



## **An Application Guide to Green Globes® for Healthcare Buildings and Campuses**



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## Green Globes® Application Guide for Healthcare Buildings and Campuses

### Introduction

Green Globes offers building assessment and certification programs for a wide variety of buildings projects which include new buildings, major renovations/additions, and existing building operations and management. Green Globes New Construction (NC) and Continual Improvement of Existing Buildings (CIEB) programs work in tandem to provide a sustainability assessment, rating, improvement, and certification throughout the building lifecycle.

Green Globes online evaluation tools and third party assessment/certification services can be flexibly applied to a wide variety of building types that reside on a Healthcare Campus. Because of the inherent complexity with sustainability evaluation and improvement projects pertaining to buildings on a Healthcare Campus, there are many considerations for facility managers undertaking sustainability initiatives.

### Purpose

This application guide is written specifically to assist clients pursuing sustainability improvement, assessment, and/or certification projects on Healthcare Campuses with Green Globes. The purpose of the document is to:

- 1) Clarify eligibility of a new or existing building on a Healthcare Campus for a specific Green Globes assessment and certification program.
- 2) Facilitate selection of the appropriate Green Globes assessment and certification program for a specific building project.
- 3) Explain how to pursue a Green Globes CIEB Campus Rating/Certification.
- 4) Articulate the benefits, opportunities, and requirements involved in a Healthcare Campus Certification.
- 5) Explain the Green Globes Energy Performance credit methodology for CIEB.
- 6) Ascertain if a building complex or multiple interconnected buildings should be evaluated and/or certified as a single building or as multiple separate buildings.
- 7) Determine if a major renovation project qualifies for assessment/certification and to understand the specific considerations for these types of projects.

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## Healthcare Building Program Eligibility Matrix

Individual Building Description	Green Globes Eligibility by Program			
	CIEB Healthcare Hospitals	CIEB	NC	ANSI/GBI 01-2010 Pilot
Hospital <sup>1</sup>	Eligible <sup>3 5,6</sup>	Not Eligible	Eligible <sup>7 8</sup>	Eligible <sup>7 8 9</sup>
Long-Term Care Facility <sup>1</sup>				
Outpatient Clinic <sup>2</sup>	Not Eligible	Eligible <sup>3 4 6</sup>		
Ambulatory Care Center <sup>2</sup>				
Medical Office Building <sup>2</sup>				
Dormitory/Apartment		Conditional Eligibility <sup>4 5 6</sup>		
Office Building				
Mechanical/Valve/Controls Building				
Warehouse				
Light Industrial Building	Eligible <sup>4 5 6</sup>	Eligible <sup>7 8 9</sup>		

**Notes:**

1. A hospital or Long-Term care building may incorporate other occupancy/uses such as an outpatient/ambulatory care clinic, emergency room, and medical offices. Provided that the building incorporates inpatient beds, use CIEB Healthcare.
2. Stand alone building without inpatient beds; if Outpatient Clinic and Ambulatory Care Center functions are part of an Acute Care Hospital or Long-Term Care Facility, use Green Globes CIEB Healthcare for existing buildings.
3. Additional fees for building complexity may be required for certification. Custom Energy Analysis may be required to determine the award of Energy Performance credits (per option selected by Client).
4. Building must include at least a) 400 GSF or more fully enclosed space, b) lighting and c) mechanical ventilation system.
5. These buildings will potentially qualify for numerous “non-applicable” determinations, please consult with GBI staff or consult the appropriate eligibility guideline document for utility/special purpose buildings prior to proceeding with certification.
6. Green Globes CIEB and CIEB Healthcare require at least one full year of occupied operational data in order to pursue certification.
7. Buildings at any stage of design through occupancy for less than one year are eligible to commence the Green Globes NC and/or ANSI/GBI assessment and certification program (additional eligibility requirements apply for ANSI)
8. GBI recommends that New Construction/Major renovation projects for Hospitals and Long-Term Care Facilities utilize the ANSI/GBI 01-2010 Pilot Program, if project constraints allow.
9. Please see ANSI/GBI 01-2010 Standard document for additional eligibility requirements.

## New Construction vs. Existing Buildings Programs

GBI offers a range of assessment and certification programs spanning the complete continuum of a building lifecycle. While most building projects considering assessment and certification fall clearly into either New Construction or Existing Building categories, in some cases the nature of the project or status of the project can make it unclear as to which Green Globes assessment and certification program is the most applicable and should be utilized.

For new construction, and for major renovations or additions to existing commercial buildings, GBI offers *Green Globes New Construction (NC)* or the *ANSI/GBI 01-2010 Standard Pilot Assessment and Certification Program*. Existing buildings and new or recently renovated buildings with 12 months or more of occupied operational data are eligible for assessment and certification with *Green Globes Continual Improvement of Existing Buildings (CIEB)* or CIEB Healthcare, if appropriate.

### Project/Building Lifecycle Program Eligibility

Project Type	Phase in Project Lifecycle/ Occupancy Status	Green Globes Program Eligibility		
		NC & ANSI Pilot	CIEB/ CIEB HC	Aspects Assessed
New Construction, Major Renovation, or Addition	Project Initiation through Completion/ Commissioning (Pre-occupancy)	Yes <sup>1, 2, 6</sup>	No	Design & Construction Only
	Completed project, with <u>less than 12</u> months of fully operational data (Occupied)	Yes <sup>1, 2, 6</sup>		
	Completed project, with <u>more than 12</u> months of fully operational data (Occupied)	Yes <sup>1, 2, 6</sup>	N/A <sup>7</sup>	
Existing Building (Operations and Management Assessment with Green Globes CIEB)	No major renovation or addition project in the last 12 months and 12 or more months of fully occupied operational data (Post-occupancy)	Generally NO <sup>5</sup>	Yes <sup>3</sup>	Sustainability Features, Operations & Management
Any building previously certified with Green Globes		Generally Yes <sup>5, 6</sup>	Yes <sup>3, 4</sup>	

## Notes:

1. New Construction, Major Renovation, or Addition projects commencing the Green Globes process early in the project lifecycle benefit from a) the self-evaluation score feedback from the online evaluation, b) tailored improvement suggestions from the online report, c) a preliminary score and rating resulting from a review of construction documents by a GBI assigned third party assessor, and d) customized sustainability improvement suggestions for each assessment area (Energy, Water, EQ, etc.) from the assessor.
2. For completed/operational buildings, NC certification still requires both an NC Stage I (construction documents review) and NC Stage II third party assessment; however both of these items can be ordered and completed simultaneously to expedite certification.
3. For recently completed buildings/projects, assessment utilizing operational data at least 14-16 months from initial occupancy is suggested to exclude the transient and start-up impacts on Energy and Water consumption.
4. If previously certified under Green Globes CIEB/CIEB Healthcare, qualifies as a re-certification.
5. In some cases, GBI may allow NC or ANSI/GBI certification of buildings that have been in occupied operation for more than 12 months.
6. Buildings may be dual-certified under Green Globes NC and ANSI/GBI 01-2010 Standard.
7. Not applicable because this is considered an Existing Building Project.

## Campus Certification with Green Globes

GBI offers optional campus third-party assessment and certification with the *Green Globes Continual Improvement for Existing Buildings (CIEB)* program. Campus-wide sustainability evaluation and certification with Green Globes augment the benefits of individual building assessment and certification and leverages the synergy and efficiency of assessing groups of buildings as part of a larger project.

Campus assessment and certification enable credible sustainability benchmarking of the entire campus, enable clear comparison and contrast of the individual buildings on the campus, and enable campus-wide overview of performance in specific sustainability areas such as Energy, Water, and EMS. The benefit of an evaluation by an experienced Green Globes Assessor is that customized improvement suggestions are made to facilitate holistic management and sustainability improvement of the overall campus. Finally, aggregated campus sustainability performance is documented, and sustainability performance improvements can be benchmarked, measured, and tracked over time.

