



SECTION 8

Green Globes EB Program

LEARNING OBJECTIVES

- Describe the features and eligibility.
- List and explain the EB Environmental Assessment Areas.
- Understand the assessment and certification process.

The Green Globes for Existing Buildings rating system assesses actual building performance and operations by helping building owners and facility managers benchmark their progress, track return on investment (ROI), and avoid performance slippage.

Program Features

SURVEY

The Green Globes for Existing Building program includes one online survey which is required as part of the assessment process. Different than NC and SI, the EB survey is used by both the user and the assessor. Only one version of the survey is retained with the most recent saved responses.

The survey is broken into sections and criteria. Criteria are allocated specific point values according to the response provided (Yes, No, N/A, or a threshold value). The user must select “Save and Continue” at the bottom of each page to save responses and advance to the next page.

The Green Globes online system is interactive and automatically calculates the projected Green Globes score based upon the entered responses to the survey questions. Each time the user saves, the projected score updates accordingly.

The system also indicates how many pages of the survey have saved responses. Please note, the count is based upon the selecting “Save and Continue”, so if a user does not answer any questions, but still saves, the system will still count that page as answered.

Many many of the criteria are accompanied by helpful “ToolTips” that provide guidance, additional information, or detailed explanation. ToolTips can be viewed by hovering your cursor over a criteria number.

PROJECT LIST

Once you launch the project from your GBI Account, you will have access to the Project List which will display the project name, the project manager, and the building address as entered within the basic building information.

Green Globes Continual Improvement of Existing Buildings (CIEB) Environmental Assessment

YOUR PROJECT LIST | INSTRUCTIONS | MANAGE MY ACCOUNT | LOGOUT

SELECT / ADD BUILDING BUILDING DASHBOARD SELECT SECTION COMPLETE QUESTIONNAIRE VIEW REPORT

Test Project GGP Training - Large Office Building

User: testing_again@thegbi.org

Section: Resources - Site Questions

SECTION SURVEY QUESTIONS
It is not necessary to complete the questions in order or at the same time.

Question	Answer	Points
Facilities for Storing and Handling Recyclable Materials		25
Are there separate storage/handling facilities for used paper products, glass, metal and plastic?	☐ Yes ☐ No	10
Are there collection points for sorting paper, glass, metal and plastic near the areas where waste is generated?	☐ Yes ☐ No	10
Is there a composting program in place?	☐ Yes ☐ No	5
Waste Reduction Workplan		30
Has a waste audit been done within the last three years?	☐ Yes ☐ No	5
Is regular monitoring of waste conducted?	☐ Yes ☐ No	5
What is the current diversion rate?	☐ >85% ☐ >75% ☐ >50% ☐ Unknown	10
Are there waste-reduction targets?	☐ Yes ☐ No	5
Is there a construction, renovation and demolition waste management policy?	☐ Yes ☐ No	5

Save and Continue

Tooltip
A separate designated area for storage will help to avoid recycled waste being inadvertently hauled away with other refuse.

SELECT / ADD BUILDING BUILDING DASHBOARD SELECT SECTION COMPLETE QUESTIONNAIRE VIEW REPORT

User: testing_again@thegbi.org

Welcome to the Green Globes CIEB Assessment Tool

Your Project List

Select a column header to sort.

Project	Proj. leader	Address	City	St.	Proj. client
Test Project GGP Training	Dianne Elliott	1234 Sustainability Avenue	Portland	OR	

You are currently approved to use the system for 2 office buildings, and have 1 office building entered.

Add a new building

Need Help? [Read Instructions >](#)

BUILDING DASHBOARD

After a building is added and the basic building information is saved, the Building Dashboard is available. From this screen, you can see the survey completion progress of the six sections that correspond with the EB assessment areas (Energy, Water, Resources, etc.). The dashboard is color-coded to indicate the section status:

Test Project GGP Training EB - Large Office Building

User: testing_again@thegbi.org

[Edit Basic Building Information](#)
[Download Green Globes survey in PDF format \(99 Kb\)](#)

Progress key: ■ Not started ■ In Progress ■ Completed

Sections	Energy	Water	Resources	Emissions	Indoor Environment	Environ. Mgmt.	Total Questions Answered	% of Points Earned
Building Overview								

INSTRUCTIONS:

- Click on the Building Overview link to go to the Building Overview page. This page provides additional information on how many pages have been answered and points earned.
- Click on any Section box in the Building Dashboard to visit that Section's survey questions.
- Hover over any Section box to view a description of that Section here in the instructions area.
- Tooltips provide additional information while answering questions in the Green Globes Assessment tool. To view a Tooltip, hover over any question underlined in blue and the Tooltip will appear on the right.

Red: Not Started
 Blue: In Progress
 Green: Completed

As previously stated, the status is dependent upon selecting "Save and Continue", not upon populating the responses.

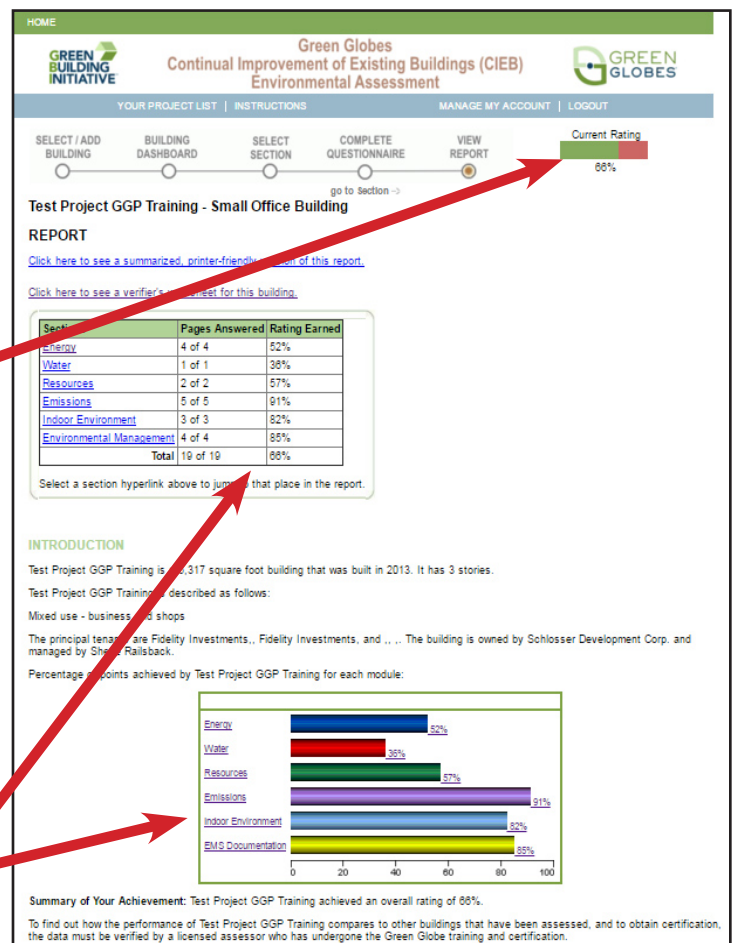
You can access any section of the survey by clicking on the corresponding colored box within the dashboard.

AUTOMATED REPORT

A unique feature of the EB program is the an automatically-generated report based on the responses provided within the EB survey. The report includes the overall projected Green Globes score as well as a bar chart summary showing the projected score in each assessment area.

Overall Score %

Assessment Area Score %



ENERGY

Rating Earned: 52%

Energy is an important operational cost as well as an environmental parameter because energy use relates directly to climate change and global warming as well as a variety of air emissions. These atmospheric emissions include hydrocarbons, CO₂, and airborne particles as well as sulphur dioxide and oxides of nitrogen which produce acid rain. From a cost perspective, there is a direct relationship between energy savings and cost savings.

Test Project GGP Training received a score of 52% based on the assessment of best-case practices for energy efficiency in office buildings.

Energy Consumption

It was not possible to obtain energy use and cost target information from the Energy Star® Target Finder. Please click the "Reload" button in your browser to try again.

If the problem persists, this may be because the required project information was not entered properly in the [energy section](#), or because a proper zip code was not entered in the building [basic information](#). Alternatively it may be because of technical problems with Greenglobes interface to the Energy Star® Target Finder. Please check your answers in the energy target section on [page 1 of the energy section](#) and try this report again. If you are sure you have entered valid data in all the items required for the target finder and this problem persists, please notify Greenglobes technical staff as indicated on the [Contact](#) page.

Energy Efficiency Features

HVAC systems, lighting and heating of water use large amounts of energy. The ANSI / ASHRAE / IESNA Standard 90.1-2010 focuses on improving the energy consumption performance of commercial buildings based on both the building envelope and the building systems and equipment. Test Project GGP Training achieved a score of 57% based on a review of individual features of the building fabric and services that would be expected to affect the building's energy use and hence its carbon dioxide emissions.

Summary of Your Achievements

Test Project GGP Training has the following energy-efficiency features:

Lighting

Energy efficient lighting that includes:

- compact fluorescents
- T5 or T8 fluorescents
- light emitting diodes (LEDs) on exit signs
- task lighting
- daylight and/or occupancy sensors

High efficiency lighting accounts for 50 - 74% of the building's lighting.

Hot Water

The building heats its water using high-efficiency technology.

Hot water is maintained between 120-130°F

Other

The building does not use chillers.

Other energy-saving systems or measures are proposed, described thus:

Fresh Air Economizers

Envelope

The building's cooling load is reduced by appropriate shading.

The upper third of the building and the mechanical penthouse have been sealed.

The lower third of the building, the entrance doors and the parking area have been sealed.

The insulation of the walls complies with the recommendation of the building condition report.

The insulation of the roof complies with the recommendation of the building condition report.

The report also presents a summary of achievements, improvement suggestions, and references to relevant technical resources. The suggestions presented are based upon the survey responses and performance data provided and, thus, are customized to a limited extent.

Summary of Achievements

Suggestions for Improvement

Opportunities for improvement

The following suggestions are common solutions to improve energy efficiency and reduce costs at Test Project GGP Training. They are offered for consideration; however, you are advised to consult an expert to ensure that these will produce optimal results in your building.

Recommendations	Supplementary Information
Lighting Consider a lighting retrofit. Re-lamping with energy efficient lighting is one of the most common building retrofits because it can produce significant savings. For example: Links to more information about this recommendation: Energy Efficient Lighting-WBDG DOE Lighting Advanced Buildings Lighting and Daylighting High Efficiency Fluorescent Fixtures High Efficiency Fluorescent Fixtures, Indirect Lighting The Illuminating Engineering Society of North America Examples of ENERGY STAR Qualified Fixtures	Electricity consumption for lighting is typically 30% of total electricity consumption. Lighting also affects occupant comfort and productivity.
Consider high intensity discharge (HID) lamps or high-intensity fluorescent fixtures where high levels of light are required over large areas, and for locations where bulb replacement is difficult. Links to more information about this recommendation: Tungsten Halogen Lamps WBDG: Energy Efficient Lighting	High intensity discharge lamps (i.e. high-pressure sodium, metal halide, mercury vapor, and low-pressure sodium) are among the most energy-efficient light sources due to their very high lumen, high efficacy, long life, and economical operation. They are most economical where they operate for extended periods and in locations where replacement is difficult. Since they require a warm-up period and take time to re-light after a power interruption, they should only be used in areas where such potential downtimes will not cause major problems. Nevertheless, their energy and cost savings can be dramatic.
Controls RECOMMENDATION Consider implementing temperature setback - i.e. adjusting the building temperature when it is unoccupied to minimize heating or cooling requirements. Links to more information about this recommendation: Thermostats and Control Systems	Heating should not exceed 61°F (16°C) when the building is unoccupied. Start evening setback before business hours are over, taking advantage of the energy stored in the building mass. Start morning temperature pickup with outside air dampers closed so that the building is at 68°F (20°C) when occupants arrive. Complete the warm-up during the first hour of occupancy. Cool the building to no lower than 73°F (24°C) when occupied. Don't use mechanical cooling when it is unoccupied except for morning pre-cooling, and complete the cool-down during the first hour of occupancy. When practical, cool the building overnight using cool outside air. The time required for morning startup is dependent on the ability of the HVAC equipment to heat or cool the building, and should be established based on worst-case conditions.

VERIFIER'S WORKSHEET

Akin to the Printable Survey with Scores for NC and SI, the Verifier's Worksheet displays all criteria, saved responses, applicable points, and scored points. It also includes the project rating percentage by assessment area as well as the overall rating percentage.

Overall Score %

Area Score %

Test Project GGP Training - Small Office Building

VERIFIER'S WORKSHEET

Sections	Pages Answered	Rating Earned
Energy	4 of 4	52%
Water	1 of 1	38%
Resources	2 of 2	57%
Emissions	5 of 5	91%
Indoor Environment	3 of 3	82%
Environmental Management	4 of 4	85%
Total	19 of 19	68%

Select a section hyperlink above to jump to that place in the report.

INTRODUCTION

Test Project GGP Training is a 5,317 square foot building that was built in 2013. It has 3 stories.

Test Project GGP Training is described as follows:

Mixed use - business and shops

The principal tenants are Fidelity Investments, Fidelity Investments, and . . . The building is owned by Schlosser Development Co managed by Sherie Railsback.

Percentage of points achieved by Test Project GGP Training for each module:

Module	Percentage
Energy	52%
Water	38%
Resources	57%
Emissions	91%
Indoor Environment	82%
BMS Documentation	85%

ENERGY

Rating Earned: 52%

Question	Answer	Applicable	Scored
Energy Consumption		80	0
The Energy Star Rating for this:			
Individual Office Building is:			
Healthcare Campus is:			
No ES rating			
Does the building have individual metering installed and functional or a plan to install an individual building meter within the next 12 calendar months?			
Please supply the following data in order that an Energy Star® energy target may be established:			
How many people work in this facility during normal operating hours?	14		
Number of PCs	19		
How many hours per week is the facility open?	40		
% Heated	50% or more		
% Air-Conditioned	50% or more		
Please specify the ending month of the 12 month period for which energy consumption figures are being entered:	Month: n/a Year: n/a		
What was the building's total energy bill for the 12 month period specified?	\$ 0		
What was the total energy consumption for each non-renewable fuel type, in total or by month, for the 12 month period specified?		80	0
Lighting		34	28
Does the building incorporate any of the following high-efficiency lighting features:			
compact fluorescents?	Yes No	4	4
T8 or T5 fluorescent lamps?	Yes No	4	4
exit signs with light-emitting diodes (LEDs)?	Yes No	4	4
use of high-intensity fluorescent fixtures?	Yes No	4	0
task lighting?	Yes No	4	4
installation of automated lighting controls?	Yes No	4	4
What percentage of all lighting in the facility is high efficiency lighting?	75 - 100 50 - 75 1 - 50 none	10	6
Boilers		0	0
Are the boilers 20 years old or more?	Yes No N/A (no boilers)	0	0
What percentage of boilers in the facility are high-efficiency?	50 - 100 25 - 49 < 25 N/A (no boilers)	0	0
Do the boilers have automatic vent dampers?	Yes No N/A (no boilers)	0	0
Controls		12	0
Is temperature setback and weather compensation implemented?	Yes No	6	0
Does the building have building automation systems (BAS)?	Full Partial None	6	0

Area Rating, Applicable and Scored Points

Section Applicable and Scored Points

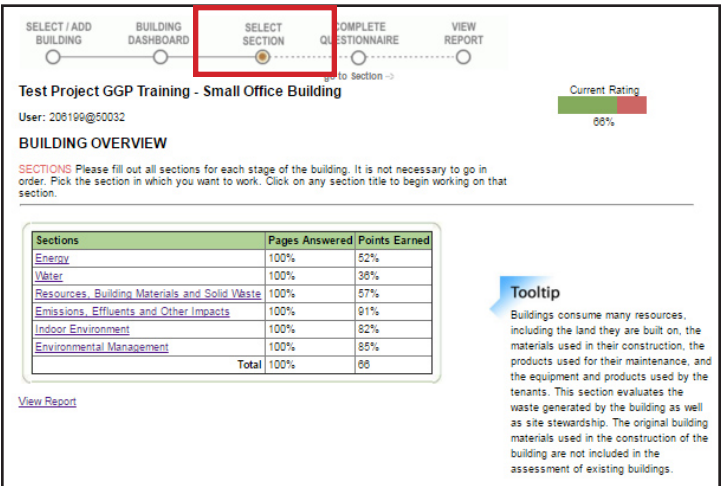
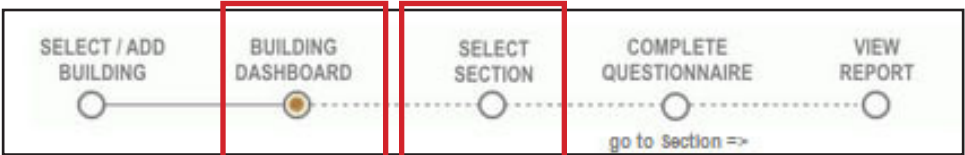
Response

Criterion Applicable and Scored Points

NAVIGATION

Upper Toolbar

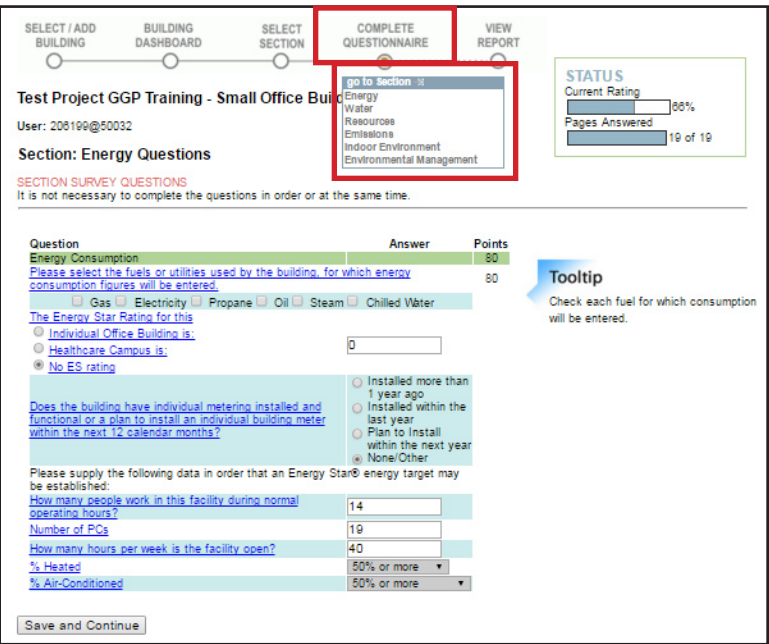
As mentioned above, you can access any section of the survey by clicking on the corresponding colored box within the dashboard. You can also navigate by using the upper toolbar. From the toolbar, you can access the Building Dashboard, or select a specific section of the survey.



You can also select “Complete Questionnaire” which will take you to the first incomplete section of the survey.

Or you can select the “go to section” which provides a drop down for you to select a specific section to access.

You can also access an automated report and verifier worksheet we will discuss in the following pages.



From the top blue navigation, you can return to the Project List, access survey instructions, or select “Manage My Account” to return to your GBI Account.



The survey instructions provide links to a blank printable survey, an explanation of the Building Dashboard, and some additional notes about navigation and tooltips.

Green Globes CIEB Online Assessment Survey Instructions

PRINTING THE SURVEY

To assist in completing the Green Globes CIEB Online Assessment Survey, a downloadable version of the survey has been made available in PDF format.

[Green Globes Large Office Building Survey \(PDF\)](#)
[Green Globes Small Office Building Survey \(PDF\)](#)
[Green Globes Healthcare Survey \(PDF\)](#)

To save the PDF to your computer, right-click on the link and select "Save Target as...".

BUILDING DASHBOARD

Each Building you take through the Green Globes CIEB Online Assessment Survey has a Building Dashboard (see screenshot below) which displays the current status of your project. Across the top of the Building Dashboard are the 8 sections of the CIEB Survey, color-coded according to your progress within each section.

Progress key: ■ Not started ■ In Progress ■ Completed

Building Dashboard Click on any box to go to questionnaire	Sections							
	Energy	Water	Resources	Emissions	Indoor Environ.	Environ. Mgmt.	Total Questions Answered	% of Points Earned
Building Overview								

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Each box displays the progress of the section: red means it has not started, blue boxes are in progress, and green means that the section has been completed.

To view descriptions for each of the 8 sections, hover over the colored boxes underneath each section heading. A Section Description will appear in the space below, providing additional information regarding that section. Clicking on the colored boxes will take you to the beginning of the questionnaire for that section.

ADDITIONAL NOTES ON THE SURVEY

- You must save your work in each section by clicking the "Save" button at the bottom of every survey page. If you leave the page without clicking "Save", your progress will not be recorded.
- The sections do not need to be completed in any particular order.
- To start the survey from the beginning, please click on the colored box for "Energy". Alternatively, you can select "Energy" from the Go To Section drop-down list (see below) or from the Select Section page.
- Tooltips provide additional information while answering questions in the Green Globes Assessment Tool.

COLLABORATION

If you want to grant access to the EB survey for additional team members, you may use the collaboration function. This will allow those granted access to view and update the survey from within their own GBI Account. You can view who has been assigned collaborator access. The individual from whose account the project was ordered will show as the project owner, all others who have been granted collaborator access will show beneath the owner. It is important that a single user is in the survey making updates at any given time to minimize the chance users are erroneously overwriting responses.

