



## Meeting 1

# LEED Green Associate Exam Prep

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## Reminders!

- Zoom Meeting
- Session is being recorded
- Feel free to utilize camera if comfortable
- Please remain on muted unless speaking
- Post questions/comments in the Q&A or chat boxes

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# Q:

Where are you joining us from today?



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*About* GBRI

 **SUSTAINABLE DEVELOPMENT GOALS**

 **EDUCATION PARTNER**

 **ENERGY EFFICIENCY & RESOURCE MANAGEMENT COUNCIL**

 **The American Institute of Architects**

 **COLLABORATIVE FOR HIGH PERFORMANCE SCHOOLS**

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## Welcome Home!

Let's join hands not only to build a greener world but also a equitable one.

GET STARTED



Let's join hands not only to build a greener world but also an equitable one!

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This course is ideal for **building professionals, students** or **anyone** seeking to learn the fundamentals of **sustainability** and how it can be applied to the built environment. You will learn about **green buildings** and green rating systems such as LEED. Additionally, this course will introduce you to the **LEED Green Associate Exam**.

## COURSE OBJECTIVES

1

Understand the fundamentals of sustainability and green buildings

2

Explain the benefits of building green

3

Identify the differences between traditional vs. green building process

4

Learn about green building rating systems and analyze the LEED rating system

5

Identify the key components of the LEED certification process

6

Analyze the growth of green building industry and Learn more about LEED credentials

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## Table of Contents

### Section I

- Introduction to Sustainability
- Definitions
- The Triple Bottom line

### Section II

- Sustainability and the built environment
- Green Buildings
- Traditional vs. Whole Building Design Process
- Cost of Building Green
- Green Building rating systems and LEED
- Green Building FAQs
- Case study

### Section III

- The LEED Rating system Explored
- LEED Project Adaptations
- LEED Certification Process
  - Minimum Program Requirements
  - Prerequisites and Credits
  - Integrative Process and LEED
  - Cost of LEED
  - Case study

### Section IV

- Green Building Market
- LEED Credential Exam
- Is LEED right for you?

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## Sustainability? What is it?

“

“Development that meet the needs of the present without compromising the ability of future generations to meet their needs.”

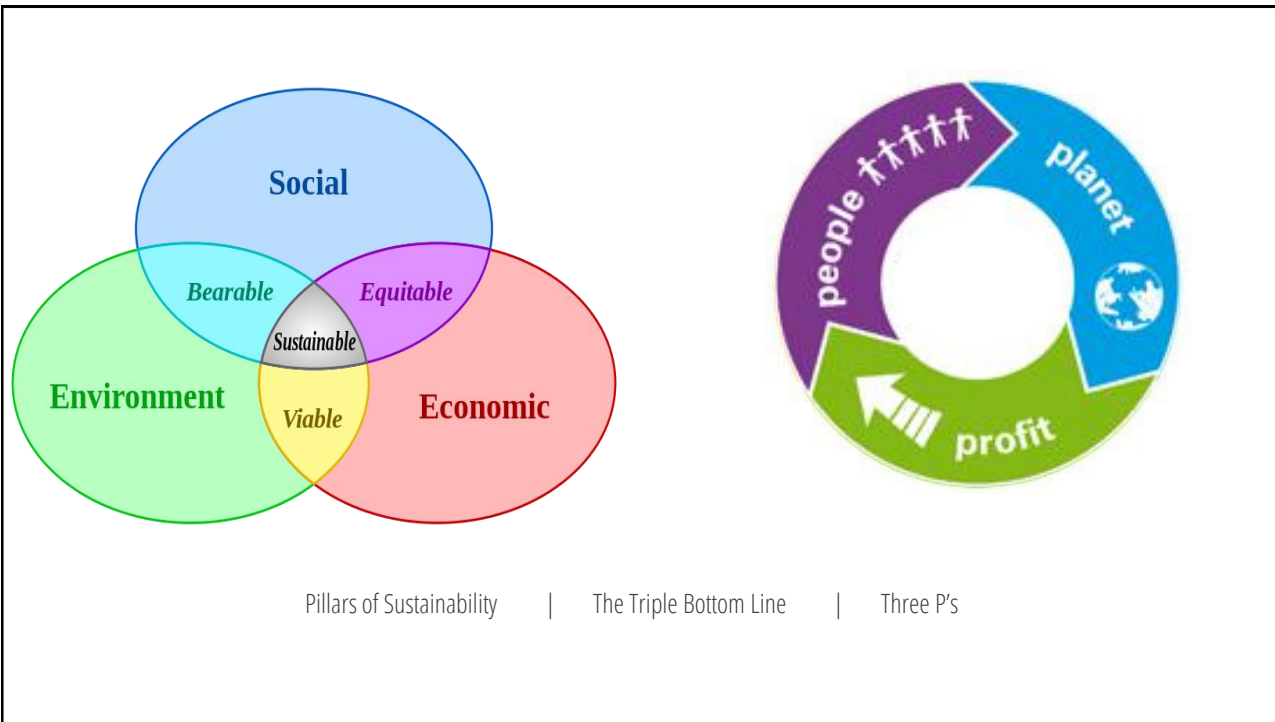
- Brundtland Report

“Sustainability is based on a simple principle: Everything that we need for our survival and well-being depends, either directly or indirectly, on our natural environment. Sustainability creates and maintains the conditions under which humans and nature can exist in productive harmony that permit fulfilling the **social, economic, and other requirements of present and future generations.**”

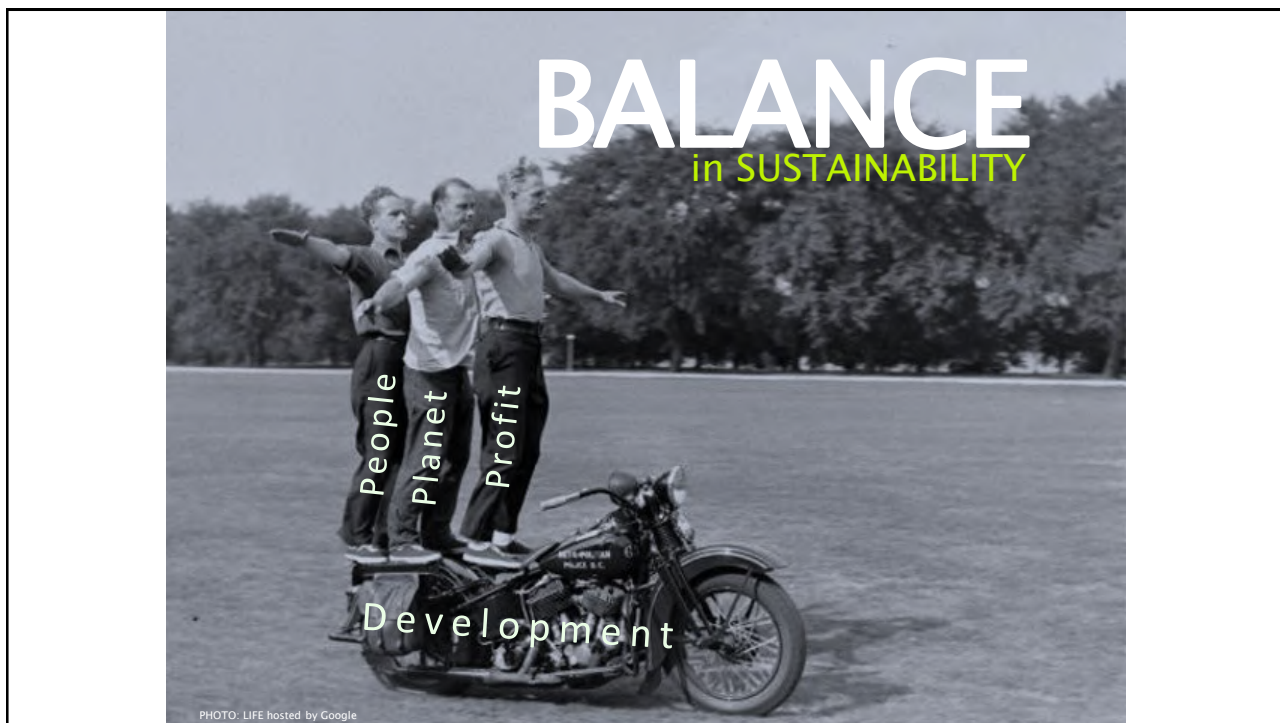
- U.S EPA

”

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## The Triple Bottom Line

Economic  
Prosperity



Social  
Responsibility



Environmental  
Stewardship



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## Promoting Triple Bottom Line - Example

Awesome Outdoor Clothing's (example company-not real) success comes from offering stylish outdoor gear.



People

+

Planet



=



Profit

**People** – By paying workers a living wage and providing clean and safe working environments, workers make a higher quality product and continue to develop skills beneficial to their job.

