM QUESTIONS: ANSWER KEY 130

Domain 1: Decarbonization Drivers 130
Domain 2: Project Planning 130
Domain 3: Project Development 131
Domain 4: Construction and Renovation 132
Domain 5: Passive Efficiency 133
Domain 6: Active Efficiency 133
Domain 7: Facility Management 133
Domain 8: Distributed Energy Resources 134

APPENDIX 135

Appendix A: Common Building Decarbonization Formulas 135
Appendix B: Certified Decarbonization Professional (CDP) Exam Blueprint 135
Section I: CDP Exam Weightings by Domain 136
Section II: CDP Exam Weightings by Subdomain 137
Section III: CDP Exam Tasks 140

GLOSSARY 147

REFERENCES 149

Introduction

ASHRAE is an international membership society committed to serving humanity by advancing the arts and sciences of heating, ventilation, air conditioning, refrigeration and their allied fields, and to a healthy and sustainable built environment for all. The Certified Decarbonization Professional (CDP) certification program supports this mission and vision by validating job competency as understood in internationally recognized technical information, reflecting the best practices that lead our industry.

PURPOSE OF THE CDP CERTIFICATION

The CDP certification program validates the competency of the decarbonization professional to do the following:

Assess, analyze, and develop effective and sustainable strategies that reduce/eliminate the life-cycle carbon footprint of new and existing buildings.

More information about the CDP credential and eligibility criteria can be found on the ASHRAE website and in the CDP Candidate Guidebook.

This Study Guide provides a framework and tools to help you self-assess your knowledge in building decarbonization and create a customized, self-paced study plan for the CDP exam. ASHRAE offers numerous resources in the field. The Study Guide will help you target which resources are most beneficial based on your own professional development needs.

In this Study Guide, you, the candidate, are expected to evaluate your knowledge and skills in the decarbonization job tasks found in eight Domains.

Depending on your experience level, some of these tasks may be a bit daunting or unfamiliar. If that is the case, consider it an opportunity for growth and devote extra attention to these matters. David Underwood, P. Eng., 2015-2016 ASHRAE President, once said that “we in the engineering community are in the solutions industry.” Based on this statement, it is your job to identify problems and produce solutions. The tasks included in Domains 1-8 represent the knowledge and skills necessary to produce solutions for building decarbonization problems, and this Study Guide represents your opportunity to fill gaps in your knowledge and skill base.

Using navigation buttons at top of screen: The buttons located at the top of each page allow you to navigate through this document. Click on these buttons to take you Back to view the last page you were on or to the First Page, Previous Page, Next Page, or Last Page. The Glossary button provides a direct link to the full glossary.

THE OVERARCHING GOALS OF THE STUDY GUIDE ARE TO:

- Provide a framework and tools for customized, self-paced exam preparation
- Focus your review on key elements of recommended exam preparation resources
- Review knowledge and skills needed to assess, analyze, and develop effective and sustainable strategies that reduce/eliminate the life-cycle carbon footprint of new and existing buildings.
- Build knowledge and skills across the eight (8) Domains of the CDP exam, which are:

1. **Domain 1:** Decarbonization Drivers
2. **Domain 2:** Project Planning
3. **Domain 3:** Project Development
4. **Domain 4:** Construction and Renovation
5. **Domain 5:** Passive Efficiency
6. **Domain 6:** Active Efficiency
7. **Domain 7:** Facility Management
8. **Domain 8:** Distributed Energy Resources

- Identify key terms and concepts used by decarbonization professionals
- Provide the opportunity for you to test your acumen and readiness for the CDP exam
- Help you assess your own individual core content strengths and weaknesses, and build a study map customized for your needs

How to Use This Study Guide

This Study Guide is designed as a workbook that contains tools you can use to assess what you need to focus on as you prepare to take the exam.

The Study Guide is organized by Domains and Tasks. There are eight Domains total, all of which have numerous Tasks, so we've broken them down into segments. The CDP certification exam was developed to assess your competence to perform each of these Tasks as organized under each Domain and Subdomain, so this is a great way to organize your study leading up to the exam and to also build and validate your knowledge and skills as a building decarbonization professional.

ASHRAE offers numerous resources to help you study for the CDP certification exam; however, which resources do you need to review to prepare for the exam? The tools in this Study Guide link the Domains and Tasks with the resources available from ASHRAE to help you review and study the content. The tools will also help you determine which Tasks you need to focus upon. So, for example, if through the Self-assessment and Quick Quiz contained herein you discover that you have limited knowledge of Domain 1: Climate-Related Decarbonization Drivers, Task 1: "Describe the impact of climate change on building energy systems and operation," then the Study Guide will direct you to the *Position Document on Building Decarbonization*, p. 1-12.

Study Tools

In this Study Guide you will find the following tools for each Domain that will help you assess what you already know, and importantly, what you don't know, step-by-step:

- Quick Quiz
- Self-assessment, including the Task-by-Task Resource Guide, which will direct you to core resources you can use to study, including deep-dive resources, in some instances, which you can use to dive more deeply into that topic on a more advanced level
- Practice Exam Questions
- Study Map

Used together, the tools in the Study Guide and ASHRAE's resources will help you create a targeted, customized study plan based upon your own needs. You will note that we have broken some Domains into multiple sections to help you pace yourself through the material.

You will start each section by taking a Quick Quiz which will help you test your knowledge of key terms and concepts for that section. Next, you will complete a Self-assessment to capture the areas you need to focus on as you study for your certification exam. These tools will help you assess your knowledge and skills and organize your study of the content.

Throughout this Study Guide, you'll find instructions on how to use each study tool, but here's an overview: