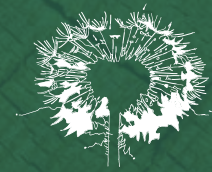




CORE GREEN BUILDING CERTIFICATION

**A Best Practice Green
Building Standard**



INTERNATIONAL
LIVING FUTURE
INSTITUTESM

NOTIFICATION

Copyright © 2019 by International Living Future Institute

All rights reserved. No part of this document may be modified, nor elements of this document used out of existing context without written permission.

For information, address:

The International Living Future Institute
1501 East Madison Street, Suite 150
Seattle, WA 98122

Core Green Building Certification and Living Building Challenge are trademarks of the International Living Future Institute (the Institute). The terms “Living Buildings,” “Living Building,” “Living Building Leader,” “Living Future,” and “Living Future Challenge” are also trademarks of the Institute. No use of these terms is allowed without written permission from the Institute, and no project may claim to reach “Living Building,” “Living Renovation,” “Living Interior” “Living Landscape,” or “Living Infrastructure,” status without review and certification by the Institute.


The Institute grants substantial limited uses in order to encourage a wide distribution, including the following:

This particular document may be printed and distributed in its entirety by any organization for the purposes of education or adoption of the Challenge. This stipulation does not apply to other Living Building Challenge or Living Future Challenge documents or other related documents unless expressly specified.

This document may be transmitted in PDF form only-without any modifications made-to any individual or organization for the purposes of education or adoption of the Challenge.

This document may be posted on websites in its entirety and unmodified in PDF form for the purposes of education or to encourage the adoption of the Challenge. However, the Institute encourages organizations to instead provide a link to the International Living Future Institute website at living-future.org in order to maintain access to the most current version of the document.

Use of this document in any form implies acceptance of these conditions. The Institute reserves the right to modify and update the Core Green Building Certification and the Living Building Challenge at its sole discretion.



IMAGINE a best practice green building standard that is simple to use and identifies the ten best practice requirements that credential a 'green building'.

IMAGINE a green building standard that enables a project to move towards being a Living Building.

IMAGINE a green building standard that encompasses equity and beauty as a core requirement.



**IT'S TIME FOR A
BEST PRACTICE
GREEN BUILDING
STANDARD THAT
IS HOLISTIC AND
SIMPLE TO USE.**

TABLE OF CONTENTS

EXECUTIVE SUMMARY	4
CALL TO ACTION	6
HOW CORE GREEN BUILDING CERTIFICATION WORKS	9
STRUCTURE + APPLICABILITY	11
SUMMARY TABLE	13
TRANSECTS	14
SCALE JUMPING	16
REGISTRATION + CERTIFICATION	17-18

CORE IMPERATIVES

C1. Ecology of Place	20
C2. Human-Scaled Living	21-22
C3. Responsible Water Use	23
C4. Energy + Carbon Reduction	24
C5. Healthy Interior Environment	25
C6. Responsible Materials	26
C7. Universal Access	27-28
C8. Inclusion	29
C9. Beauty + Biophilia	30
C10. Inspiration + Education	31

ADDITIONAL RESOURCES FOR DEEPER ENGAGEMENT	32
GLOSSARY	40

EXECUTIVE SUMMARY: MAKING GREEN BUILDINGS MAINSTREAM TOGETHER

OUR GOAL IS SIMPLE. WE WANT TO SEE GREEN BUILDINGS EVERYWHERE, IN EVERY CLIMATE AND IN EVERY PROJECT TYPE. TOGETHER WE CAN MEET THE MARKET AT DIFFERENT LEVELS AND DRIVE MORE PROJECTS TOWARDS OUR ULTIMATE GOAL OF LIVING BUILDINGS.

The Core Green Building CertificationSM (Core) is a simple framework that outlines the 10 best practice achievements that a building must obtain to be considered a green or sustainable building. It puts the connection to nature, equity and the need for a building to be loved on even footing with the typical water, energy and materials concerns. Core seeks to rapidly diminish the gap between the highest levels of established green building certification programs and the aspirations of the Living Building Challenge.