**Planet** – By using more environmentally friendly products such as organic cotton & non-heavy metal dyes, along with techniques that lessen water pollution; they ensure that they will continue to have a steady supply of high quality materials and clean water supply

**Profit** – They make a profit by selling their superior quality gear because it's a brand that people trust for quality and good ethics.

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# Corporate Social Responsibility (CSR)

CSR policies are a comprehensive set of sustainable business initiatives that facilitate a company's triple bottom-line approach to operating business.

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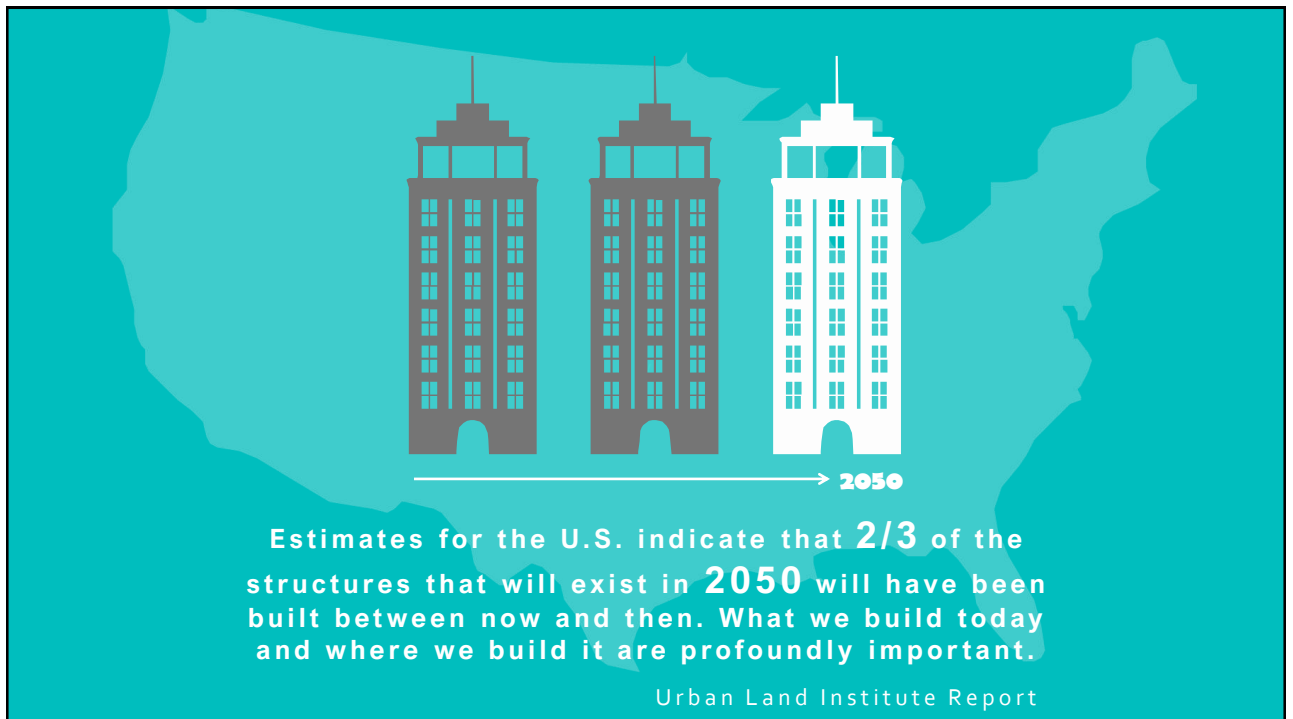
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## **Green Building**

### **Green buildings:**

*Facilities which are environmentally friendly and consume less energy, water and materials, produce less waste comparing to a traditional building and offer a healthy environment for its occupants*

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# The Impacts of Buildings

IN THE UNITED STATES, BUILDINGS ACCOUNT FOR:

## SOCIAL

We spend an average of **90%** of our time indoors

**7.36 million** jobs in the construction industry

## ECONOMIC

**\$531 billion** in annual revenue in the building industry

**30%** of buildings suffer from sick building syndrome negatively affecting occupants health and productivity

## ENVIRONMENTAL

**40%** of total energy use **72%** of electricity use

**38%** of greenhouse gas emissions

**40%** of raw materials use

**40%** of waste output/136 million tons annually

**14%** of potable water consumption

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# BENEFITS

*The Costs and  
Financial Benefits of  
Green Building*



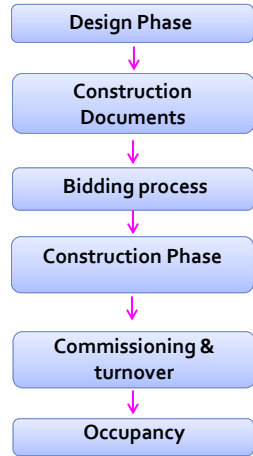
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# How are Green Buildings Different?

## Traditional Building Process



Team members working in isolation

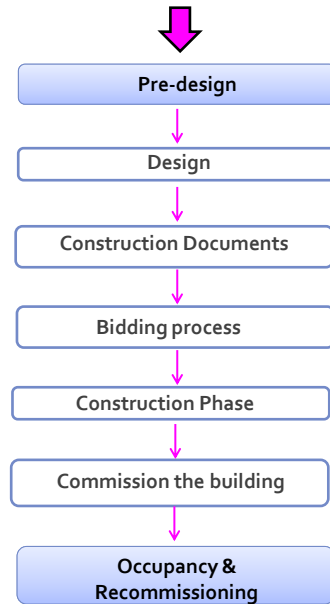


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# Green Building Process



Integrated project delivery (IPD)



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## Cost of Building Green

“In the most comprehensive analysis of the financial costs and benefits of green building conducted to date, this report finds that an upfront investment of less than **two percent of construction costs yields life cycle savings of over ten times the initial investment.** For example, an initial upfront investment of up to \$100,000 to incorporate green building features into a \$5 million project would result in a savings of at least \$1 million over the life of the building, assumed conservatively to be 20 years.”

-The Cost and Financial Benefits of Green Buildings, a report by Capital E

**0.7%-6.5%** the average cost increase of green offices and schools



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Question:  
How do I know  
if a building is  
Green?

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# How many stars does your car have?



GOVERNMENT SAFETY RATINGS		
Frontal Crash	Driver	★★★★★
	Passenger	★★★★★
<small>Star ratings based on the risk of injury in a frontal impact. Frontal ratings should ONLY be compared to other vehicles of similar size and weight.</small>		
Side Crash	Front seat	★★★★★▲
	Rear seat	Not Rated
<small>Star ratings based on the risk of injury in a side impact. ▲ Safety concern. Visit www.safercar.gov or call 1-888-327-4236 for more details.</small>		
Rollover		★★★★★
<small>Star ratings based on the risk of rollover in a single vehicle crash.</small>		
<small>Star ratings range from 1 to 5 stars (★★★★★) with 5 being the highest.</small>		
<small>Source: National Highway Traffic Safety Administration (NHTSA).</small>		
<b>www.safercar.gov or 1-888-327-4236</b>		

Parent Organization



Testing and Verification Branch



Rating System

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# USGBC & LEED Rating System



Parent Organization

Testing and Verification Branch

Rating System

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# 4 Levels of LEED Certification



40-49 pts



50-59 pts



60-79 pts



80+ pts



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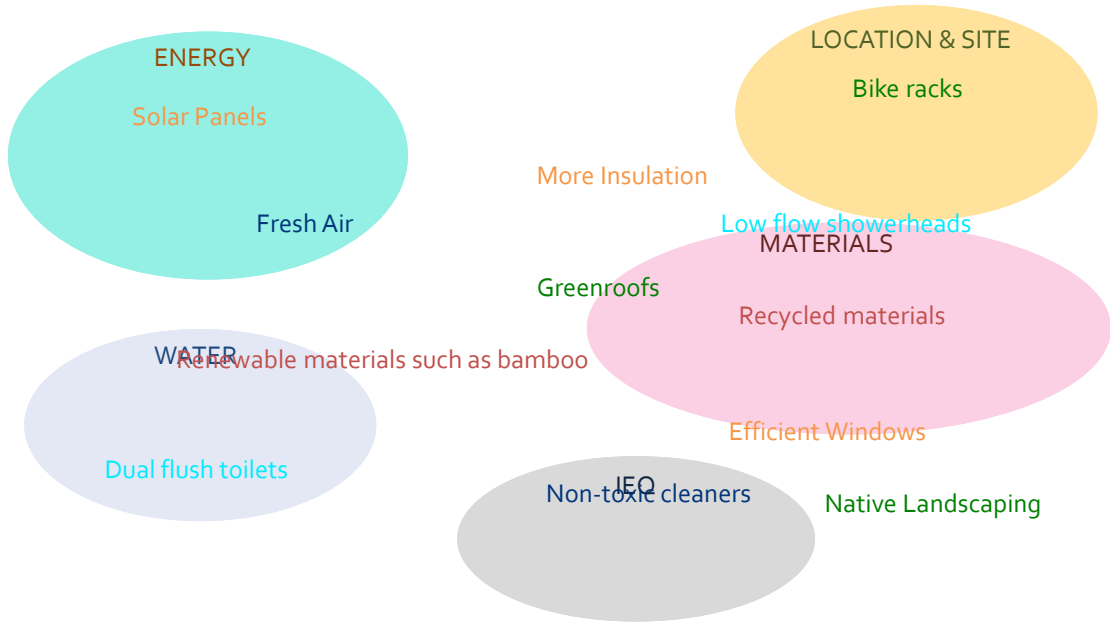
LEED® Facts	
[Your Project Here] [City, State, County]	
LEED for New Construction	
<b>Platinum</b>	<b>110*</b>
Sustainable Sites	26
Water Efficiency	10
Energy & Atmosphere	35
Materials & Resources	14
Indoor Environmental Quality	15
*Out of a possible 100 points + 10 bonus points	
Innovation & Design	6
Regional Priority	4

LEED® Facts	
Habitat for Humanity Grand Rapids, MI	
LEED for Homes Certification awarded March 2011	
<b>Gold</b>	<b>68.5*</b>
Innovation & Design	5 / 11
Location & Linkages	10 / 10
Sustainable Sites	8 / 22
Water Efficiency	4 / 15
Energy & Atmosphere	23.5 / 38
Materials & Resources	8 / 16
Indoor Environmental Quality	9 / 21
Awareness & Education	1 / 3
*Out of a possible 136 points	

Nutrition Facts	
Serving Size	1 Medium Onion (148g/5.3oz.)
Amount per Serving	
Calories 45	Calories from Fat 0
%Daily Value *	
Total Fat 0g	0%
Saturated Fat 0g	0%
Cholesterol 0 mg	0%
Sodium 5mg	0%
Potassium 190mg	5%
Total Carbohydrate 11g	4%
Dietary Fiber 3g	12%
Sugars 9g	
Protein 1g	
Vitamin A 0%	Vitamin C 20%
Calcium 4%	Iron 4%
* Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your daily needs.	
Source: USDA Federal Register August 17, 2006	

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# Green Buildings Categories



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# LEED Categories

-  Location and Transportation
-  Sustainable sites
-  Water efficiency
-  Energy & atmosphere
-  Materials & resources
-  Indoor environmental quality
-  Innovation in design
-  Regional priority

9 Areas

8 Categories

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## Rating Systems..

LEED

Living Building Challenge

Energy Star

Green Globes

BREEAM

WELL

Estidama – Pearl

Griha

CASBEE

QSAS

China – 3 Star

Australia Greenstar

Rating System  
& Sustainability

Rating System & Project  
Certification

Rating System & Professional  
Accreditation

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## Popular Misconceptions

### I can't make a difference

Average showerhead flow - **2.5** gallons per minute

High efficiency showerhead flow – **1.6** gallons per minute

5 minute shower,

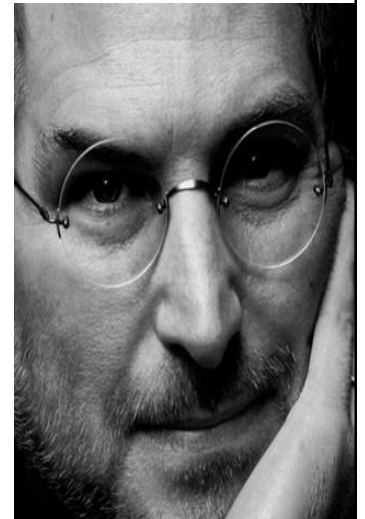
switching the shower head will save **4.5 gallons of water/person/day**

For **365** days – Conserve **6,570 gallons of water/person**

Retrofitting 1 out of 100 American homes with water –efficient fixtures

**80,000 tons** of green house gas emissions

**15,000 cars** from the road for one year



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## Popular Misconceptions

### It has to be recycled

One of the largest misconceptions is **that a product has to be recycled to be green.**

A new window can be green if it's placed in an area where it allows for the most day light use and keeps out the most heat in the summers and the most cold in the winter. It's therefore green, because of its overall effect on the 'big' picture, which in this case is energy efficiency.

By the same token, don't assume that **just because the product is made from recycled content, something is green.** If a product is made from recycled content that's shipped across the world to be assembled in a facility that pollutes, then packaged in petroleum-based packaging material, just think how many resources have been wasted to get the 'green' product to you.

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## Popular Misconceptions

- ✓ LEED only certifies buildings - True
- ✓ LEED certifies products - False
- ✓ Energy Star certifies buildings and products - True



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# Holistic and Integrative Design Approach



Dockside Green, Victoria, British Columbia  
 15-acre mixed-use community  
<https://docksidebybosa.com/>

**DOCKSIDE GREEN**

**TRIED, TESTED AND TRUE:** Dockside offers three core ingredients for sustainable living: our state-of-the-art Waste Water Treatment Facility, our District Energy System, and the highest neighbour-first building standards. Feel peace of mind knowing that your footprint is made smaller by living here. This imprint is not only ideal to the environmentally aware, but it appeals to those who are economically conscious.

**How It Works**

- Drinking water from City of Victoria
- Hot water from onsite district energy system
- Warm water for heating
- Heat extracted water
- Used water from toilet, dishwasher, laundry and sinks
- Cleaned and recycled water from onsite water treatment facility
- Site collected rain water

## Fresh Air Circulation

- 1 YOUR OWN FRESH AIR INTAKE**  
Every home has its own private fresh air intake directly from outside.
- 2 ENERGY RECOVERY VENTILATOR (ERV)**  
ERVs circulate fresh air into your home while regulating the temperature, keeping you warm in the winter and cool in the summer.
- 3 STALE AIR EXHAUST**  
Stale air is returned to the outside directly from each home.

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**100%** OF YOUR HOME'S AIR COMES FRESH FROM THE OUTSIDE

**UP TO 30%** REDUCTION IN GHG EMISSIONS

**UP TO 70%** ENERGY USE



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<p style="text-align: center;"><u>Section I</u></p> <ul style="list-style-type: none"> <li>• Introduction to Sustainability</li> <li>• Definitions</li> <li>• The Triple Bottom line</li> </ul> <p style="text-align: center;"><u>Section II</u></p> <ul style="list-style-type: none"> <li>• Sustainability and the built environment</li> <li>• Green Buildings</li> <li>• Traditional vs. Whole Building Design Process</li> <li>• Cost of Building Green</li> <li>• Green Building rating systems and LEED</li> <li>• Green Building FAQs</li> <li>• Case study</li> </ul>	<p style="text-align: center;"><u>Section III</u></p> <ul style="list-style-type: none"> <li>• The LEED Rating system Explored</li> <li>• LEED Project Adaptations</li> <li>• LEED Certification Process             <ul style="list-style-type: none"> <li>▪ Minimum Program Requirements</li> <li>▪ Prerequisites and Credits</li> <li>▪ Integrative Process and LEED</li> </ul> </li> <li>• Cost of LEED</li> <li>• Case study</li> </ul> <p style="text-align: center;"><u>Section IV</u></p> <ul style="list-style-type: none"> <li>• Green Building Market</li> <li>• LEED Credential Exam</li> <li>• Is LEED right for you?</li> </ul>
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## United States Green Building Council - USGBC

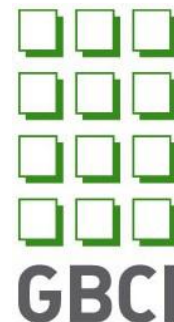
- Founded in 1993 as a non-profit
- A community of leaders working to make green buildings available to everyone
- Over 15,000 member organizations from every sector of building industry
- Works to promote buildings that are environmentally responsible, profitable, and healthy places to live and work
- Provides Educational opportunities to learn about sustainable design
- Handles the development of LEED rating systems
- Offers LEED-based educational research programs



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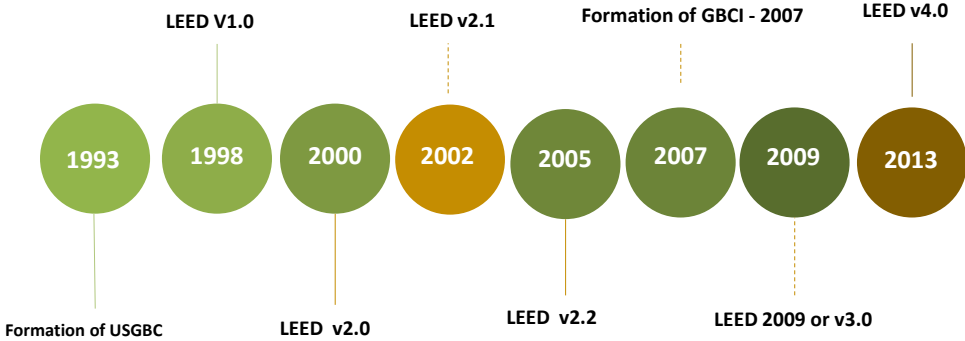
## Green Business Certification Incorporated - GBCI