Test Project GGP Training - EB [EDIT NAME](#) [LAUNCH PROJECT](#)

Status: Active

Type: Green Globes for Existing Buildings (GG CIEB)

Quote Request: JULY 27, 2015: Test Project GGP Training - EB

Project Registration: [Registered](#)

Collaborators:

- Dianne Elliott (owner)
- Jane Smith
- John Doyle
- Eric Truelove

[EDIT](#)

Eligibility Guidance

Green Globes for Existing Buildings (EB) is used to assess and certify existing buildings, recognizing that sustainability is an ongoing process requiring continuous evaluation and benchmarking. Using this tool enables building owners/managers to focus on sustainability, gives them options when considering capital improvements or implementation of best practices, and allows them to track and rate the benefits of various

building attributes and procedures. Existing buildings pursuing EB certification may have been certified previously under Green Globes NC, EB, had spaces within the building certified under Green Globes SI, or pursuing their first certification. A building undergoing assessment under this program typically exhibits the following characteristics:

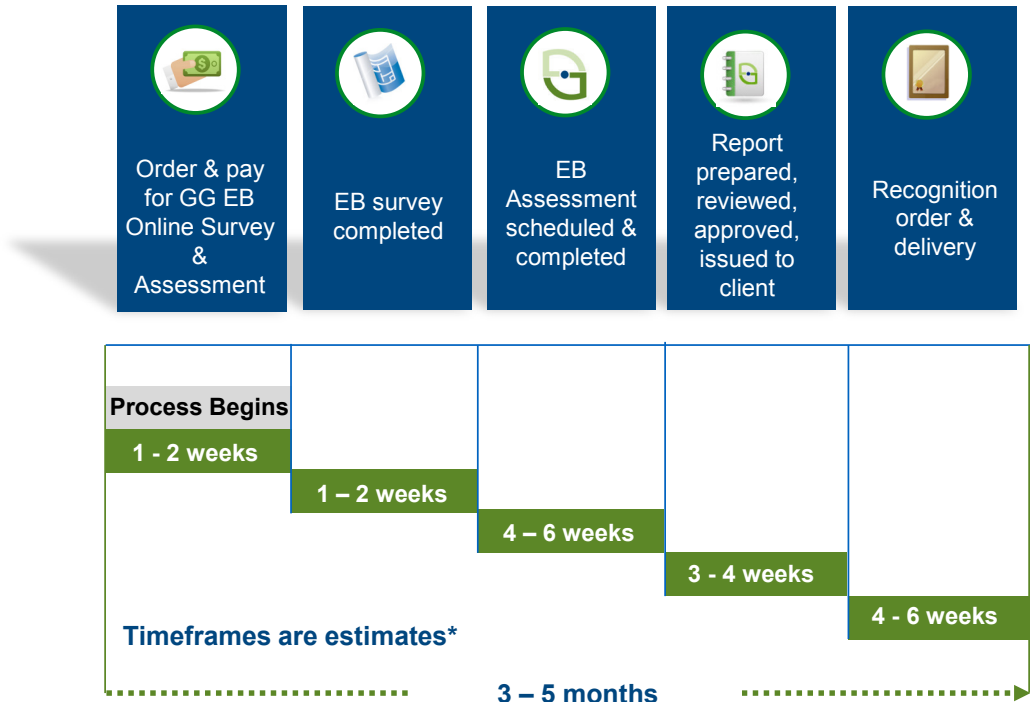
- Is located in the U.S. or within a U.S. Territory.
- Is at least 400 gross square feet.
- Has been occupied with at least 12 consecutive months of normalized operational energy and water performance data.
- Is a permanent enclosed structure.
- Has a contiguous project boundary and its site.
- Is typically designed for human occupancy with HVAC and water.

More details regarding eligibility can be found in the [Green Globes Building Eligibility Guidance](#) document located in the Training & Resources\User Resources\Downloads link on GBI website.

Tasks & Estimated Time Commitments

Although the time line of each Green Globes EB assessment and certification project is unique, the entire process generally can be completed in 3-5 months. The certification time line is largely dependent upon the client in regards to completion of the online evaluation and availability and organization of the supporting documentation.

Green Globes EB focuses on real, quantifiable performance data and management practices; consequently, EB has only one assessment stage rather than the two stages required for NC certification.



The following table lists the specific tasks GGP's may perform when taking a building through the Green Globes EB process. Before the project begins, the client and the GGP agree to the scope of services to be

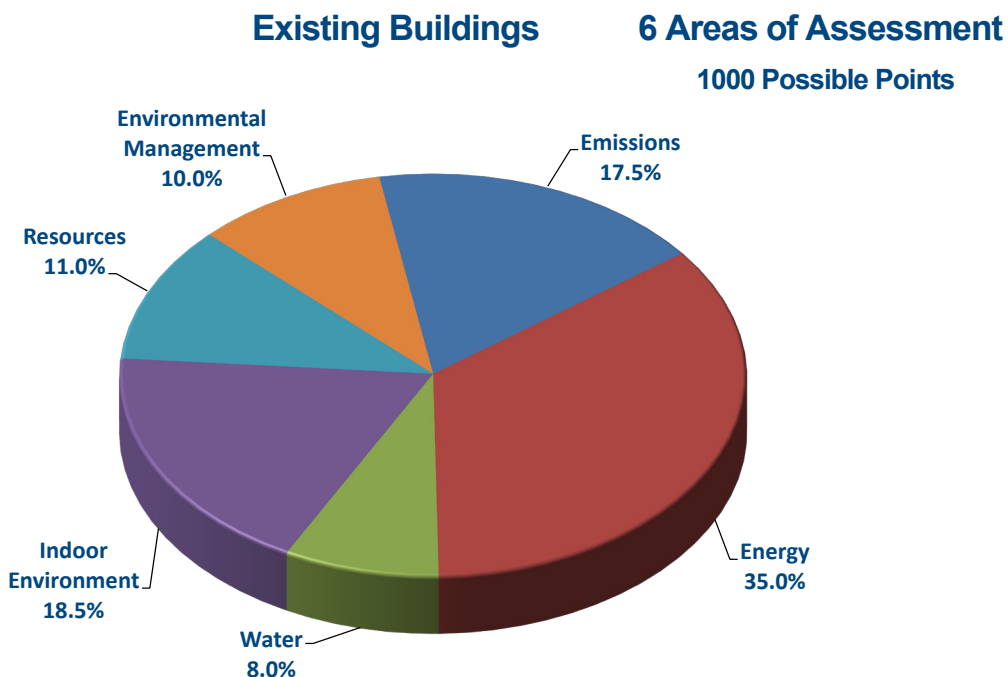
provided, and GGP's provide an estimate of the number of work-hours required to complete that scope of work. Clients may elect to perform all of the GGP (user) functions themselves, assign part of the project to a GGP, or assign the entire project to the GGP.

The table presents a range of work-hours for a typical 100,000 square foot office building where the role of the GGP is that of a "Green Facilitator." However, the number of hours required can vary greatly depending on the building size, characteristics and complexity as well as the level of required documentation readily available from the client. As expert users of Green Globes, GGP's will be able to perform the required project tasks more efficiently than untrained users due to the GGP's thorough understanding of the process and familiarity with the available tools.

Green Globes Projects Tasks for EB	Estimated Work Hours
Project management & client meetings	4 - 8
Gather and assemble data for the online survey	12 - 20
Complete online survey	2 - 8
Prepare documentation package for the on-site assessor review	12 - 20
Plan and attend the EB on-site assessment	4 - 12
Post assessment action items (review report and share results)	4 - 8
Recognition	1
Total Hours	39 - 77

Assessment Areas

The maximum points possible within Green Globes for Existing Buildings are distributed among six assessment areas. As a reminder, small office buildings within the EB program have 985 maximum possible points, and large office buildings have 1000. Just as in NC and SI, Energy has the largest percentage of points in the EB program. Indoor Environment and Emissions are the next two heavily weighted areas.



ENERGY

The prominence of energy performance and conservation related criteria is also demonstrated in Green Globes EB, with 35% of all available credit allocated to energy topics. This area includes an energy performance criterion as well as prescriptive energy criteria.

Energy performance measurement relies primarily on ENERGY STAR – Portfolio Manager, for the occupancy types eligible within the ENERGY STAR award and labeling program. For those building types not eligible for the ENERGY STAR award program, GBI has adopted an alternative measurement protocol; energy consumption performance percentage improvement over a minimum four year consumption review period. This award points based upon a scale for percentage improvement. The client must have verifiable energy consumption data available for the required time period, aggregated as necessary to perform the specified benchmarks and comparisons. This method requires manual analysis and calculations in contrast to utilizing Portfolio Manager. The client would need to hire an energy professional to perform the calculations.

The prescriptive energy criteria comprehensively cover the building envelope, building equipment and systems, and other aspects of the building that relate to energy. Renewable energy options include Geo-thermal, and the transportation subsection includes alternative refueling facilities. In addition, approximately half of the section dwells on energy management topics, including policies, procedures, training and best practices , recognizing the critical importance of management in the continuous improvement of building energy performance.

WATER

In a similar manner to Energy, Green Globes EB provides a focus on both whole building water performance and prescriptive water efficiency criteria, as well as a host of management topics. The whole building criteria awards performance credit based on actual water consumption. Offices has an integrated point scale to award credit, based on actual yearly consumption thresholds. Other building types should use the [Green Globes Water Consumption Calculator](#).

RESOURCES

Within the EB program, a review of facilities for recycling and composting are followed by a waste reduction work plan subsection, including a metric for improving waste management – the waste diversion rate. The end of the Resources section treats site criteria, including contamination and site enhancements.

EMISSIONS

Low NOx heating equipment is treated first in this category and is heavily weighted. Refrigerants and refrigerant management practices follow, and then an extensive treatment of site and building characteristics related to contamination and hazardous substances. Underground storage tank management, drinking water, and a thorough treatment of consumable hazardous substances used in the building and grounds conclude this section.

INDOOR ENVIRONMENT

The EB Indoor Environment section covers most of the same subtopics as GG NC, but with an emphasis on management, response and operations. Ventilation addresses both the building and parking facilities. Indoor pollutants appropriately emphasizes potential problems with existing buildings, such as mold, housekeeping

cleaning agents, local exhaust, etc. Lighting includes both quality and O&M procedures. The Acoustics subsection addresses actual sound transmission and sound privacy criteria.

ENVIRONMENTAL MANAGEMENT

The umbrella management process underpinning the criteria in this environmental assessment area is the environmental management system (EMS). Key EMS elements include updated policies, action plans for improvement, as well as training and education. Building specific areas that directly impact environmental management and improvement are also addressed. Purchasing policies and practices are especially emphasized. Emergency response planning and management are comprehensively covered for both environmental and environmental health incidents. Finally, as with any complete EMS, “tenant” communication, awareness and input is included. ‘Tenant’ is to be interpreted as any users of the building, but especially the full time occupants.

Assessment Guidance

MULTI-USE BUILDINGS

When a building has multiple uses, the criteria may apply differently depending upon the use. For example, a theater with concessions and an office space. Daylighting will negatively impact the conditions for viewing within the theater, but is important in the concessions area and office space.

How are these situations handled? The assessor will pro-rate the applicable points according to the percentage of building for each occupancy type. If the theater is 70% of the square footage and the office space is 30%, Daylighting would be N/A for 70% of the points. If daylighting is worth 10 points, then 7 points would be N/A and 3 points would be applicable. Point awards are based upon compliance to the criterion, so if the office space has appropriate daylighting to warrant credit, you would be awarded 3 points yielding 100% compliance.

SPACE WITHIN A COMPLEX OR WITHIN A LARGER OFFICE

Spaces within a larger office or complex can be certified with the Green Globes EB program. In addition to the direct leased space, shared spaces can be included in the assessment, such as restrooms or custodial spaces.