## Green Globes Campus Certification Overview

1. A campus is considered to be two or more buildings and associated grounds that are geographically adjacent or co-located. Separate portfolio certification is available for groups of geographically dispersed buildings.
2. All significant existing buildings on the campus must individually complete the third-party assessment and Green Globes CIEB/CIEB Healthcare building rating/certification process (except for dedicated Boiler/Chiller Plants and other buildings ineligible for certification).
3. In addition to the individual building assessments/certification, a campus third-party assessment/certification must be purchased for all buildings on the campus (with the exceptions of ineligible and dedicated boiler/chiller plant buildings). Generally, no separate site visit or additional documentation is required; however the campus/portfolio certification report takes an additional 6-8 weeks to produce after completion of the last building certification.
4. Individual Green Globes final third-party assessed percentage points scored for all the certified buildings on the campus are averaged on a weighted square footage basis to determine the campus percentage points score on a 1,000 point scale.
5. Campus Green Globes ratings range from one to four Green Globes, are based on the campus percentage point score, and utilize an identical rating scale (percentage points required for each rating) to the individual buildings rating scale.

Individual buildings being certified as part of a campus may be eligible for substantial third-party assessment/certification discounts. Discount applicability depends on the campus details, the buildings' details, and specifics of the campus certification project implementation. After ordering a campus assessment and certification; where applicable, individual buildings that are being certified as part of that campus may be eligible for specific discounts based upon:

1. Common EMS policies and documentation
2. Site assessment performed by the Green Globes Assessor occurring on a single visit
3. Identical and essentially replicated buildings
4. Healthcare Campus ENERGY STAR Rating

## Green Globes Campus Certification Program Details and Requirements\*

1. Specific to Green Globes CIEB and CIEB Healthcare, over 50% of the criteria are policy and management related. Since the vast majority of campuses are under a single management organization, the assessment for these criteria would be identical across the portfolio of buildings. Due to individual building characteristics, however, it is still necessary for the client/user to complete a GG CIEB/CIEB Healthcare online assessment for each building. This ensures that the interactive features and output of the program, including the report and assessor's worksheet, are maintained for each individual building assessment.
2. Campus certification may be added after one or more buildings have been certified on a campus; however, all individual certifications and the campus certification must be completed within 12 months (including consistent time frames for utility consumption data provided).
3. A multi-building campus should delineate a portion of the grounds associated with each individual building, including landscaping, parking and roadway, sidewalk, etc. The criteria related to grounds would then cover the total campus parcel. For a compact campus, most if not all of the grounds would be 'captured' in the assessment of the single principal campus building.
4. Many campuses particularly if dating back before the latter part of the 20<sup>th</sup> century, are master metered for utilities and/or have a central plant serving multiple buildings. Therefore, without specific energy and water consumption data for each single building, it is not possible to assess actual energy and/or water performance per building; it can be only assessed in an aggregated form for the campus. Depending on the building certification project, and campus particulars, Energy and Water Performance credits may be applied to an individual building based on applicable aggregated campus data and a suitable allocation metric as determined by the Green Globes Assessor and GBI. Other credits in the Energy and Water categories are available even if energy and water performance points are not attainable. In the worst case, because Green Globes does not incorporate pre-requisites, it is still possible to certify the individual building or entire campus; however, the final score/rating will be adversely impacted.
5. Since multiple buildings on a campus may share a common boiler/chiller plant, or an individual building's boiler/chiller plant may reside in a separate building, the attributes of the boiler/chiller plant (including equipment, systems, and information) should be entered online into the assessment for the individual building being assessed. A separate building online assessment/subscription for a dedicated boiler/chiller plant building is not required for individual or total campus certification. Typically, the boiler/chiller plant would not be certified separately, unless the client determines they want to certify the boiler/chiller plant.
6. Smaller buildings (size < 400 GSF) or other buildings that are ineligible for individual Green Globes rating/certification can be a) combined with the assessment of a larger building, b) excluded from the assessment/certification requirement to achieve campus certification, or c) aggregated with other smaller buildings; all as determined at GBI's sole discretion.