- Established in 2007 as a separately incorporated entity with support of USGBC
- Administers the LEED Professional Accreditation programs independently
- Administers project certification for LEED, PEER, WELL, SITES, GRESB & other rating systems



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# History of LEED



## LEED v4 System Goals



Reduce contribution to **global climate change**



Enhance individual **human health**



Project and restore **water resources**



Protect and enhance **biodiversity and ecosystem services**



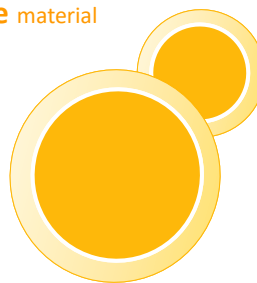
Promote **sustainable and regenerative** material cycles



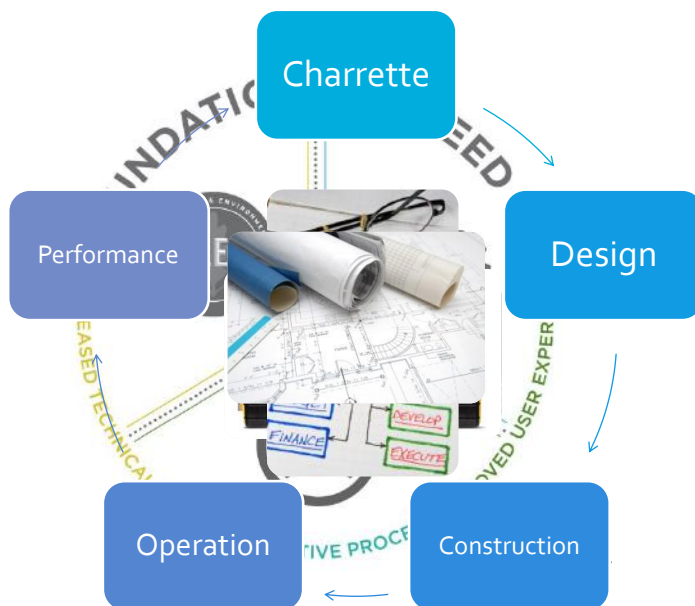
Build a **green economy**



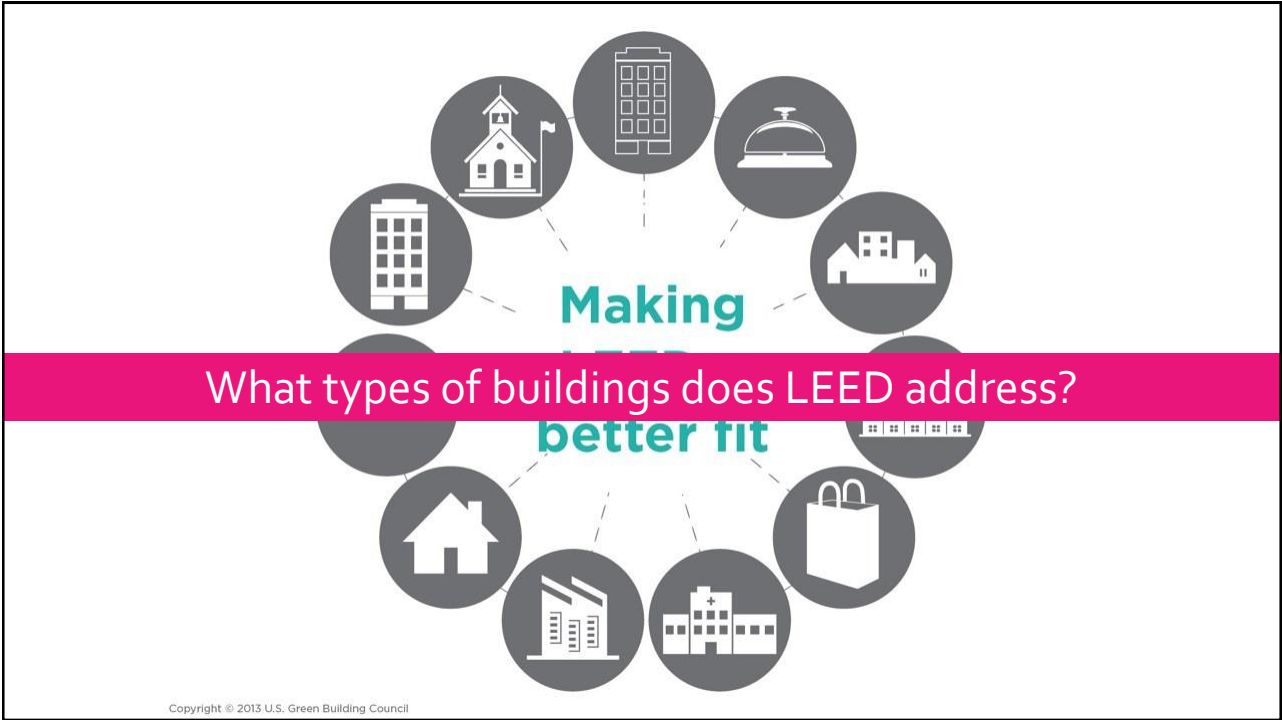
Enhance **community quality of life**



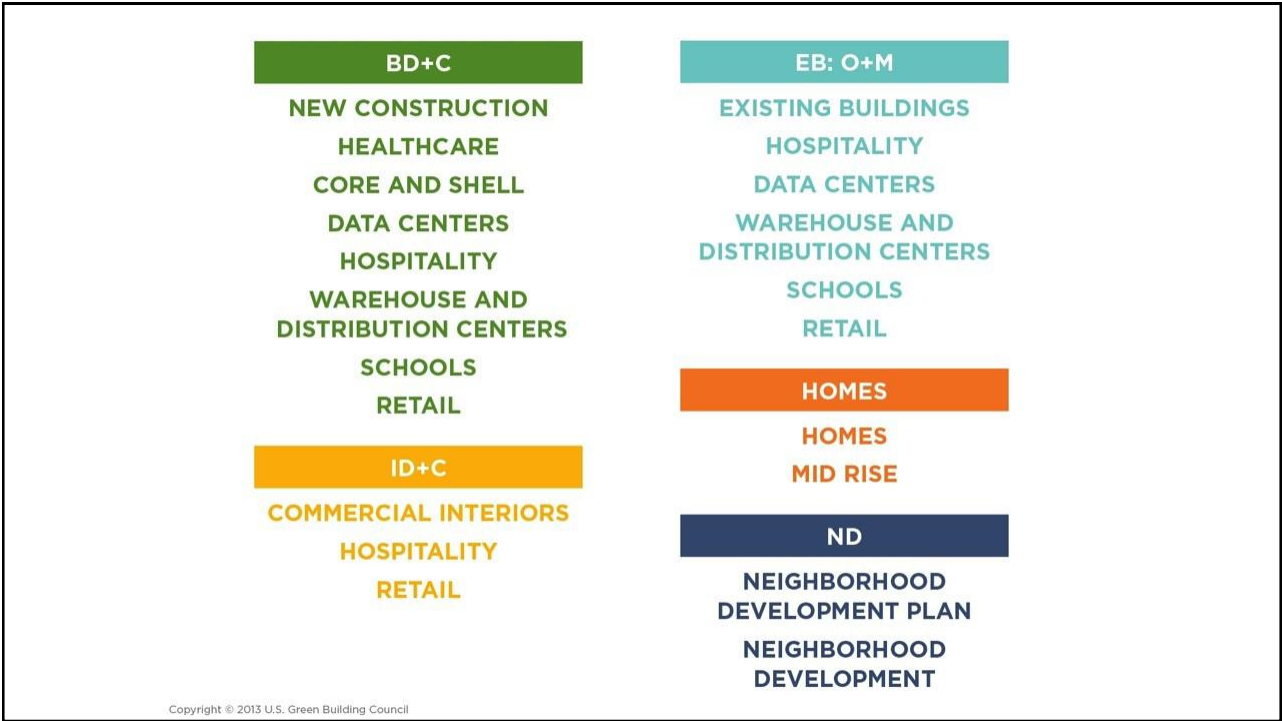
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## CERTIFIED INSTRUCTOR TALK



Certified Instructors talk

With the LEED V 4's global adaptation – can we expect an increase in number of international LEED projects?



**Sean**  
LEED AP BD  
Project Man  
Tetra Tech #  
NY & Doha

“A **LEED** certified building currently, at the most superficial level, has an essence of prestige that is desirable and with the new modifications LEED has the possibility to grow beyond the boundaries or North America at a much faster rate”

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BUILDING DESIGN AND CONSTRUCTION

INTERIOR DESIGN AND CONSTRUCTION

BUILDING OPERATIONS AND MAINTENANCE

HOMES DESIGN AND CONSTRUCTION

NEIGHBORHOOD DEVELOPMENT

LEED

LEED

LEED

LEED

LEED

WHICH RATING 40/60 RULE SHOULD A PROJECT USE?