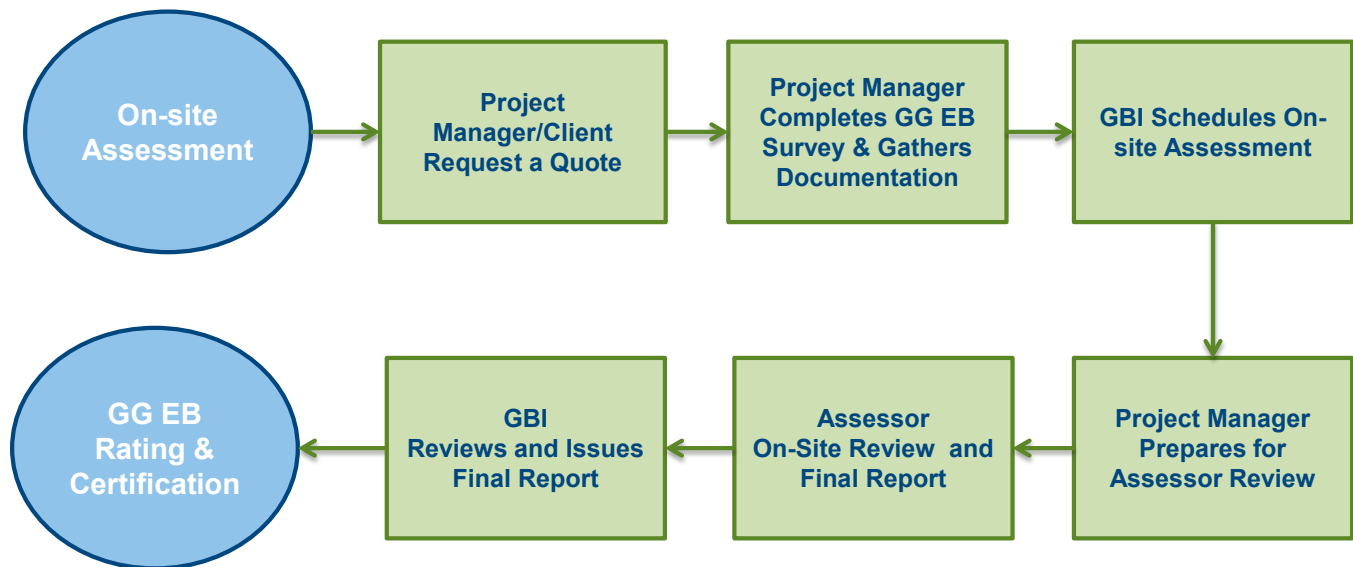
This type of assessment is not without its challenges. Not all items being assessed are in direct control of the lessee; however, the tenant is encouraged to influence building management regarding decisions that impact the sustainability of the space and site. Undergoing an assessment will likely require collaboration with the lessor or property manager.

Even if the client is not in direct control, some items may still be applicable. For example, water consumption data for water performance may not be available, but the criteria for water may still be determined to be applicable since water consumption is a critical aspect of sustainability.

Assessment Process

ON-SITE ASSESSMENT & CERTIFICATION MAP

The Green Globes for Existing Buildings assessment process involves one stage; the On-Site Assessment.



REQUEST & VIEW A QUOTE

Every assessment must have a quote which will be used when ordering the assessment.

Create a GBI Account

To request a quote the project manager will need to create a GBI Account. To create an account, follow these steps:

From the GBI website, www.thegbi.org select "Create Account".

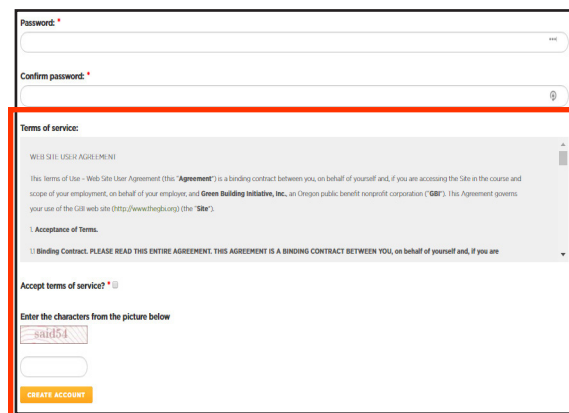


Complete the account information.



The 'Create Account' form is located at the top of the page. It features a header with 'Create Account' and 'Log In' buttons. Below the header, a red asterisk indicates required fields. The form includes input fields for Username, Email Address, First Name, Last Name, Company, and Title. Each field has a red asterisk next to its label. The Username field has a password strength indicator on the right. The Email Address field has a red asterisk next to its label. The First Name field has a red asterisk next to its label. The Last Name field has a red asterisk next to its label. The Company field has a red asterisk next to its label. The Title field has a red asterisk next to its label.

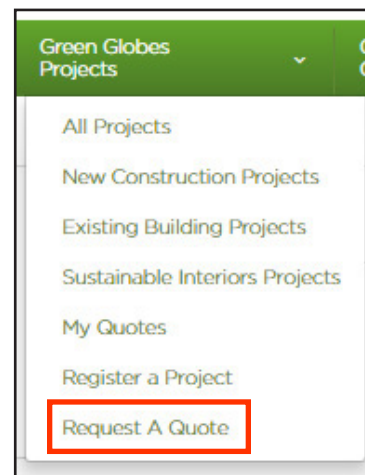
Read and accept the terms of service. Enter the CAPTCHA and select “Create Account”.



This section contains the 'Terms of service' and a CAPTCHA. The 'Terms of service' section is titled 'Terms of service:' and includes a 'Web Site User Agreement' link. Below the link, there is a paragraph of text explaining the agreement. A red box highlights the 'Accept terms of service?' section, which includes a checkbox and a 'CREATE ACCOUNT' button. Below the checkbox, there is a CAPTCHA image with the text 'Enter the characters from the picture below' and a text input field containing the characters 'said54'.

Request a Quote

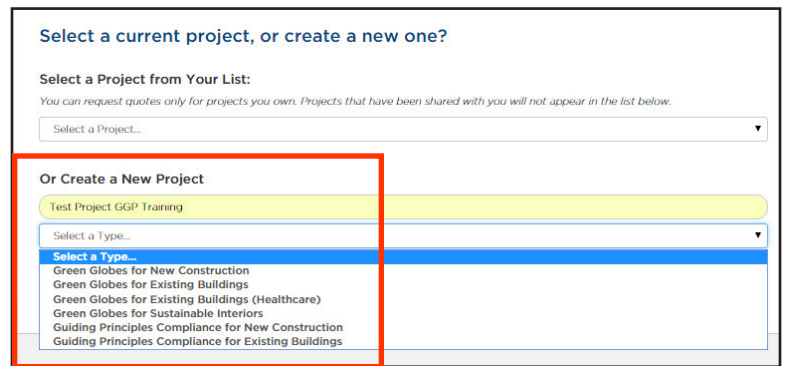
To request a quote, login to your GBI Account. From the green toolbar, hover over Green Globes Projects and select “Request a Quote”.



The 'Green Globes Projects' dropdown menu is located in the top right corner of the page. It features a green header with the text 'Green Globes Projects' and a dropdown arrow. Below the header, there is a list of options: 'All Projects', 'New Construction Projects', 'Existing Building Projects', 'Sustainable Interiors Projects', 'My Quotes', 'Register a Project', and 'Request A Quote'. The 'Request A Quote' option is highlighted with a red box.

You can select a previously created project from the drop down list, or create a new one.

If you create a new project, add your project name and select the program type from the drop down list.



Select a current project, or create a new one?

Select a Project from Your List:

You can request quotes only for projects you own. Projects that have been shared with you will not appear in the list below.

Select a Project...

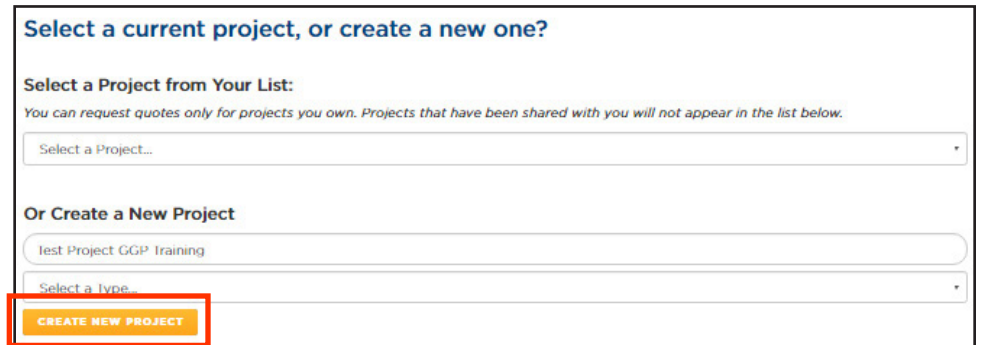
Or Create a New Project

Test Project GGP Training

Select a Type...

- Green Globes for New Construction
- Green Globes for Existing Buildings
- Green Globes for Existing Buildings (Healthcare)
- Green Globes for Sustainable Interiors
- Guiding Principles Compliance for New Construction
- Guiding Principles Compliance for Existing Buildings

Select “Create New Project”.



Select a current project, or create a new one?

Select a Project from Your List:

You can request quotes only for projects you own. Projects that have been shared with you will not appear in the list below.

Select a Project...

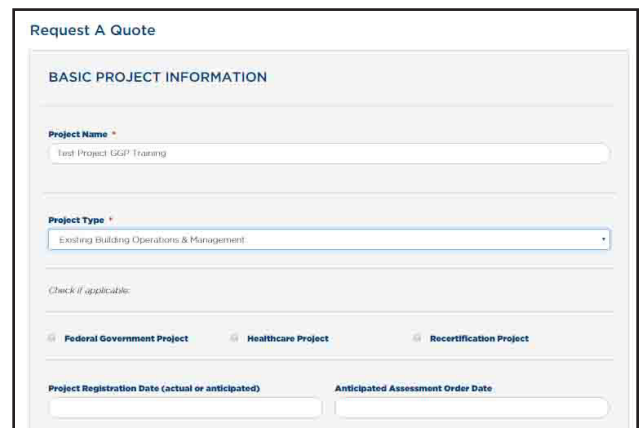
Or Create a New Project

Test Project GGP Training

Select a Type...

CREATE NEW PROJECT

Complete the Quote Form. Please be sure to enter integers only in the square footage field (no commas or periods). Note that Google Chrome seems to work better than Firefox for completing the form.



Request A Quote

BASIC PROJECT INFORMATION

Project Name *

Test Project GGP Training

Project Type *

Existing Building Operations & Management

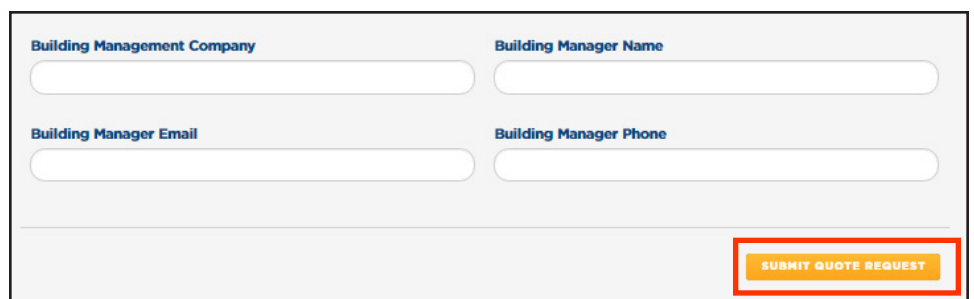
Check if applicable:

☐ Federal Government Project ☐ Healthcare Project ☐ Recertification Project

Project Registration Date (actual or anticipated)

Anticipated Assessment Order Date

When the form is complete, select “Submit Quote Request”.