7. For campus certification, any new construction or existing buildings undergoing major renovation on the campus that are first occupied within the 12 months prior to the date of desired campus certification, must be certified with Green Globes NC or ANSI/GBI 01-2010 Pilot Program, and included in the campus certification. In addition, incomplete or unoccupied new buildings/major renovation projects as of the date of campus certification must at least be registered for Green Globes NC or ANSI/GBI 01-2010 Pilot Program and have progressed to an appropriate stage in the assessment/certification process.

***\* A complicating factor for existing buildings is energy and water consumption data. Often with campuses, the lack of individual metering of utility consumption, including hot and chilled water, and/or steam from a central plant to individual buildings is a common occurrence. In the case of a relatively small number of buildings, an allocation methodology is possible, as GBI has taken this approach in the past. This would constitute part of a custom energy analysis ordered as part of GG CIEB/CIEB Healthcare assessment. However, the client always has the option to opt out of claiming credit for energy performance.***

Clients can flexibly choose to certify one or several buildings on a campus, and then later in that year, certify the rest, and then ultimately elect to pursue campus certification. However, to take advantage of discounts, travel cost savings, and other synergies resulting from certifying the entire campus as one project, it is best to scope and plan a Green Globes Campus rating/certification project from the beginning. In order to clarify the total project requirements for campus certification, and to determine the applicability/eligibility of individual buildings for campus discounts, clients are encouraged to submit a GBI Campus Summary Form at the earliest opportunity in the process. Campus certification requirements and discounts are determined at GBI's sole discretion. Terms and conditions from the GBI price list apply.

## Energy Performance Credit Methodology - Healthcare

Green Globes CIEB/CIEB Healthcare provides Energy Performance credits for qualifying existing buildings. Credits are awarded based on benchmarked energy consumption data of the individual building (or hospital campus if applicable), with ENERGY STAR the most accepted benchmarking database.

Thus, the first step in pursuing Energy Performance credits within a Green Globes CIEB/CIEB Healthcare assessment is to obtain your individual building or hospital campus Energy Star rating. For those unfamiliar with utilizing the ENERGY STAR Portfolio Manager, go to the [ENERGY STAR Benchmarking Starter Kit](#), which includes worksheets, quick reference guides, and animated training on benchmarking instructions. For specific information regarding ENERGY STAR rating of individual buildings or healthcare campuses, please also refer to the appropriate [ENERGY STAR reference information](#).

Buildings with an ES rating of 76% or better earn credits which are allocated on a linear scale up to the full 80 points. The following comparison table illustrates the number of Green Globes Energy Performance points that are awarded based on a specific Energy Star Rating:

<b>Green Globes CIEB and CIEB Healthcare                      Green Globes Energy Performance Credit Award Comparison Scale                      (Applicable for Automated &amp; Manual Calculations)</b>	
<b>ENERGY STAR                      Rating</b>	<b>Green Globes                      Energy Performance Credits</b>
< 75	0 points
75	10 points
76-78	20 points
79-81	30 points
82-84	40 points
85-87	50 points
88-90	60 points
91-93	70 points
≥94	80 points

For building types where ENERGY STAR ratings are not available, but have 12 or more months of occupied energy consumption data and a credible database for comparison can be accessed, Energy Performance points may be awarded during assessment and certification based on the results of a custom energy analysis performed by the Green Globes Assessor. Since Green Globes does not have pre-requisites, even buildings that lack 12 months of occupied operational data or are otherwise unable to earn Energy Performance credits can still be certified with Green Globes if the total points earned meet the minimum 35% threshold.