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Minimum Program Requirements

Are there any eligibility requirements for projects to pursue LEED certification?

1. Give clear guidance to customers
2. Protect the integrity of the LEED program
3. Reduce challenges that occur during the LEED certification process
4. (partially obscured)

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## 1. Must be in a permanent location on existing land

### Intent

Since LEED credits are dependent on the project's location, it is critical to evaluate projects as permanent structures.

### Criteria

- All projects must be constructed and operated in a permanent location on existing land.
- No project that is designed to move at any point in its lifetime may pursue LEED certification.
- Applies to all land within the LEED project.

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## 2. Must use reasonable LEED boundaries

### Intent

Defining a reasonable LEED boundary ensures that project is accurately evaluated.

### Criteria

- The LEED boundary must include all contiguous land that is associated with the project and supports its operations.
- The boundary may not unreasonably exclude portions of the building, space, or site to give the project an advantage.
- Project team must clearly communicate the project boundary and distinguish it from non-certifying spaces.

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### 3. Must comply with project size requirements

#### ● Intent

LEED requirements do not accurately assess the performance of projects outside of these size requirements.

#### ● Criteria

LEED BD+C: minimum 1,000 square feet of gross floor area

LEED O+M: minimum 1,000 square feet of gross floor area

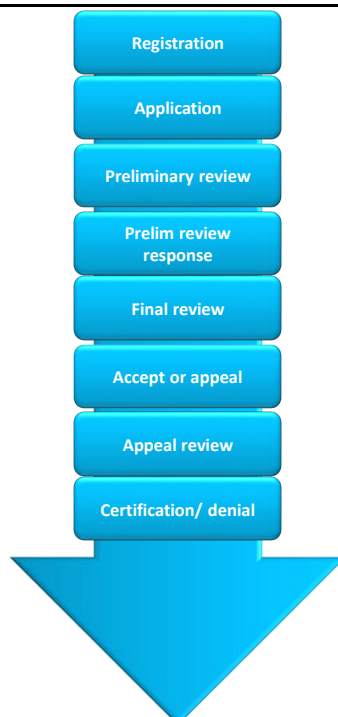
LEED ID+C: minimum 250 square feet of gross floor area

LEED for Homes: defined as a "dwelling unit" by all applicable codes

LEED for ND: at least 2 habitable buildings , no larger than 1500 acres

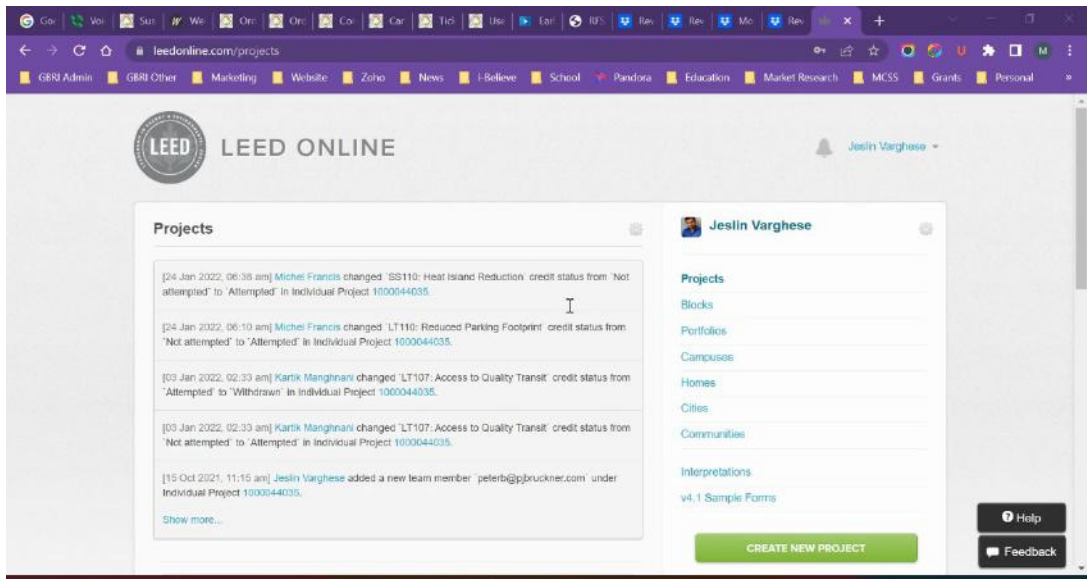
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### LEED Certification Process

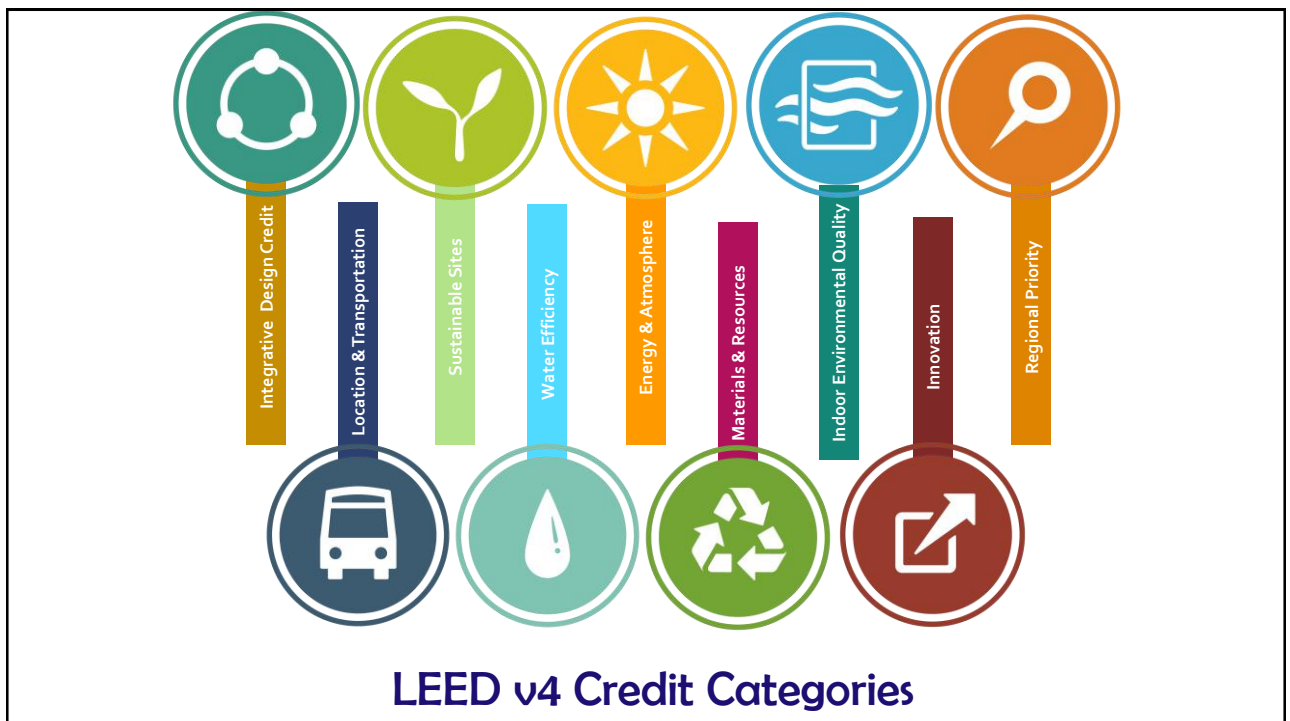


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# LEED Online



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## LEED Certification for buildings

### Credits

- The phrase 'credit' means a non-mandatory project characteristic, measurement, quality, value or function as identified within a LEED rating system. Credits represent particular facets of sustainable design that contributes to overall green building performance.
- No single credit is mandatory, credits are selected and pursued at the options of a LEED project team.
- Each credit for the rating system include information on:

INTENTS	REFERENCE STANDARDS
STRATEGIES	IMPLEMENTATION IDEAS & STRATEGIES
REQUIREMENTS	TIMELINE AND TEAM INFORMATION
ENVIRONMENTAL & ECONOMIC ISSUES	CALCULATION
RELATED CREDITS	DOCUMENTATION
EXEMPLARY PERFORMANCE	



Local, state, and federal rules **ALWAYS** take precedent over LEED requirements and referenced LEED standards. If a LEED Credit says 'do X,' first review any relevant laws, codes, local ordinances, and statutes to make sure there isn't a conflict.



## LEED Certification for buildings

### Pre-requisites

- The term 'prerequisite' refers to a mandatory project characteristic. Measurement, quality, value or function as identified within the LEED rating system.
- Prerequisites represent that key criteria that define green building performance.
- Failure to meet any prerequisite will render a project ineligible for certification.

