

BOC 1009 – Building Scoping for Operational Improvement – Online Introduction

Total Instruction Time: 1 hour

Prerequisites. None

E-Learning Description. Prior to class, participants *complete 5 e-learning modules sequentially*. Participants are introduced to the basic concepts of scoping for a building tune-up to prepare them for an in-depth presentation in the classroom.

1. What is scoping and why it is needed
2. The Steps of the Scoping Process
3. How to make a Site Visit Plan
4. The basics of Data Collection
5. How to get started with Data Analysis

PROJECT: None



Learning Objectives

At the completion of Building Scoping for Operational Improvement a participant will be able to:

- ✓ *Define scoping and explain why it is needed.*
- ✓ *Make a site visit plan*
- ✓ *Collect basic data for a scoping report and perform basic analysis.*

Textbook

BOC 1009 – Building Scoping for Operational Improvement Handbook, NEEC

Evaluation

Quizzes 100%

E-Learning Outline

Introduction to Scoping

What is a Building Energy Tune-Up?

What is Scoping?

Two Approaches to Scoping

Scoping Process

Develop a Scoping Action Plan

Elements of a Scoping Action Plan

Completing a Building Scoping

Staff Interviews

Walkthrough Plan Elements

Monthly Billing Analysis

Interval Data Analysis

System Description

Document Checks

Equipment and System Checks

Activity 1



Entering and Analyzing Utility Bill Information

Load Factor Calculation

Excess Use Calculation

Utility Consumption Analysis Tool

Activity 2

Analysis of Utility Data

Energy Use Index

Review of Benchmarking with Portfolio Manager

Seasonal Trends

Load and Occupancy Factors

Activity 3

Introduction to Interval Data

What is Interval Data?

Sources of Interval Data

Usefulness of Interval Data

What Can Interval Data Tell You?

Software Tools

Activity 4

BOC Online Technical Requirements

Computers should meet the following requirements:
Windows XP, Vista or Windows7:



1. 1 GHz or equivalent computer with a minimum of 512 MB of RAM (1 GB recommended), a color monitor, a DSL or cable modem for broadband access, a sound card and headphones or speakers;
2. Mozilla Firefox (<http://www.mozilla.com/en-US/firefox/personal.html>);
3. An account with an ISP (Internet Service Provider);
4. A minimum of 500 MB of free space on their computer hard drive.
5. Microsoft Office or Apache OpenOffice (<http://download.openoffice.org/>)
6. Adobe Acrobat Reader
(<http://www.adobe.com/products/acrobat/readstep2.html?promoid=BUIGO>)
7. Adobe Flash Player
(http://www.adobe.com/shockwave/download/download.cgi?P1_Prod_Version=ShockwaveFlash&promoid=BUIGP)
8. QuickTime Player (<http://www.apple.com/quicktime/download/>)
9. Silverlight (<http://www.microsoft.com/getsilverlight/Get-Started/Install/Default.aspx>)
10. Anti-virus software

Macintosh OSX:



1. 1 GHz or equivalent computer with a minimum of 512 MB of RAM (1 GB recommended), a color monitor, a DSL or cable modem for broadband access, a sound card and headphones or speakers;
2. Mozilla Firefox (<http://www.mozilla.com/en-US/firefox/personal.html>);
3. An account with an ISP (Internet Service Provider);
4. A minimum of 500 MB of free space on their computer hard drive.
5. Microsoft Office for Mac or Apache OpenOffice (<http://download.openoffice.org/>).
6. Adobe Acrobat Reader (<http://www.adobe.com/products/acrobat/readstep2.html?promoid=BUIGO>)
7. QuickTime Player (<http://www.apple.com/quicktime/download/>)
8. Anti-virus software