Core satisfies our left-brain craving for order and thresholds, and our right-brain intuition that the focus needs to be on our relationship with and understanding of the whole of life. Regardless of the size or location of the project, Core simplifies the complexity contained within our current understanding of how we define a 'green building'.

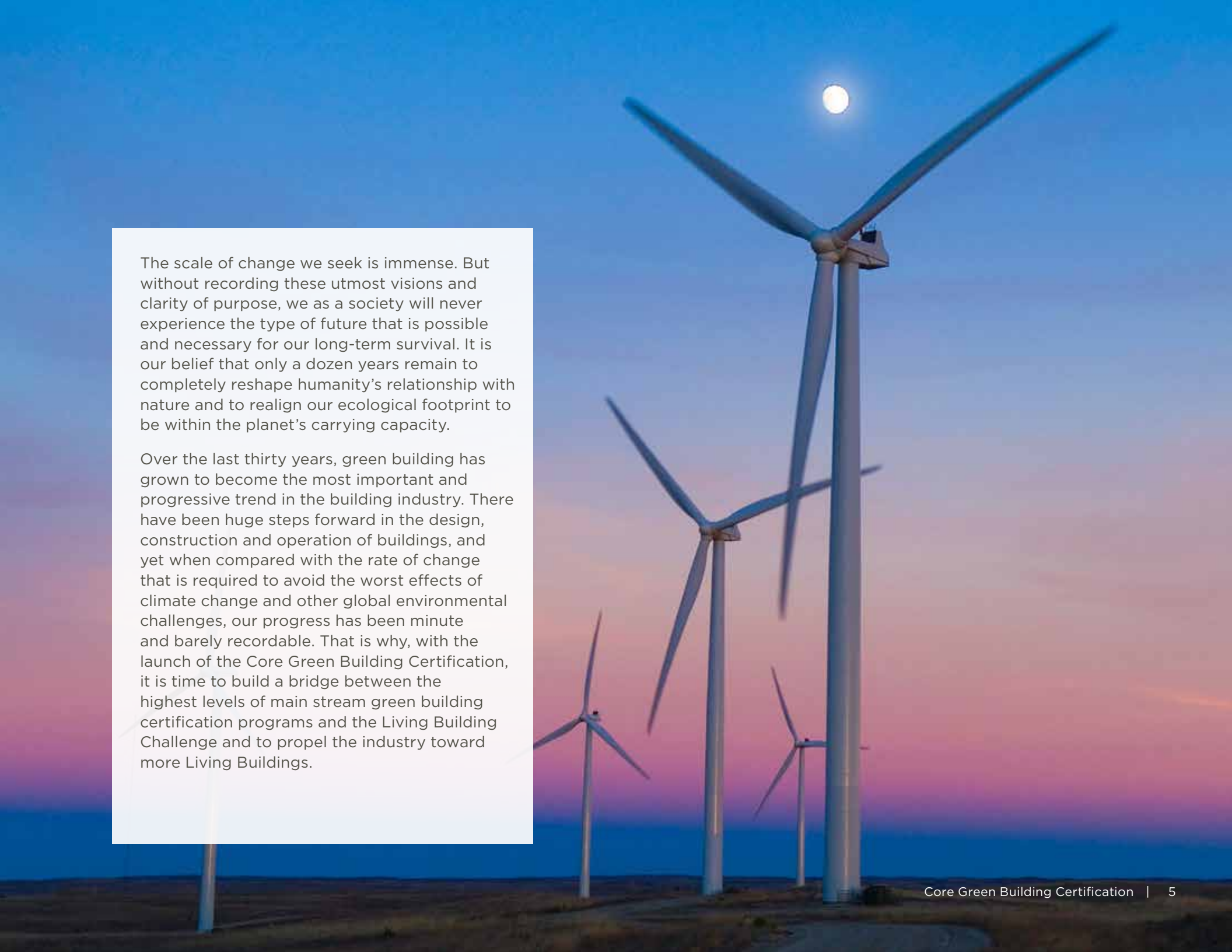
Joining Zero Carbon Certification, Zero Energy Certification, Living Building Challenge Petal Certification and Living Certification, Core completes the family of building certification programs administered by the International Living Future Institute. Together, they create a suite of certifications designed to address the many types of highly aspirational projects. The Imperatives of the Core Green Building Certification fit seamlessly into the requirements in the Living Building Challenge; it is both a stand-alone program and an integral part of the Living Building Challenge.

Projects that achieve Core certification can claim to be role models in their communities for redefining the future of the built environment. Whether the project is Zero Energy, Zero Carbon, Core, Living Building Challenge Petal or Living Certified, it has a home in the construct of ILFI building certifications.

The Core Green Building Certification is simple and easy to use: There are ten simple Imperatives that must be met for any type of project, at any scale, in any location around the world.

Core is decidedly not a checklist—the requirements are performance-based and position demonstrated best practice as an indicator of success.

continued >>



The scale of change we seek is immense. But without recording these utmost visions and clarity of purpose, we as a society will never experience the type of future that is possible and necessary for our long-term survival. It is our belief that only a dozen years remain to completely reshape humanity's relationship with nature and to realign our ecological footprint to be within the planet's carrying capacity.

Over the last thirty years, green building has grown to become the most important and progressive trend in the building industry. There have been huge steps forward in the design, construction and operation of buildings, and yet when compared with the rate of change that is required to avoid the worst effects of climate change and other global environmental challenges, our progress has been minute and barely recordable. That is why, with the launch of the Core Green Building Certification, it is time to build a bridge between the highest levels of main stream green building certification programs and the Living Building Challenge and to propel the industry toward more Living Buildings.

CALL TO ACTION

THE PAST DECADE HAS SEEN RELATIVELY SMALL PROGRESS TOWARD ADDRESSING GLOBAL CLIMATE CHANGE; WE ARE REACHING A POINT WHERE THE NEXT DECADE WILL SEE CHANGE TO OUR ECOSYSTEM HEALTH, FRESH WATER SUPPLIES AND CLIMATES AT UNPRECEDENTED LEVELS.

A world with seven billion people and counting.

A world where every single major ecological system is in decline, and the rate of that decline is increasing.

A world where global temperature increases means shifting rainfall distributions, acidified oceans and potentially catastrophic sea-level rise.

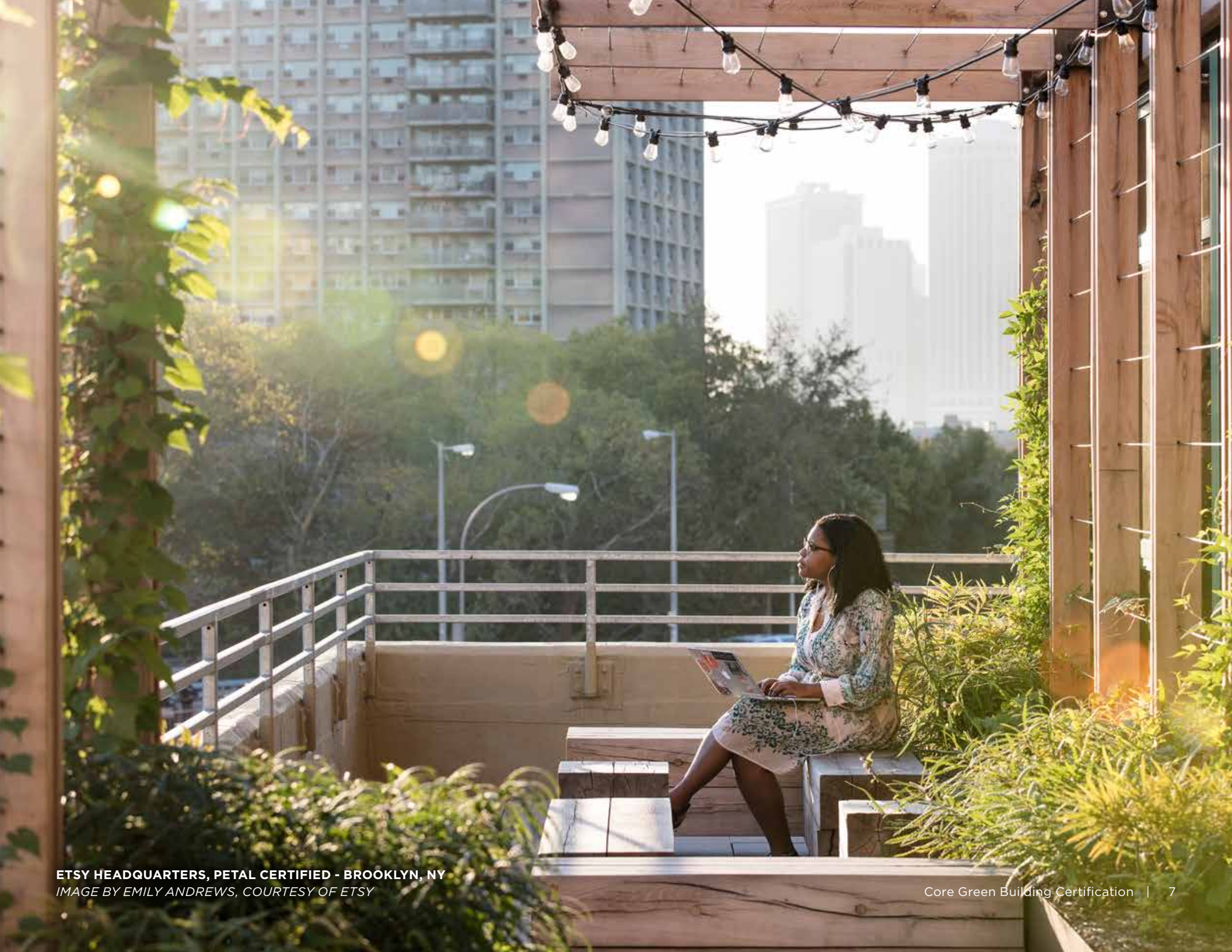
Nothing less than a sea change in building, infrastructure and community design is required. Indeed, this focus needs to be the great work of our generation. We must remake our cities, towns, neighborhoods, homes and offices, and all the spaces and infrastructure in between. This is part of the necessary process of reinventing our relationship with the natural world and each other —reestablishing ourselves not separate from, but part of nature, “because the living environment is what really sustains us.”

Since it was launched in 2006, the Living Building Challenge


has inspired and motivated rapid and significant change: projects have sprouted up all over North America and beyond—currently, there are efforts underway in a dozen countries with several million square feet of Living Building Challenge projects in progress—each as a beacon in the dark showing what is possible; the regulatory environment has embraced a series of reforms; and most importantly, a new sense of possibility has permeated design communities as a result of the first 100 certified projects.

Now that we know the Challenge is achievable, the Core Green Building Certification and the Living Building Challenge 4.0 take the lessons learned from the first 100+ certified projects, as well as the first 500+ registered projects, and create scalable, simple and elegant certification programs that can adequately address the radical change the built environment must make in the next decade.

THIS STANDARD IS AN ACT OF OPTIMISM AND BELIEF THAT WITH THE RIGHT TOOLS IN THE HANDS OF PASSIONATE AND SENSITIVE INDIVIDUALS, A REVOLUTIONARY TRANSFORMATION IS POSSIBLE. IT IS A PROGRAM THAT ASKS US TO THINK HOLISTICALLY AND TO ENGAGE BOTH OUR RIGHT AND LEFT BRAINS, HEAD AND HEART.



ETSY HEADQUARTERS, PETAL CERTIFIED - BROOKLYN, NY
IMAGE BY EMILY ANDREWS, COURTESY OF ETSY

A woman wearing a white long-sleeved top, a blue skirt, and a white hat is walking away from the camera on a grassy path in a park. The path is dappled with sunlight and shadows from large, mature trees with vibrant green foliage. The scene is bright and natural, suggesting a healthy, restored environment.

We invite you to join us so that together we can continue to forge ahead on our path toward restoration and a Living Future.

The International Living Future Institute issues a challenge:

TO ALL DESIGN PROFESSIONALS, CONTRACTORS AND BUILDING OWNERS to radically transform the way we create the built environment and to eliminate negative impact on global health.