Examples

SUSTAINABLE SITE PREREQUISITE 1 – CREATE A CONSTRUCTION ACTIVITY POLLUTION PREVENTION PLAN

WATER EFFICIENCY PREREQUISITE 1 – REDUCE OVERALL WATER CONSUMPTION BY 20% (COMPARED TO BASELINE)

ENERGY & ATMOSPHERE PREREQUISITE 3- ZERO USE OF CFC-BASED REFRIGERANTS

MATERIALS AND RESOURCES PREREQUISITE- COLLECT AND STORE RECYCLABLES

INDOOR ENVIRONMENTAL QUALITY 1- PROHIBIT SMOKING



## Design Vs. Construction Credits



Also called Designer Responsible Credits    Also called Contractor Responsible Credits

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### LEED for New Construction and Major Renovations (v4)

	<b>POSSIBLE: 1</b>			<b>POSSIBLE: 13</b>
Integrative process	1		<b>MATERIAL &amp; RESOURCES</b>	<b>REQUIRED</b>
			Storage and collection of recyclables	<b>REQUIRED</b>
			Construction and demolition waste management planning	<b>REQUIRED</b>
			Building life-cycle impact reduction	5
	<b>POSSIBLE: 16</b>		Building product disclosure and optimization - environmental product declarations	2
LEED for Neighborhood Development location	16		Building product disclosure and optimization - sourcing of raw materials	2
Sensitive land protection	1		Building product disclosure and optimization - material ingredients	2
High priority site	2		Construction and demolition waste management	2
Surrounding density and diverse uses	5		<b>INDOOR ENVIRONMENTAL QUALITY</b>	<b>POSSIBLE: 16</b>
Access to quality transit	5		Minimum IAQ performance	<b>REQUIRED</b>
Bicycle facilities	1		Environmental tobacco smoke control	<b>REQUIRED</b>
Reduced parking footprint	1		Enhanced IAQ strategies	2
Green vehicles	1		Low-emitting materials	3
			Construction IAQ management plan	1
	<b>POSSIBLE: 10</b>		IAQ assessment	2
Construction activity pollution prevention	<b>REQUIRED</b>		Thermal comfort	1
Site assessment	1		Interior lighting	2
Site development - protect or restore habitat	2		Daylight	3
Open space	1		Quality views	1
Rainwater management	3		Acoustic performance	1
Heat Island reduction	2		<b>WATER EFFICIENCY</b>	<b>POSSIBLE: 11</b>
Light pollution reduction	1		Outdoor water use reduction	2
			Indoor water use reduction	6
	<b>POSSIBLE: 11</b>		Building-level water metering	<b>REQUIRED</b>
Outdoor water use reduction	2		Cooling tower water use	2
Indoor water use reduction	6		Water metering	1
Building-level water metering	<b>REQUIRED</b>		<b>INNOVATION</b>	<b>POSSIBLE: 6</b>
Cooling tower water use	2		Innovation	5
Water metering	1		LEED Accredited Professional	1
	<b>POSSIBLE: 33</b>		<b>REGIONAL PRIORITY</b>	<b>POSSIBLE: 4</b>
Fundamental commissioning and verification	<b>REQUIRED</b>		Regional priority	4
			<b>TOTAL</b>	<b>110</b>

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## Credit Interpretation Requests

CIRs are used to clarify a single question the project team may have and can be submitted any time after project registration.

Often the reference guide will not specifically address the issues at hand and more information is needed. To address these issues, GBCI has created the CIR process.

USGBC company members, LEED registered project team members, and workshop attendees have access to view CIRs.

CIR rulings do not affect the existing requirements of credits within the rating system.

No credit or points are awarded by the CIR process

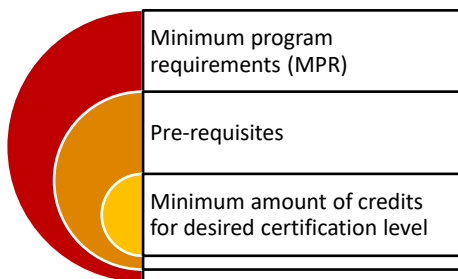
The project team must still demonstrate credit compliance in order to achieve the credit



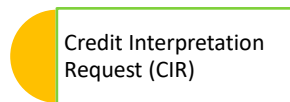
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## Credits, Prerequisites & CIRs

Projects must satisfy three requirements for certification:



In the event clarification is needed on a credit:

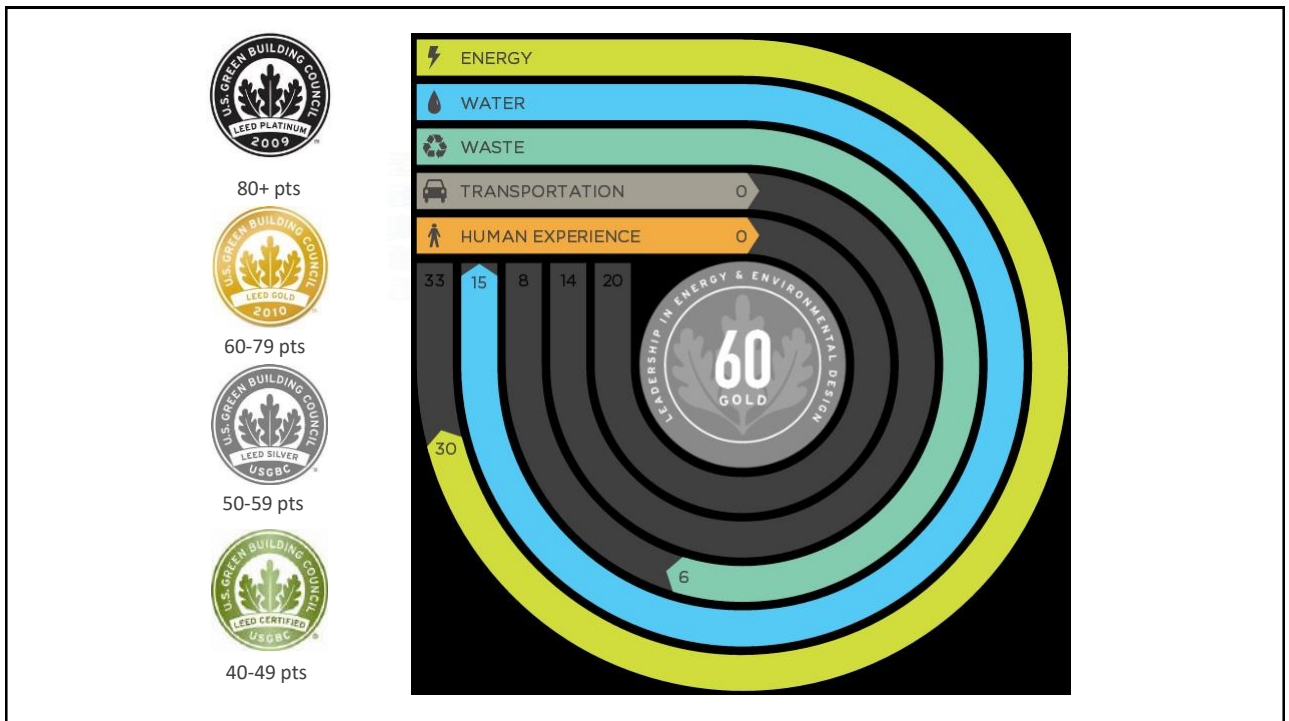


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<b>\$1200</b> (\$900)	<b>\$0,055/sf</b> (\$0,045/sf)	<b>\$10,000</b>
Project Registration	Projects bigger than 50,000 square feet	Expedited Review
<b>\$4,250</b> (\$3250)	<b>\$5,000</b> (10-12 days)	Complex credit <b>\$800</b> (All other credits - \$500)
Pre-certification	Expedited Fees for Pre-certification	Appeals
<b>\$2750</b> (\$2250)	<b>\$1,000</b> (10-12 days)	<b>\$220</b> (per credit)
Project Certification	Expedited Fees for Certification	Project CIRs