Building Management Company

Building Manager Name

Building Manager Email

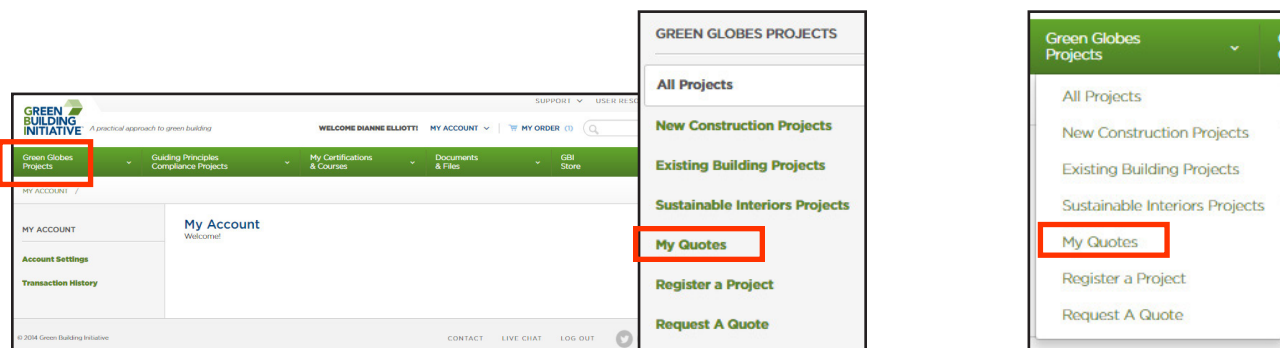
Building Manager Phone

SUBMIT QUOTE REQUEST

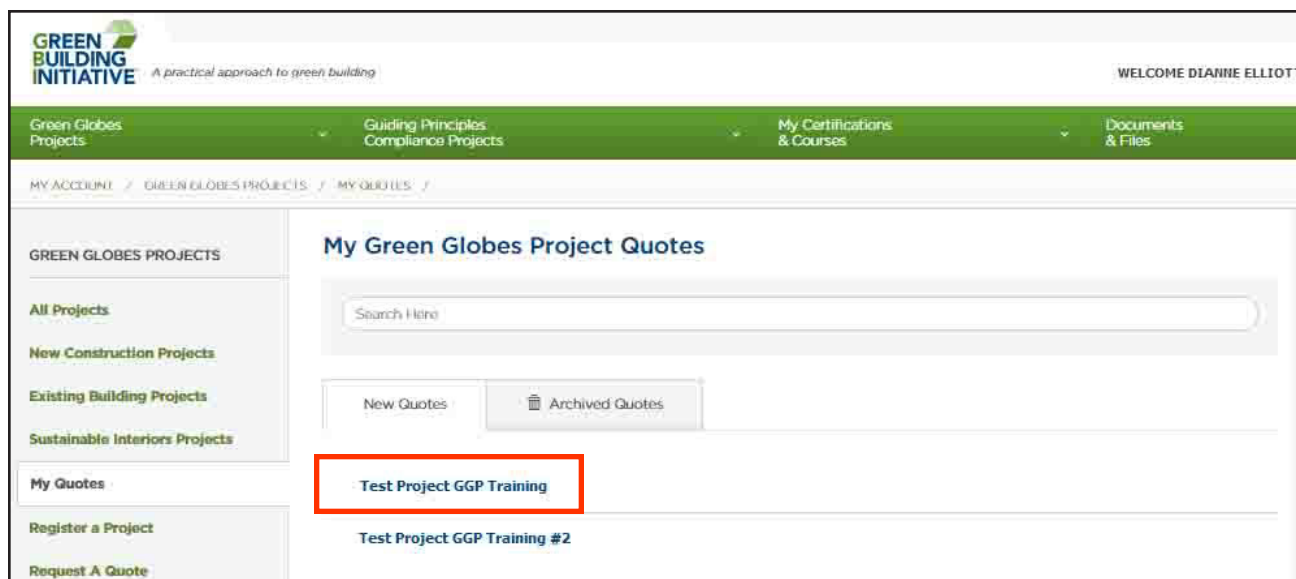
GBI will prepare a formal quote within two business days of receiving the quote request. The quote will be visible from within GBI Account of the person who requested the quote. In addition, GBI will send the quote in PDF format via email.

View a Quote

To view your quotes, access your GBI Account and select “Green Globes Projects” in the green toolbar. From the left navigation select “My Quotes”. Or you may hover over the Green Globes Projects and from the fly out menu select “My Quotes”.



Select the project from the list for which you wish to view the quote.



The quote will display.

Project Detail:

Test Project GGP Training - EB, 200,000 Square Feet

Description of Services:

Third party review of building data provided by the client through the Green Globes online evaluation and supporting documents. Third party on site assessment to verify building data. Third party final report containing building rating and certification information.

Qty	Item	Price
1	GG EB Project Registration	\$1,500.00
1	CIEB Assessment	\$7,000.00
1	Assessor Travel (flat fee) Travel charges are paid upfront as a \$1500 flat fee.	\$1,500.00
1	Certification Plaque - Single Building (16x16") Certification plaque is optional. Optional	\$945.00

Due before work is performed

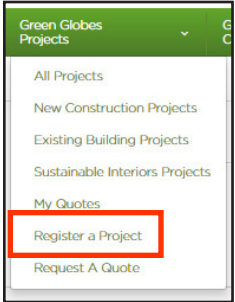
GRAND TOTAL: \$10,945.00

PURCHASE NOW

REGISTER A PROJECT

Some clients elect to register their project and submit payment to gain access to the online survey in advance of purchasing an assessment.

If you wish to register a project prior to purchasing an assessment, hover over the Green Globes Projects link in the green toolbar and select “Register a Project”.



From the GBI Store, select “Configure” under the header GG EB Project Registration.

GBI Store

Project Registration

GG NC Project Registration

\$1,500.00

CONFIGURE

GG SI Project Registration

\$1,500.00

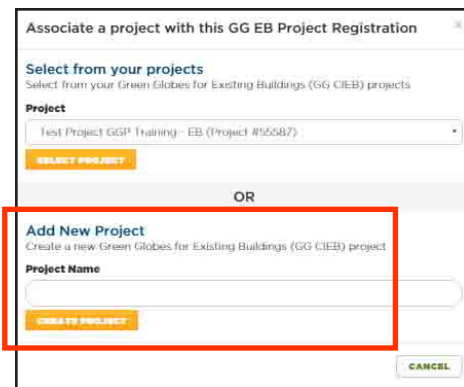
CONFIGURE

GG EB Project Registration

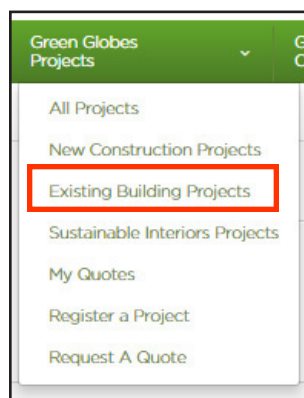
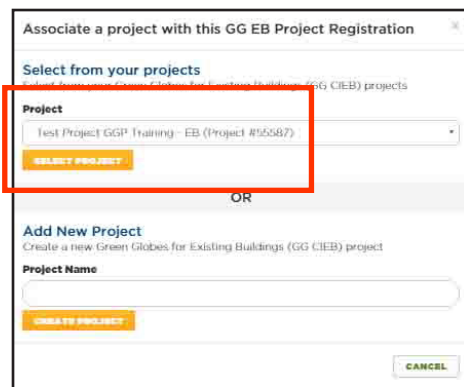
\$1,500.00

CONFIGURE

Under the Add New Project section, enter the project name and select “Create Project”.

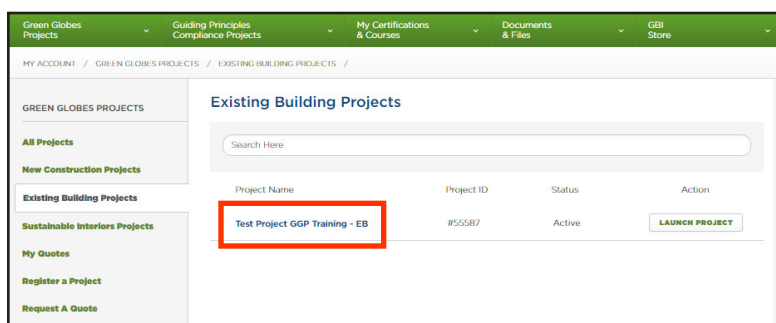


If you have already added your project name but did not complete your project registration, your project name will be in your project list. From the Associate your Project screen under “Select from your projects” section, choose the project from your drop down list and click “Select Project”.



An alternative method to select your project is to go to your list of Green Globes projects by hovering over Green Globes Projects in the green toolbar and select “Existing Building Projects”.

From your project list, click on the project you wish to register.



Project Name	Project ID	Status	Action
Test Project GGP Training - EB	#155587	Active	LAUNCH PROJECT

Select “Register Project”.

Test Project GGP Training - EB

EDIT NAME

Status:Active

Type:Green Globes for Existing Buildings (GG CIEB)

Quote Request:NOVEMBER 11, 2015 TEST PROJECT GGP TRAINING - EB

Project Registration:REGISTER PROJECT

Collaborators:Dianne Elliott (owner)

EDIT

Project QuotesView All Quotes

Project DocumentsUPLOAD NEW

Quote #55471: Test Project GGP Training - EB

Delivered November 11th, 2015, Quote Expires December 31st, 2015

\$10,945.00

VIEW

No Project Files

Select “Continue to Checkout”.

My Cart

Product	Price	Qty	Total
GG EB Project Registration • Project #55587	\$1,500.00	1	\$1,500.00
Total			\$1,500.00

EMPTY CART

CONTINUE TO CHECKOUT

ADD PROMO CODE

GBI Store Checkout

Billing Information

Shipping Details

NameDianne Elliott

AddressSustainability Drive

CityPortland

Postcode97239

CountryUnited States

StateOregon

Phone5032740418

Emaildianne@theqbi.org

☐ Same as Billing Details

Name

Address

City

Postcode

CountryUnited States

StateSelect...

Phone

RETURN TO CART

CONTINUE

Complete your billing and shipping information and select “Continue”.

Read and Accept the End User License Agreement and select “Place Order”.

GBI Store Checkout

Billing Details

Dianne Elliott
1234 Sustainability Avenue
Portland 97239
Oregon
United States
5032740448
dianne@thegbi.org

Shipping Details

Dianne Elliott
1234 Sustainability Avenue
Portland 97239
Oregon
United States
5032740448

Order Summary

Product	Total
1 x GG EB Project Registration • Project #55587	\$1,500.00
Total	\$1,500.00

End User License Agreements:
WEB SITE USER AGREEMENT
This Terms of Use - Web Site User Agreement (this “**Agreement**”) is a binding contract between you, on behalf of yourself and, if you are accessing the Site in the course and scope of your employment, on behalf of your employer and **Green Building Initiative, Inc.** (an Oregon entity).

Accept End User License Agreements? ☐

Payment

Payment Method
Select a Payment Method

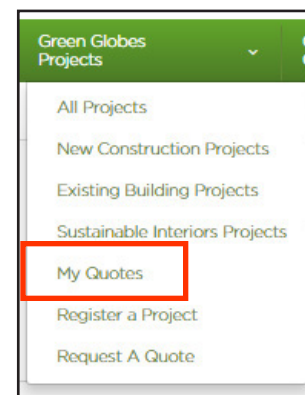
BACK **PLACE ORDER**

ORDER AN ASSESSMENT

When ready, you may order the third-party assessment online through the GBI website using the following steps. (Note: for large orders of multiple buildings, GBI can place the orders on your behalf for a nominal administrative fee.) The project should be ordered against the same account connected to the quote and if applicable, the previously ordered project registration.

If your quote included a project registration in addition to an assessment, you can register your project and order the assessment at the same time. To order the assessment, follow these steps:

From the account the quote is attached, log in from www.thegbi.org. Hover over Green Globes Projects in the green toolbar and select “My Quotes”.