Specific to **Hospitals**, ENERGY STAR (ES) can rate all space that supports the hospital activity, whether one or multiple buildings for energy performance and award eligibility. ENERGY STAR also makes allowance for inclusion of buildings on a healthcare campus that do not directly support the hospital activity, up to 51% of total space of which 10% can be non-ENERGY STAR award space. Hence if a hospital installation is a campus with multiple buildings and is master metered for utilities, the hospital building(s) and all other campus buildings included in the ES campus rating can potentially claim energy performance credits in Green Globes if the campus ENERGY STAR rating exceeds the 75 percentile threshold.

As many healthcare campus buildings are master metered for utilities, individual building utility data may not be available for individual building benchmarking. In addition, at the current time, databases to enable benchmarking comparison of certain individual hospital buildings' energy consumption data are limited.

## Guidelines for Green Globes CIEB/CIEB Healthcare Energy Performance Credits Single Building Assessment of a Master Metered Hospital Campus

This table shows how Green Globes CIEB/CIEB Healthcare Energy Performance credits are awarded to an individual building that resides on a master metered Acute Care Hospital Campus and is being assessed with Green Globes.

Individual Building Type	Green Globes Variant	ENERGY STAR (ES) Rating	Basis for Energy Performance Credits Instructions for Data Entry	
<b>Master Metered</b>	Hospital <sup>1</sup> Long-Term Care Facility <sup>1</sup>	CIEB Healthcare	Acute Care Hospital Campus	Green Globes energy performance credits will be awarded based on the <u>campus</u> ENERGY STAR (ES) rating. Enter the aggregated campus ES rating and the campus energy consumption data into GG. Energy credits are automatically computed and correctly applied in the online survey and report. Use a consistent 12-month period for ENERGY STAR (ES) as well as consumption data inputted into the Green Globes electronic survey.
	Other Building Types <sup>1</sup> on a Healthcare Campus	CIEB	Acute Care Hospital Campus	Energy Performance credits in CIEB will be awarded based on the hospital campus ENERGY STAR (ES) rating. Because there is a master meter, you still enter the campus aggregated consumption data, but to actually score your points, you use the ES rating and a manual calculation. Enter the aggregated campus energy consumption data into GG. Green Globes will calculate and apply estimated credits; however, the correct Energy Performance credits must be manually calculated and applied to the automated score and reports based on the campus ES rating. This is usually completed at the time of third-party assessment. <sup>1,2</sup>

### Notes

1. Buildings must be eligible for and be included in the hospital campus ES rating.
2. See Table above for Comparison Scale for Manual Point Calculations:

## Guidelines for Green Globes CIEB/CIEB Healthcare Energy Performance Credits Single Building Assessment of an Individually Metered Building on a Hospital Campus

This table shows how Green Globes CIEB/CIEB Healthcare Energy Performance credits are awarded to an individually metered, single building on a hospital campus that is undergoing assessment with Green Globes.

	Individual Building Type	Green Globes Variant	ENERGY STAR Rating	Basis for Award of Energy Performance Credits Instructions for Data Entry
<b>Individually Metered Building</b>	Hospital <sup>1</sup>	CIEB Healthcare	Hospital Campus	Energy Performance credits will be awarded based on the <u>campus</u> ENERGY STAR rating. Enter the campus building energy consumption data and ES rating into Green Globes. Energy Performance credits are properly calculated, applied, and reported within Green Globes.
	Long-Term Care Facility <sup>2,3</sup>	CIEB Healthcare	Individual Building	Energy Performance credits will be awarded based on the <u>individual building</u> ENERGY STAR rating. Enter the individual building energy consumption data and ES rating into Green Globes. Energy Performance credits are properly calculated, applied, and reported within Green Globes.
	Other ENERGY STAR Award Eligible Building Types <sup>2,3,5</sup>	CIEB	Individual Building	Energy Performance credits will be awarded based on the <u>individual building</u> ENERGY STAR rating. Enter the individual building energy consumption data into Green Globes. Green Globes will calculate credits based on an office building. Final energy performance credits must be computed manually and adjusted to determine the proper Green Globes score during third-party assessment.
	Other Building Types, <u>Not</u> ENERGY STAR Award Eligible <sup>4</sup>	CIEB	N/A	Final Energy Performance credits cannot be computed correctly within the system. Enter the individual building energy consumption data into GG. Estimated (not final) credits will be applied based on an office building benchmark. During Third-party assessment and certification, performance credits may be awarded based on the results of an optional custom energy analysis (if performed and database is available) at additional cost.