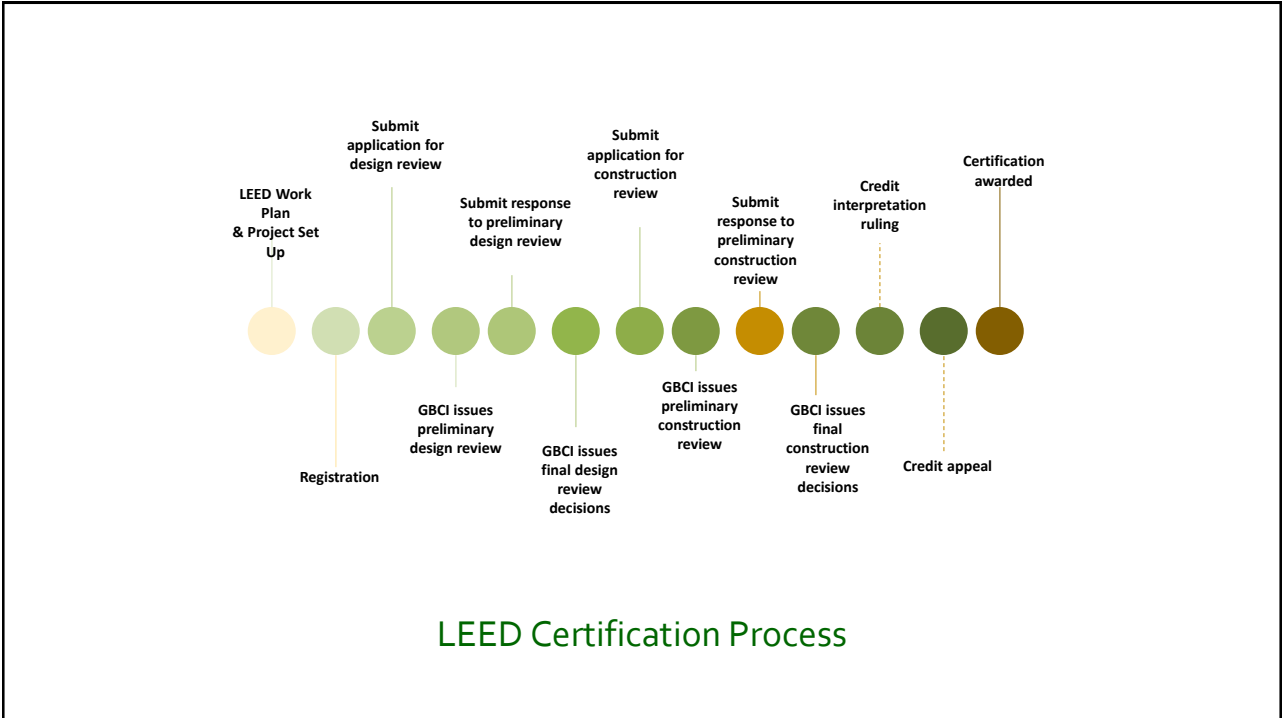
Review takes 20-25 business days. Expedited reviews available – 10-12 days

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## LEED V4 CASE STUDY – HAWORTH'S BEIJING SHOWROOM

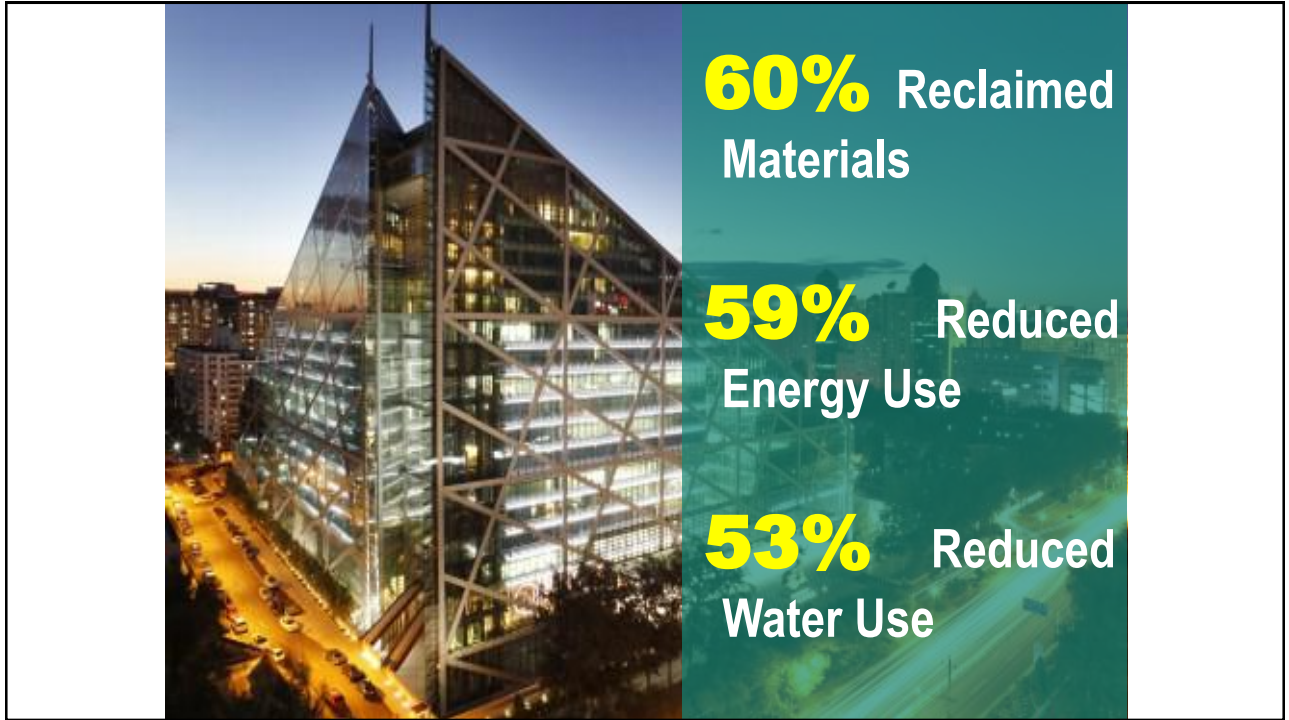
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LEED Facts	
for LEED ID+C: Commercial Interiors (v4)	
Certification awarded Sep 2013	
<b>Gold</b>	<b>71</b>
Integrative process credits 2/2	
Location & transportation	18/36
Water efficiency	12/12
Energy & atmosphere	18/38
Material & resources	5/13
Indoor environmental quality	8/17
Regional priority credits	4/4

## HAWORTH'S BEIJING SHOWROOM

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LEED Scorecard		Gold 71/128
▶ INTEGRATIVE PROCESS CREDITS	2 OF 2	
▶ LOCATION & TRANSPORTATION	18 OF 36	
▶ WATER EFFICIENCY	12 OF 12	
▶ ENERGY & ATMOSPHERE	18 OF 38	
▶ MATERIAL & RESOURCES	5 OF 13	
▶ INDOOR ENVIRONMENTAL QUALITY	8 OF 17	
▶ REGIONAL PRIORITY CREDITS	4 OF 4	

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**Energy Star**  
Score **81**

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## Table of Contents

### Section I

- Introduction to Sustainability
- Definitions
- The Triple Bottom line

### Section II

- Sustainability and the built environment
- Green Buildings
- Traditional vs. Whole Building Design Process
- Cost of Building Green
- Green Building rating systems and LEED
- Green Building FAQs
- Case study

### Section III

- The LEED Rating system Explored
- LEED Project Adaptations
- LEED Certification Process
  - Minimum Program Requirements
  - Prerequisites and Credits
  - Integrative Process and LEED
  - Cost of LEED
  - Case study

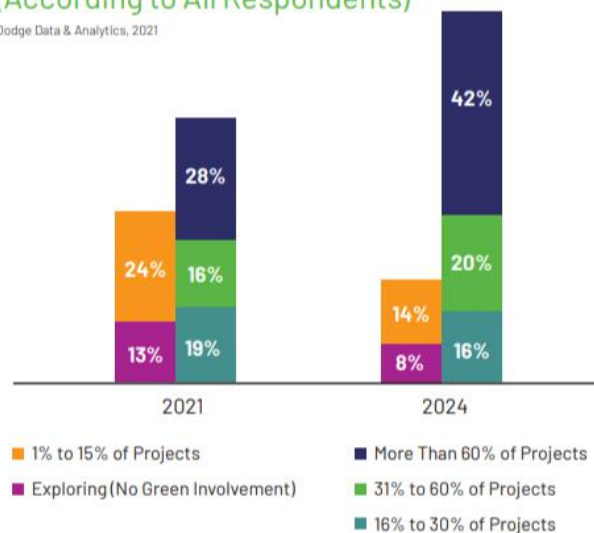
### Section IV

- Green Building Market
- LEED Credential Exam
- Is LEED right for you?

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### Level of Green Building Activity (According to All Respondents)

Dodge Data & Analytics, 2021



Source: [World Green Building Trends 2021 Report](#)

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# So What's Driving Green Building?