Select the project for which you wish to purchase the assessment.

Review the quote and ensure this is the assessment you wish to purchase the quote and select “Purchase Now”.

Project Detail:

Test Project GGP Training - EB, 200,000 Square Feet

Description of Services:

Third party review of building data provided by the client through the Green Globes online evaluation and supporting documents. Third party on site assessment to verify building data. Third party final report containing building rating and certification information.

Qty	Item	Price
1	GG EB Project Registration	\$1,500.00
1	CIEB Assessment	\$7,000.00
1	Assessor Travel (flat fee) Travel charges are paid upfront as a \$1500 flat fee.	\$1,500.00
1	Certification Plaque - Single Building (16x16") Certification plaque is optional. Optional	\$945.00

Due before work is performed

GRAND TOTAL: \$10,945.00

PURCHASE NOW

Review the order, select your payment option, then click “Continue to Checkout”.

My Cart

Quote: 55471: Test Project GGP Training

Product	Price	Qty	Total
GG EB Project Registration • Project #55471	\$1,500.00	1	\$1,500.00
Green Globes EB On-Site Assessment	\$7,000.00	1	\$7,000.00
Assessor Travel (flat fee)	\$1,500.00	1	\$1,500.00
Certification Plaque - Single Building (16x16")	\$945.00	1	\$945.00
Subtotal			\$10,945.00
Total			\$10,945.00

Payment Options

* Use One Payment Method.

Pay Full Amount of \$10,945.00 by Credit Card or receive an Invoice

○ Use Two Payment Methods

Pay for all Project Registrations with a credit card payment of \$1,500.00 and receive an invoice for \$9,445.00
You will gain immediate access to those items purchased.

EMPTY CART

CONTINUE TO CHECKOUT

Select “Continue”.

GBI Store Checkout

Quote #55471: Test Project GGP Training - EB

Product	Price	Qty	Amount
GG EB Project Registration	\$1,500.00	1	\$1,500.00
CIEB Assessment	\$7,000.00	1	\$7,000.00
Assessor Travel (flat fee)	\$1,500.00	1	\$1,500.00
Certification Plaque - Single Building (16x16")	\$945.00	1	\$945.00
Subtotal			\$10,945.00
Order Total Due Now			\$10,945.00

RETURN TO CART

CONTINUE

Complete the billing and shipping information and select “Continue”.

GBI Store Checkout

Billing Information

Name: Dianne Elliott

Address: Sustainability Drive

City: Portland

Postcode: 97239

Country: United States

State: Oregon

Phone: 5032740448

Email: dianne@thegbi.org

Shipping Details

☐ Same as Billing Details

Name:

Address:

City:

Postcode:

Country: United States

State: Select...

Phone:

[RETURN TO CART](#) [CONTINUE](#)

GBI Store Checkout

Billing Details

Dianne Elliott
2714 NW Nahcotta
Canas 98607
Oregon
United States
3609034670
dianne@thegbi.org

Shipping Details

Dianne Elliott
2714 NW Nahcotta
Canas 98607
Oregon
United States
3609034670

End User License Agreements

Green Globes Assessment Services Agreement This Assessment Services Agreement (this "Agreement") is between you, on behalf of yourself and, if you are entering into this Agreement in the course and scope of your employment, on behalf of your employer (collectively, "Customer") and Green Building Initiative, Inc., an Oregon public benefit nonprofit corporation ("GBI"), for the purpose of engaging a Green Globes Assessment for a building. An assessment is a non-intrusive, non-destructive, and non-polluting assessment of a building's energy, water, and indoor air quality performance. The assessment is conducted by a Green Globes Assessor who is trained and certified by GBI. The assessment is conducted in accordance with the Green Globes Assessment Services Agreement. The assessment is conducted in accordance with the Green Globes Assessment Services Agreement. The assessment is conducted in accordance with the Green Globes Assessment Services Agreement.

Accept End User License Agreements? ☐

Payment

Online credit card payments are not permitted for amounts of \$5000 or more. Your order will be invoiced.

PO Number (optional)

W-9 Needed? No

[BACK](#) [PLACE ORDER](#)

Order Summary

Product	Total
1 X GG EB Project Registration • Project #55469	\$1,500.00
1 X CIEB Assessment	\$7,000.00
1 X Assessor Travel (flat fee)	\$1,500.00
1 X Certification Plaque Single Building (16x16")	\$945.00
Total	\$10,945.00

Review your order. Read and Accept the End User License Agreement and select “Place Order”.

A GBI staff member will contact you via email to confirm receipt of your order, outline your next steps, and answer any questions.

ON-SITE ASSESSMENT

The purpose of the On-Site Assessment is to verify the level of compliance to the Green Globes criteria which results in the final assessment rating and certification level (certification is based upon a minimum score of 35%).

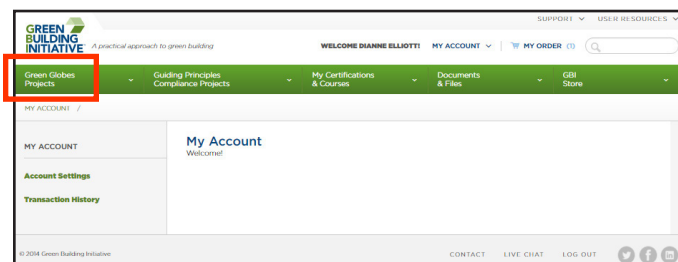
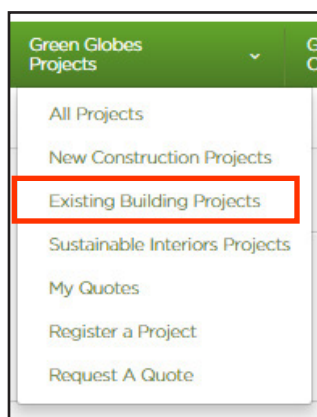
Complete the EB Survey

Every assessment begins with the completion of the online survey. You will have access to the survey once the project registration is paid. Completing the EB survey may require input from the Facility Manager, Energy Engineer, Building Owner, Human Resources Staff, and on-site Environmental Coordinators. There are also questions that ask if the owner has conducted annual occupant surveys to gather data on their general health, comfort, and well-being as well as how informed occupants are about energy policies and opportunities to conserve resources.

Add Project and Complete Basic Project Information

The first task is to connect your project to the survey. To add your project, login to the GBI Account from which the assessment and/or project registration were ordered.

Select “Green Globes Projects” from the green toolbar.

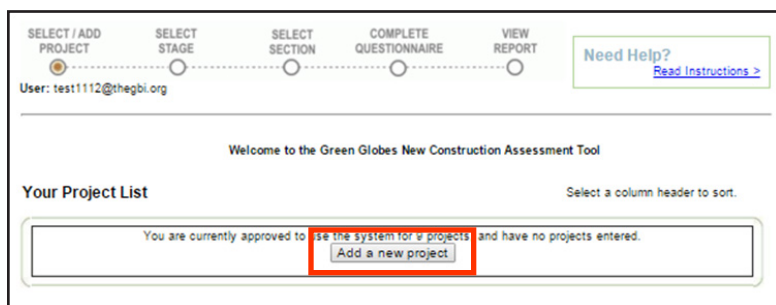


Select “Existing Building Projects”

Select “Launch Project” next to the project you wish to open.



Select “Add a New Project”.



At the top of the screen select the button to indicate you intend to complete a full assessment on this project. Complete the remainder of the Basic Building Information and select “Save and Continue”.

After you click “Save and Continue” you will be on the first page of the survey.

Access the Survey in Subsequent Sessions

If you have previously added your project and entered your basic building information, you will not be automatically directed to the Basic Building Information page. Once you select “Launch Project” you will be directed to the Project List. To access the survey, click on the project name link.

This will direct you to the project dashboard where you can click in the colored section beneath the area you wish to access. Alternative methods to access the survey are to select “Complete Questionnaire” or select “go to section”.

Add Collaborators

In addition, if you have other team members who require access to the surveys, you may add them as collaborators. From your project page, click on the name of the project.

Select “Edit” under the Collaborator section.

Enter the GBI Account User Name for the person for whom you wish to grant access. Select “Add Collaborator”.

Save Responses

Criteria are allocated specific point values according to the response provided (Yes, No, N/A, or a threshold value).

You must select “Save and Continue” at the bottom of each page to save your responses and advance to the next page.

The Green Globes online system is interactive and automatically calculates the projected Green Globes score based upon your responses to the survey questions. Each time you save a page of responses within the survey, the projected score updates accordingly. The system also indicates what percentage of the survey has been completed depending on the total number of pages saved (not based upon the number of responses answered and saved).

The screenshot displays the Green Globes online assessment interface. At the top, there is a navigation bar with links for HOME, YOUR PROJECT LIST, INSTRUCTIONS, MANAGE MY ACCOUNT, and LOGOUT. Below this, a progress bar shows the current step: SELECT / ADD BUILDING, BUILDING DASHBOARD, SELECT SECTION, COMPLETE QUESTIONNAIRE (highlighted), and VIEW REPORT. The current section is "Test Project GGP Training - Large Office Building" with the user "testing_again@thegbi.org". The section title is "Section: Resources - Site Questions". A status box on the right indicates a "Current Rating" of 5% and "Pages Answered" of 19 of 19. The main content area lists survey questions with radio button options for Yes, No, or Unknown, and associated point values. A tooltip on the right explains that a separate designated area for storage will help avoid recycled waste being inadvertently hauled away with other refuse. At the bottom, a red box highlights the "Save and Continue" button.

Question	Answer	Points
Facilities for Storing and Handling Recyclable Materials		25
Are there separate storage/handling facilities for used paper products, glass, metal and plastic?	☐ Yes ☐ No	10
Are there collection points for sorting paper, glass, metal and plastic near the areas where waste is generated?	☐ Yes ☐ No	10
Is there a composting program in place?	☐ Yes ☐ No	5
Waste Reduction Workplan		30
Has a waste audit been done within the last three years?	☐ Yes ☐ No	5
Is regular monitoring of waste conducted?	☐ Yes ☐ No	5
What is the current diversion rate?	☐ >85% ☐ >75% ☐ >50% ☐ Unknown	10
Are there waste-reduction targets?	☐ Yes ☐ No	5
Is there a construction, renovation and demolition waste management policy?	☐ Yes ☐ No	5

Pre-Assessment Checklist

The project manager and team should complete the survey and utilize the [GG EB Pre-Assessment Checklist](#) (available for download online) to record the specific documentation and location within that document that supports their responses.

This checklist can then be used to assist the team when gathering documentation to submit to the assessor. It is recommended the team include this file with the documentation packet submission to assist in locating the specific documentation used to support the survey response.

It is NOT intended to be used as scoring tool, as it does not contain threshold values for individual responses.

The GG EB Pre-Assessment Checklist is an Excel-based document. The file includes expandable sections to be able to view each criterion, associated ToolTips and maximum possible points.

Important Note: This document is intended to help you track your Green Globes for Existing Buildings assessment. Drop-downs have been included to indicate the intention to include or exclude each criterion, and comment fields are located throughout for notes and to identify supporting documentation for the third-party assessor. This document is **not intended** to predict your project's Green Globes score or rating, nor can it be used in place of the online survey. The online survey must be purchased and completed to pursue project certification. Final Green Globes score and rating is based upon third-party verification of the points claimed in the online survey.