## Notes

1. The hospital building must be included in the campus ES rating for applicability.
2. If less than 12 months of individually metered data is available, and the building was part of a campus ES rating, then the instructions for a master metered facility may be applied.
3. If individual building energy data and ES rating is available, it must be used as the basis for Green Globes Energy performance credits instead of campus data/rating.
4. Buildings that are lacking 12 months of Energy consumption data can still be certified with Green Globes provided that they meet the minimum 35% score for eligibility. Energy Performance credits would not be available.
5. See Table above for Comparison Scale for Manual Point Calculations

## Interconnected Buildings and Multiple Building Complexes

The Green Building Initiative (GBI) policy requires each separate building to individually go through the appropriate Green Globes online evaluation and third-party assessment program to receive a formal rating/certification. Accordingly, a Green Globes subscription and third-party assessment/certification must be purchased for each individual building.

Because some complex, buildings may be interconnected from a structural, major system, or operational standpoint, there are certain instances where it is not immediately evident whether the aggregate space should be Green Globes certified as one aggregate building or separately as multiple buildings. This section recommends guidance to enable clients to better delineate and proceed with single or multiple Green Globes assessment/certifications for interconnected and multiple building complexes.

### Interconnected Buildings/Building Complex Green Globes Assessment Guidance

Item	Building Description	Assess and Certify as:	
		Single Building	Separate Buildings
1	Two or more individual buildings on a campus <sup>4</sup>		X
2	Two or more buildings joined by a walkway (enclosed or open) <sup>4</sup>		X
3	Two or more buildings with a common mechanical system and no contingent space except joined by a walkway (enclosed or open) <sup>1,4</sup>		X
4	Two or more buildings with a common mechanical system and sitting atop a common foundation/crawlspace and separated by a walkway (enclosed or open) <sup>2,4</sup>		X
5	A building complex that has the visual characteristics of separate adjacent structures but is served by one integrated mechanical system, and includes continuous conditioned space by the occupant throughout the building. <sup>3,4</sup>	X	
6	Enclosed Shopping Malls, Large Hotel Complexes, and Entertainment Complexes generally conforming to the description of item #5 above <sup>3,4</sup>	X	

**Notes:**

1. The mechanical system becomes characterized as a “central plant” except the plant is located in or under one of the buildings.
2. If a single mechanical system is used, it still becomes characterized as a “central plant”.
3. In most cases, buildings of this type have multiple occupancies and will be considered a “complex” building – additional assessment fees for complexity may be required.
4. If a separate “central plant” is used, the plant building is not required to be certified for individual building or campus setting as part of the overall campus assessment and certification.

### Major Renovations and Addition Projects

The Green Globes – New Construction (NC) assessment and rating program is applicable to commercial building additions and major renovation projects that meet GBI eligibility requirements. Not all projects necessarily qualify for certification, and in some cases, assessment and certification of just the addition or the aggregated composite of the addition/renovation/existing space is indicated. If just the addition or aggregated composite is indicated, there are special assessment considerations and additional guidance to be followed for sustainability initiatives within this class of projects.

## Eligibility Considerations – Addition Projects

An addition is a distinct and adjoining structure that physically adds new space to an existing building. In some cases, existing building systems have reserve capacity or are upgraded to serve the new space, while in other cases new separate HVAC and utility systems are designed and installed.

A project that is strictly an addition will in most cases be assessed and certified only for the new space with special consideration for building systems that support the new space. A project that involves both an addition and major renovation of existing spaces within the scope of work would be considered a major renovation and provisions in the subsequent section necessarily apply.