## Financial Benefits of Building Green, Compared With Traditional Buildings

Dodge Data & Analytics, 2021

	New Green Buildings	Green Renovation/Retrofit
Average Reduction in Operating Costs in Next 12 Months	10.5%	11.5%
Average Reduction in Operating Costs in Next 5 Years	16.9%	17%
Average Increase in Asset Value (According to Owners/Investors)	9.2%	9.1%

Source: [World Green Building Trends 2021 Report](#)

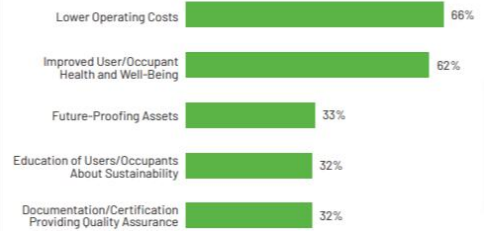
## Top Triggers for Increasing Green Building Selected by One Quarter or More Respondents

Dodge Data & Analytics, 2021

Owners/Investors	Architects/Engineers/Contractors
1. Lower Operating Costs	1. Client Demands
2. Right Thing to Do	2. Environmental Regulations
3. Healthier Buildings	3. Right Thing to Do
4. Internal Corporate Commitment	4. Healthier Buildings
5. Environmental Regulations	5. Lower Operating Costs

## Most Important Business Benefits of Green Building

Dodge Data & Analytics, 2021



# About the LEED Rating System



Buildings become LEED certified (not people or products)



Individuals become LEED accredited (not certified)



Firms become USGBC national members (not people)

## WHO IS LEED® ACCREDITATION FOR?

The LEED AP® credential designates an advanced knowledge of a specific LEED® rating system. The LEED AP® exams *require specific knowledge of each prerequisite and credit in a particular rating system*



Structural Manager  
CX agent  
Daylighting Analyst  
Energy Modeler  
Remediation Specialist  
Students

Architect  
Planner  
Landscape Designer  
Building Users



Facility Manager  
MEP Contractor  
Owners  
Civil Engineer  
Planning Staff  
MEP Engineer  
Community Members  
General Contractor  
Construction Manager  
Cost Estimator



MEP Contractor  
Civil Engineer  
MEP Engineer  
Structural Manager  
Interior Designer


*Anyone interested in a career in sustainability and Green buildings will benefit from a LEED credential*

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## LEED GREEN ASSOCIATE ELIGIBILITY

There are **no eligibility requirements** to take the LEED GA exam; however, exposure to LEED and green building concepts through education, volunteering or work experience is recommended.

▶ Must be 18 years of age or older



▶ Must agree to GBCI's exam policy

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## Registering for the Exam



### Login

- to your Credentials account via the USGBC® site

### Verify

- that the name you enter in matches the name on the ID you will present at the testing center.

### Select

- the Green Associate credential exam and follow the instructions for the application

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你好

**hola**



مرحبا

*bonjour*



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## Exam Scheduling

- Exam fees are nonrefundable
- Scheduled through USGBC credential account
- Test taken at Prometric Testing Center or online through ProProctor

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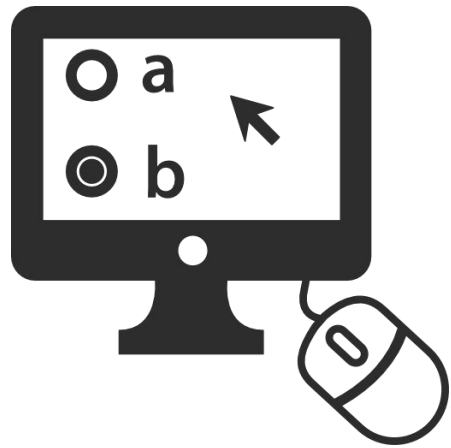
## Exam Format

**Recall :**  
Ability to recall factual material

**Application:**  
Ability to solve a problem/scenario using principles from exam references

**Analysis :**  
Ability to break the problem down into its components to create a solution. Evaluate the relationship or interactions of these elements.

**REMEMBER**  
EXAM  
UPDATES  
occur every  
year



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**KNOWledge domains** 

 **TASK domains**

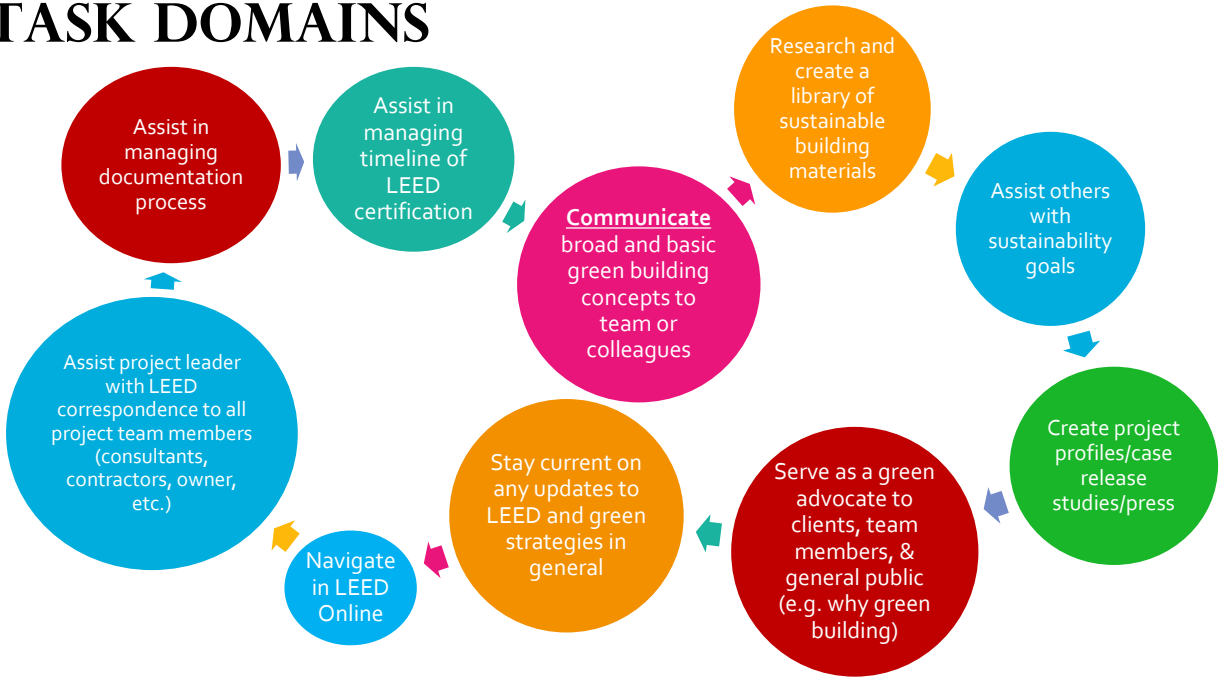
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## Knowledge Domains

LEED Process - 16 Questions  
Integrative Strategies - 8 Questions  
Location & Transportation - 7 Questions  
Sustainable Sites - 7 Questions  
Water Efficiency - 9 Questions  
Energy & Atmosphere - 10 Questions  
Materials & Resources - 9 Questions  
Indoor Environmental Quality - 8 Questions  
Project Surroundings & Public Outreach - 11 Questions

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# TASK DOMAINS



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## At the Exam



### IDENTIFICATION REQUIREMENTS

Candidates must provide valid, unexpired ID with a signature, a photograph that looks like the candidate, and an expiration date.

### EXAMPLES

- 1 Non-Expired Government-issued photo ID with signature
- 1 Non-Expired Credit card photo ID with signature
- 1 Non-Expired photo ID without signature plus 1 credit card with signature—first and last names must match on both

Examples of acceptable forms of Non-Expired photo ID:

Driver's license, Passport, Military ID  
Alien ID/Resident Alien Card\*

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## After the Exam



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**What does this consist of**

- 5 live online meetings
- Self-paced on-demand modules
- Study guide
- Flash cards and memory charts
- 700+ practice questions
- Simulated mock exams
- Instructor & peer study support
- Pass your exam on your first try – guaranteed!

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## INSIDER KNOWLEDGE

- You DO NOT need to know how many exact points a credit can earn.
- You DO need to know how many points your project has to earn to become certified, LEED silver, LEED gold & LEED platinum.
- You DO need to be familiar with the key terms listed in your flash cards.
- You DO need to be familiar with credits across all rating systems.



**EDUCATION**  
**PARTNER**

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## MEMORIZATION METHODS

USE ACRONYMS

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TAKE ADVANTAGE OF GBRI FLASH CARDS

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READ, WATCH & LISTEN. THEN REPEAT.



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## TIPS AND TRICKS

LEARN YOUR TERMS AND DEFINITIONS FIRST

BUILD YOUR FOUNDATION IN GREEN BUILDING  
BASICS

TAKE MORE THAN ONE PRACTICE EXAM. ONCE YOU  
CONSISTENTLY MAKE AN 80-90% YOU ARE READY TO  
TAKE YOUR LEED GREEN ASSOCIATE TEST.



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## 5 WEEK ROADMAP

### WEEK 1

#### Topics Covered:

Introduction to Sustainability & LEED + LEED Green Associate Exam Overview

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#### After Session:

- Join our WhatsApp study group.
- Ensure you have access to your GBRI on-demand account.
- Create a free USGBC account if you do not already have one.
- Schedule your LEED Green Associate Exam - we suggest taking your exam 2-4 weeks after our live session ends.
- Study your Key Term Flashcards & review Study Guide, taking notes as necessary.
- Take section quiz - Introduction to Sustainability & LEED.

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