Either use the + or - buttons to the left of the numbers above them to expand or collapse sections within the table.

CRITERIA #	AREA / CRITERIA QUESTION	TOOL TIP / REFERENCE INFORMATION	MAX POINTS	ADD CREDIT	PERSON ASSIGNED TO
1.0	ENERGY		350.0		
1.1	Energy Consumption		80.0		
1.2	Lighting		23.0		
1.3	Boilers		16.0		
1.4	Controls		14.0		
1.5	Hot Water		16.0		
1.6	Other Energy Efficiency Features		12.0		
1.7	Green Energy		16.0		
1.8	Envelope		12.0		
1.9	Energy Policy		5.0		
1.10	Energy Audit		2.0		
1.11	Energy Management, Monitoring and Targeting		16.0		
1.12	Energy Training		5.0		
1.13	Financial Resources		5.0		
1.14	Sub-metering		10.0		
1.15	Operating Manual		15.0		
1.16	Maintenance Schedules		22.0		
1.17	Public Transportation		45.0		
1.18	Cycling Facilities		10.0		
1.19	Other Measures		5.0		
2.0	WATER		80.0		

Expandable Sections

ToolTips

CRITERIA #	AREA / CRITERIA QUESTION	TOOL TIP / REFERENCE INFORMATION	MAX POINTS	ADD CREDIT	PERSON ASSIGNED TO	DUE DATE	FILE NAME(S)	FILE PATH, NAME, DIRECTORY	NOTES
1.0	ENERGY		350.0						
1.1	Energy Consumption	For buildings that are part of a healthcare campus rated by the Energy Star, please check the box for Healthcare campus ES rating and enter the campus ES rating and energy consumption data. For all other buildings, please complete the relevant Energy Star survey information regarding occupancy, number of PCs, open hours and % heated and % cooled for the individual building only.	80.0						
1.11	Does the building have individual metering installed and functional or plan to install individual building meter within the next 12 calendar months?	In the event of campus ES rating, this question will in part determine the pro-rata share of eligible energy performance credits that will be awarded. If your building is master metered at the HC campus, with an ES HC campus rating, your building is eligible for up to 10 points of energy performance credits. If an individual meter was installed in the last 12 months, up to 40 points of the energy performance credits. If you plan to install a meter within the next year, and up to 20 points if there are no existing individual meters. Buildings with individual building meter data for 12 months or more are not eligible for the award of energy performance credits based upon the HC campus ES rating. The individual building energy consumption data and/or ES rating must be entered to calculate and award energy performance credits.	8.0						
1.12	Please supply the following data in order that an Energy Star target may be established: - How many people work in this facility during normal operating hours? - Number of PCs - How many hours per week is the facility open? - % Heated - % Air-Conditioned	- Enter the total number of employees who work in this space. The normal occupant density ranges between 0.3 and 0.6 occupants per 1000 square feet. - Enter the total number of personal computers and servers in this space. - The total number of hours per week that this space is in operation, excluding hours when the facility is occupied only by maintenance, security, or other support personnel. For facilities with a schedule that varies during the year, "operating hours/week" refers to the total weekly hours for the schedule most often followed. Office space operation time averages 60 hours per week, rather than 48 hours per week. Operating hours per week must be 24 or greater for office spaces and must not be greater than 168. - The percentage of gross floor area that is heated. - The percentage of gross floor area that is air conditioned. Please select the month and year corresponding to the last month of the 12-month period for which you will be entering energy consumption figures.	25.0						
1.13	Please specify the ending month of the 12-month period which energy consumption figures are being entered	Include the total figures (including taxes) for the overall energy cost of the building. If detailed information is not available, please provide an estimate.	5.0						
1.14	What was the building's total energy bill for the 12-month period specified?	Provide energy consumption for the specified 12-month period, including either total values (in any of the boxes provided), or monthly or bi-monthly amounts.	5.0						
1.15	What was the total energy consumption for each non-renewable fuel type, in total or by month, for the 12-month period specified?	Choose as many as apply.	5.0						
1.16	Does the building incorporate any of the following high-efficiency lighting features?	Context fluorescent are suitable replacement for incandescent.	5.0						

Maximum Possible Points

Assign Tasks and Record Documentation

Gather Documentation

The project manager will ensure all documentation that verifies the survey responses is available and ready to provide to the assigned assessor.

Schedule On-Site Assessment

When your project registration and assessment are paid, the online evaluation is complete, and your documentation is ready for review, contact your GBI Project Manager to schedule your On-Site Assessment. Provide your preferred date range for the site visit. Keep in mind that a minimum of one month advance notice is required for scheduling.

Your GBI Project Manager will reach out to the pool of certified third-party Green Globes Assessors (GGA's) to determine who is available and best suited for your project. Once secured he/she will assign an assessor to your project and email a scheduling letter that provides the assessor's contact information and the official site visit date.

From: Dianne Elliott
Sent: Thursday, October 22, 2015 11:12 AM
To: client@sustainability.com; etruelove@att.blackberry.net
Cc: Jenna Middaugh; Dianne Elliott
Subject: GBI Green Globes for Existing Buildings Scheduling Letter for the Green Building in Richmond VA

Barry,

The attached letter introduces Mr. Eric TrueLove as your assigned assessor for the Green Globes for Existing Buildings Recertification of the Green Building in Richmond VA. The site visits is scheduled for November 20, 2015.

Per your previous communication, the online self-evaluation is ready and you will have all supporting documentation ready and available for assessor review during the visit. I have made Eric a collaborator for this project, so he may access your survey via his GBI Account.

Eric will be in contact with you shortly to advise you on the assessment process. Please feel free to contact him at any time.

If I can be of any further assistance, please let me know.

Best Regards,

Dianne Elliott | Customer Service Manager | Green Building Initiative
P.O. Box 80010 | Portland, OR 97280
503.274.0448 x105
www.theebi.org | www.facebook.com/GreenBuildingInitiative



October 22, 2015

Client
Sustainability, Inc.
Richmond VA
client@sustainability.com

Order Date: 8/7/15

Re: Green Globes™ for Existing Buildings Assessment of the Green Building at 601 East Ames Street in Richmond VA 23219.

Dear Client,

Thank you for your order of an Existing Building Site Assessment.

The site visit for the Green Building will be completed by Eric TrueLove on November 20, 2015. Eric can be reached at etruelove@att.blackberry.net and (608) 332-8444 if you have any questions regarding his requirements for the assessment. Eric will compare the operations and maintenance documents and information you entered in the Green Globes CIEB online survey with the actual facility being assessed.

In preparation for the on-site visit, please ensure that your online survey is current and that you save an electronic copy or print a paper version for your records. In addition, please reference the [Green Globes for Existing Buildings Pre-Assessment Checklist](#) for additional documents needed for the assessment.

You have supplied the following contact information for the project: Client, client@sustainability.com and (555) 355-3170. If this information is not correct, please let us know immediately.

We look forward to working with you!

Best Regards,

Dianne Elliott | Customer Service Manager | Green Building Initiative
P.O. Box 80010 | Portland, OR 97280
503.274.0448 ext. 105 direct
www.theebi.org | www.facebook.com/GreenBuildingInitiative

The assessor will contact you to discuss specific details of the assessment, including the itinerary, recommended participants, etc..

Prepare for Site Visit

When preparing for the On-Site Assessment, you should organize the assessment documentation in the order of the criteria within the survey.

To help with the organization process, you can print a copy of the survey (Verifier Worksheet) that contains your responses by selecting “View Report” from the top navigation.

The screenshot shows the top navigation bar of the Green Globes assessment tool. The steps are: SELECT / ADD BUILDING, BUILDING DASHBOARD, SELECT SECTION, COMPLETE QUESTIONNAIRE, and VIEW REPORT. The 'VIEW REPORT' button is highlighted with a red box. Below the navigation bar, the user is logged in as 'testing_again@thegbi.org'. The current building rating is shown as 0%.

From the report, select the link “Click here to see a verifier worksheet for this building”.

The screenshot shows the assessment report for 'Test Project GGP Training - Small Office Building'. The overall rating is 66%. A table lists the sections and their completion status:

Sections	Pages Answered	Rating Earned
Energy	4 of 4	52%
Water	1 of 1	36%
Resources	2 of 2	57%
Emissions	5 of 5	91%
Indoor Environment	3 of 3	82%
Environmental Management	4 of 4	85%
Total	19 of 19	66%

Below the table, there is a bar chart showing the percentage of points achieved for each module. The chart shows the following percentages: Energy (52%), Water (36%), Resources (57%), Emissions (91%), Indoor Environment (82%), and Environmental Management (85%).

Summary of Your Achievement: Test Project GGP Training achieved an overall rating of 66%.

You should also secure a meeting room and arrange for all key personnel to be available during the assessment. Schedule a guided site tour. It should be organized so that the building walk-through occurs in an efficient and orderly sequence (e.g. from roof deck through main floors, to basement, to external site) and the items to be inspected are seen throughout a single path. The assessor should not have to retrace his/her steps unless certain building features need to be revisited.

The length of the site visit will vary depending on building size and the level of document organization, but a typical site assessment of a 50,000 SF building takes approximately 4 hours.

The assessor will contact the project manager to discuss the site visit and provide an agenda in advance.

Assessor On-Site Assessment

The purpose of the on-site assessment is to verify conformance to the assessment criteria and determine point awards based upon additional documentation and the physical inspection of the building and site. The site visit consists of three phases: the Introductory Meeting, the Building/Site Tour and the Closure Meeting.

Introductory Meeting

On the day of the site visit, you should meet the assessor at a pre-determined time and place. The assessor will begin with a brief meeting with key project personnel, which should include an introduction of team members. He/she will review the survey and the supporting documentation and will note all documentation still lacking. Be sure to discuss any criteria you believe should be considered as non-applicable and address any other questions.

The assessor will look for the following documentation during the visit organized by assessment area.

Energy

- Energy Consumption
 - ENERGY STAR documentation
 - Work order for energy meter installation
 - Energy consumption figures
 - Utility Bills for the 12 month period
- Lighting
 - Equipment cut sheets and reflected ceiling plan to verify percentage and/or calculations
- Boilers
 - Boiler manuals
 - Mechanical drawing with layout
- Controls
 - Operating procedures that establish temperature set points
- Hot Water
 - Water heater operating manuals
 - Standard operating procedures that establish temperature set points or faucet temperatures
- Other Energy Efficiency Features
 - Equipment cut sheets
 - Operating manuals
 - Schematic drawings of CHP

- Green Energy
 - Copies of contracts with green energy provider or RECs
- Envelope
 - Building condensation report
 - Industrial Hygienist report
 - Cut sheets for windows/doors
 - Data on insulation or building section drawings that show sealant and insulation details
- Energy Policy
 - Documented energy policy signed by senior management
- Energy Audit
 - Energy Audit report within the last 3 years
- Energy Management, Monitoring and Targeting
 - Energy plan, energy historical data
 - Documented energy goal with preferably graphical representations to show movement toward goals
- Energy Training
 - Individual training plans
- Financial Resources
 - Budget that includes energy upgrades and explains funding source
- Sub-metering
 - Tenant energy readings
 - Tenant agreement
 - Drawing of sub-metering layout
- Operating Manual
 - Operating Manual
- Maintenance Schedules
 - Maintenance schedule or reports from applicable computer program
 - Life Cycle calculations or data that demonstrate how they are used as part of maintenance decisions
- Public Transportation

- Bus/Train route maps and schedule
- Cycling Facilities
 - Visit bike racks and changing facilities
- Other Measures
 - Advertising or notices concerning car-pooling etc.