In the event the addition has a significant impact on the total building sustainability performance, such as an upgraded entire-building HVAC system or the size of the addition is a significant fraction of the pre-existing structural square footage, or the addition is not readily disaggregated from the pre-existing building, then the entire building encompassing the addition will be assessed and certified.

The most prominent example is the HVAC central mechanical plant; if the system is upgraded to serve the new space, then assessment of energy performance would require a new design and modeling undertaking to determine the energy efficiency of the whole building. The new space would then be rated based on the energy efficiency of the whole building. With this approach, other credits that apply to equipment that serves the whole building and sustainable features within the pre-existing structure are also assessed.

## Eligibility Considerations – Major Renovation Projects

GBI deems a major renovation project to be eligible for Green Globes NC assessment and certification provided that a minimum of 50 percent of applicable Green Globes points are addressed in the scope of work of the proposed project. The ANSI/GBI 01-2010 standard pilot assessment and certification has additional eligibility requirements, which are stipulated in the standard document itself.

The 50% metric for evaluating the application of a sustainability assessment, to be realistic, necessarily involves measuring potential environmental benefits and hence is based on the actual Green Globes criteria. The most efficient way to perform this measurement is to compare the sum of applicable, possible points of the proposed project to the total applicable, which should be set at 900 points, because major renovations will, in every case, invoke Non-Applicable responses for certain questions up to the 10% maximum N/A response cap.

In addition to the 50% metric, there are three core areas that should help define whether a building renovation project qualifies as a major renovation: 1) mechanical/HVAC control upgrades that result in long term energy performance improvement and lower emissions; 2) building envelope upgrades that result in long term energy and/or lighting improvements along with the additional

benefit of updating appearance and aesthetics; and 3) plumbing/fixture or mechanical upgrades that result in long-term water performance improvement and lower effluents.

An important attribute of a major renovation project is the resulting environmental benefit. A genuine major renovation would directly enhance the whole building life cycle and environmental performance. Significant commercial interior renovations that include enhancements to operational policies, on-going maintenance, materials sustainability, and indoor environment can be categorized as a major renovation.

### **Assessment and Certification Considerations**

Green Globes NC assessments of building projects undergoing major renovations involve a comprehensive assessment of both the existing (and potentially unchanged) building spaces and the added/renovated renovated spaces. If a certain feature, component, or attribute of a proposed major renovation project remains as part of the building or site and is addressed by Green Globes criteria for potential award of points, then it should be assessed as a criterion that is or is not met.

Because the questionnaire, criteria, and points scoring for major renovation projects are the same as with that used for a new building, a potentially large number of questions, criteria, and points are necessarily deemed Non-Applicable. For any Green Globes assessment and certification, the Non-Applicable points claimed are limited to 10 percent (100 points); energy performance, water performance, commissioning, and management criteria are ineligible.

### **Special Assessment Considerations – Non-Applicable Criteria**

Further defining which Green Globes criteria may be classified as Non-Applicable is essential for major renovation projects to avoid penalties based on a narrow, prescriptive determination. Determination of a Non-Applicable designation can only apply to the same criteria that would apply for the finished complete building project, which includes new, newly renovated, and existing components. As stated above, a major renovation project assessed through Green Globes is virtually assured to reach the 100 point cap on non-applicable criteria.

A very important premise in evaluating the sustainability of an existing building is that, with the exception of energy and water-consuming equipment and fixtures, the most sustainable option is to use as many of the existing building components as possible as part of the newly renovated building. You must carefully evaluate if a certain criteria should be considered applicable for credit versus considered truly non-applicable. If a certain feature, component, or attribute of a proposed major renovation project remains as part of the building or site and is addressed by Green Globes criteria for potential award of points, then it should be assessed as a criterion to be met. Otherwise, it would be grossly inaccurate and penalizing to characterize it as non-applicable, essentially determining that the feature, component, or attribute contributes little or nothing to environmental performance and improvement.