Water

- Water Consumption
 - Water consumption figures and water bills for the 12 consecutive month period
- Water Conserving Features
 - Cut sheets or operating manuals for water saving features, or plan showing how landscape minimizes irrigation
 - Documents for alternate irrigation sources
- Water Management
 - Water management plan
 - Water monitoring data
 - Water goals
 - Maintenance procedures/records

Resources

- Facilities for Storing and Handling Recyclable Materials
 - Waste management contracts
- Waste Reduction Workplan
 - Waste Audit report within 3 years
 - Waste handling reports
 - Waste diversion goal
 - Construction waste management plan/policy
- Site Enhancement
 - Environmental assessment data

Emissions, Effluents and Pollution Controls

- Boiler Emissions

- Emission data or report
- Maintenance report
- Refrigerants
 - Chiller system operating manuals
- Management of Ozone Depleting Refrigerants
 - ODS inventory or report
 - Maintenance records
 - Training records
 - Leak testing results
 - ODS phase out plan
 - Maintenance contract
- Halons
 - Validate that none of the sprinkler systems contain halon
- Waste Water Effluents
 - Demonstrate floor and roof drain operations, in addition to storm water routes and protection
 - Indicate glycol flushing locations and procedures
- Asbestos
 - Asbestos inventory and report
 - Asbestos management plan
- Radon
 - Radon survey or location maps to indicate radon risk area
- PCBs
 - PCB survey or report
 - PCB management Plan
 - PCB inspection results
- Storage Tanks
 - Storage tank management plan
 - Reporting results
 - Upgrading schedule
 - Testing results

- Emergency response procedures
- Records
- Closure/removal plans
- Drinking Water (lead and bacteria)
 - Report from local authority to indicate water quality
- HCS Program
 - Provide copies of MSDS's
- Health & Safety and Management of Hazardous Products
 - Procedures for handling haz mat, records of haz mat & haz waste disposal, and training records for staff handling of haz mat
 - Procedures or scope of work from landscape contractors, pest control contracts

Indoor Environment

- Ventilation System
 - Maintenance records for ventilation system
 - Results of acoustic measurements
 - Results of carbon dioxide monitoring
 - Mechanical drawings showing equipment
- Filtration System
 - Filter cut sheets
 - Demonstrate manometer set points
- Humidification System
 - Humidification system cut sheets or manufacturing information
 - Maintenance records
- Cooling Towers
 - Maintenance records for cooling towers
- Parking and Receiving
 - Visit parking areas to validate ventilation systems and ensure no exhaust fumes are permitted to reenter the building
 - Demonstrate the carbon monoxide monitoring in the garage and near boilers
- Control of Pollutants at Source
 - Record of complaints from building occupants

- Procedures to minimize indoor air pollutants at source
- Cleaning contract and scope of work
- IAQ Management
 - Sample forms or contract with tenants concerning IAQ
 - Record of previous complaints
 - Indoor Air Quality audit, HVAC operating procedures
- Lighting Features
 - Lighting survey or lighting audit data
 - Calculations or site plans that indicate day lighting levels
- Noise
 - Demonstrate the noise levels throughout the building

Environmental Management System

- Environmental Management System (EMS) Documentation
 - Environmental Management Plan with applicable goals
 - The action plan that indicates the schedule for corrections
- Environmental Purchasing
 - The purchasing plan or documents that indicate the preferred environmentally friendly products permitted
 - Copies of documents that demonstrate the review of MSDS are part of purchasing decision making
- Emergency Response
 - A copy of the emergency response plan
 - Applicable training records
 - The operating procedures relative to power failures
- Tenant Awareness
 - Lease agreements or communications with tenants regarding environmental initiatives
 - Emails, website information, contract agreements, flyers, news letters, etc.

Building/Site Tour

After the meeting, you or a designated representative will take the assessor on a guided tour of the building and site. During the tour, the assessor will need full access to the mechanical rooms, rooftop, basement, parking garages/lots, and work areas. He/she will document findings, and take pictures of verified building

features. The assessor will strive to be minimally intrusive but may need to inspect conference rooms and secure areas of the facility.

The assessor will inspect all accessible relevant building components and operations. The will inspect items, such as these:

Distance between air intakes and pollution source

- Air intake and exhausts
- HVAC Systems - installation
- Air filters
- Drains
- Toilet flow
- Urinal flow
- Sink flow
- Drains
- Motion sensors
- Water heater
- Cooling equipment and refrigerant
- Air handling equipment and access
- Leak detection
- Filters
- Meters
- Lighting controls
- Shading devices
- ENERGY STAR appliances
- Motion sensors
- Temperature controls
- Landscaping
- Irrigation system
- Exterior lights
- Smoking sign and designated smoking area
- Storage tanks

- Bicycle racks
- Car-pool spaces
- Recycling and waste handling

Closure Meeting

When the tour is finished, the assessor will conduct a closure meeting to review the findings, provide feedback regarding points the client is seeking, and identify items still requiring verification documentation. He/she will set expectations for the next steps, including the time line for submission of missing items and report delivery.

POST ON-SITE ASSESSMENT

Missing Documentation

Any additional documentation requested by the assessor should be sent as soon as possible after the assessment (usually within one week, unless otherwise agreed upon with the assessor). It is important to communicate any delays in the delivery of this documentation. The assessor cannot give credit for any items that cannot be validated. Delays in document submission will result in delays to the On-Site Assessment Report and Green Globes certification. Please note that failure to deliver supporting documentation within a reasonable time frame will result in the report being issued without the associated points.

Third Party Report

Upon receiving all additional documentation, the assessor will make any last updates to the EB survey. The assessor will use his/her professional judgment as necessary to account for any non-applicable criteria that cannot be accommodated by the online survey and will identify the resulting Green Globes score and rating. Within four weeks of the site visit (or four weeks after the receipt of any missing documentation, whichever is later), the assessor will create a detailed EB On-Site Assessment Report and submit it to GBI for review. The report contains the official Green Globes score, rating, and logo. It identifies any discrepancies between the client's version of the survey and the assessor's version and contains recommendations for future sustainability improvements.

 	RECOMMENDATIONS Additional recommendations that may enhance the building and provide a better fit: Energy 1. Establish specific, measurable energy usage reduction targets and use utility toward goals. Benchmark and track energy consumption through Energy Star. 2. Explore opportunities to integrate daylight harvesting into the current light system. 3. Consider retrocommissioning to provide exercise of existing systems and to improve facility performance through low cost operational and maintenance improvements. 4. Evaluate strategies to install submetering of major energy uses such as HVAC extension to load profile for further study of energy reduction options. 5. Explore options to improve energy efficiency by incorporating advanced building operation to capture and recycle heat from electrical equipment; energy to reclaim waste energy from exhaust air and condition incoming air via variable motors. 6. Investigate opportunities to implement renewable energy systems such as solar systems or solar hot water heating to supplement and reduce commercial power. 7. Conduct an energy audit to include appliances, computers, audio visual equipment to identify options to reduce energy consumption. 8. Consider a performance and condition assessment of the building envelope with moisture, condensation, or air leakage and opportunities to improve the environmental performance of the building. 9. Establish an operational performance baseline for HVAC equipment to identify operation or potential issues. 10. Consider upgrading the Building Automation System (BAS) to provide monitoring over more building systems including lighting, security, fire alarm, and sprinklers. 11. Provide frequent formal energy training to staff to provide timely updates of building specific training for employees on sustainability initiatives and resource conservation tips employees can use to contribute towards goals. 12. Provide measures to reduce dependency on cars by providing transit passes. 13. Provide covered bike racks for employees to encourage alternate means of transport. Water 1. Consider a water audit to identify water usage trends, locate leaks in the system, and implement water conservation measures. 2. Develop specific water reduction targets for the building to facilitate progress. 3. Specifications for future build-out or future replacements should require less than 1.0 GPM, unless that use less than 1.0 GPM, and low flow/ultra-low flow nozzles per minute (GPM) include standards for low flow showerheads that changing facilities with showers for employees in the future. REPORT ADDRESSING COMMENTS LETTER 10-001	VERIFIED BUILDING FEATURES Energy - ACME Office does not have an Energy Star Rating and therefore did not meet the Consumption criteria under the Green Globes CEB rating system. - The primary source for heating, ventilation, and cooling (HVAC) is provided in the space above the ceiling. - Chilled water for fan coil units is provided by a McQuay chiller. - Supplemental air conditioning for the L&N room is provided by a Liebert separate rooftop unit. (Fig. 1) - Supplemental heating is provided by hot water fired tube baseboard in perimeter walls. Hot water is converted from steam metered separately. - HVAC systems are monitored and controlled with a Building Automation System. - Electricity consumption for the ACME Office leased space is metered separately. - Lighting is controlled by occupancy sensors in offices, conference room, etc. - Exterior illuminated signage is controlled by timers to ensure shut-off after hours. - High efficiency lighting was observed throughout the building including T5 fluorescent fixtures, and LED exit lighting.  Fig. 1: Liebert Roof Top Unit  Fig. 2: Steam Valve and Vialer Water - Sustainable building envelope features include a vestibule at the building entrance, energy efficient doors and windows, air sealing, and insulation. - A small percentage of electricity purchased from the local utility is generated from renewable resources. - Energy performance for each investor center is measured and reviewed by the facility manager annually. - Energy performance targets are set for the ACME Office investment Center portfolio. - Energy management policy has stated goals to reduce energy use and greenhouse gas emissions. Standards for energy consuming systems include temperature set points and operating schedules for HVAC equipment, lighting, signage, and appliances. REPORT ADDRESSING COMMENTS LETTER 10-001	SUMMARY ACME Office has demonstrated excellent progress in the reduction of environmental impacts and use of environmental efficiency practices. The policies and procedures that have been implemented and the efforts towards continuous improvement of the building in Fayetteville, MI. Verification of the initiatives currently in place documents an earned final score of 584 out of 658 applicable points and a rating of 65% which is equivalent to Two Green Globes. Jamie Jones and her team should be commended for their excellent work in preparing the Green Globes assessment package and contributing to the assessment. The results of the Existing Building Site Assessment demonstrate their commitment to furthering sustainability practices for ACME Office. <i>David M. Johnson</i> David M. Johnson, GBA, NCBIB D Johnson Architect
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GBI Report Review & Issuance

In the last step of the On-Site Assessment, GBI will review the report for consistency, for technical incongruence, grammar and aesthetics. We will notify the assessor regarding any clarification requests or needed updates. If required, the assessor will update the report and submit to GBI. We will review the report to ensure the updates are complete. Once approved, we will issue a PDF of the final assessment report to the project manager by email.

Upon receipt, the project manager is responsible for reviewing the report and identifying any areas in which they have questions or would like clarification. If there are any noted discrepancies, they must contact both the assessor and GBI within two weeks and provide documentation that supports additional credit. The assessor and GBI will promptly address any discrepancies. For additional details, please refer to the [GBI Assessment Discrepancy Resolution & Appeal Guidelines](#).

BENCHMARKING & RECERTIFICATION

GBI strongly encourages annual benchmarking of building performance using the Green Globes EB survey as well as formal EB recertification every three years. Tracking the building's actual performance and operations helps owners/facility managers track their return on investment in sustainable measures and develop action plans to further improve sustainability. This three-year cycle of benchmarking and Green Globes assessment is intended to continue over the entire building service life.