TO POLITICIANS AND GOVERNMENT OFFICIALS to remove barriers to systemic change, and to realign incentives to truly protect the health, safety and welfare of people and all beings.

TO ALL OF HUMANITY to reconcile the built environment with the natural environment, into a civilization that creates greater biodiversity, resilience and opportunities for the regeneration of our ecosystems.

HOW THE CORE GREEN BUILDING CERTIFICATION WORKS

Early Recognition + Proven Performance

TWO PRINCIPLES OF THE CORE GREEN BUILDING CERTIFICATION:

Certification is based on actual performance and projects must be operational for at least twelve consecutive months prior to audit to verify compliance. Core Ready Recognition is an option once the project is constructed to show the project is on track for certification.

All ten Imperatives must be achieved in order to obtain Core certification.

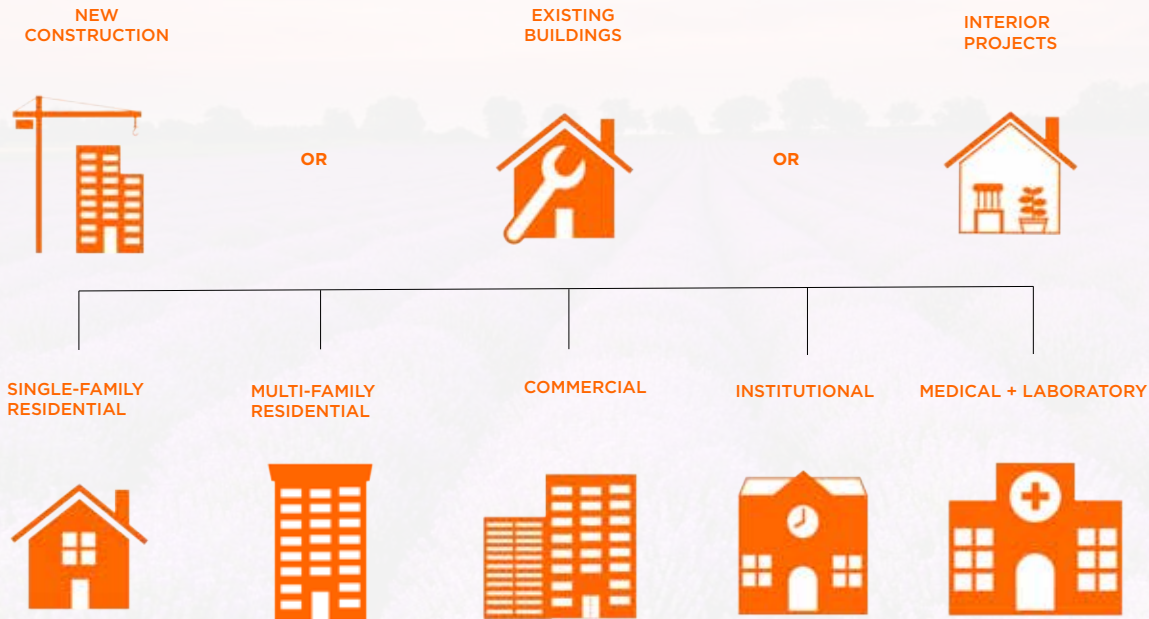
STRUCTURE + APPLICABILITY

The Core Green Building Certification consists of 10 Imperatives addressing Place, Transit, Water, Energy, Health, Materials, Equity, Inclusion, Biophilia and Inspiration.

This compilation of Imperatives can be applied to almost every conceivable building project, of any scale and any location—be it a new building or an existing structure.

All ten of the Imperatives are embedded within the Living Building Challenge and therefore clarifications, definitions and any exceptions are listed in the Petal Handbooks, which should be consulted for the most up-to-date rulings. Exceptions will be modified or removed as the market changes.

The Core Green Building Certification is versatile and can apply to **any building project**. These include but are not limited to:



Core Green Building Certified projects come in all shapes and sizes and consist of both new construction and renovation projects—including historic preservation. If you can imagine it, then it can likely be a Core project given the right application of strategies, technologies, and imagination. Requirements can vary based on project context and conditions, but the intent of each Imperative remains the same, regardless of project type.

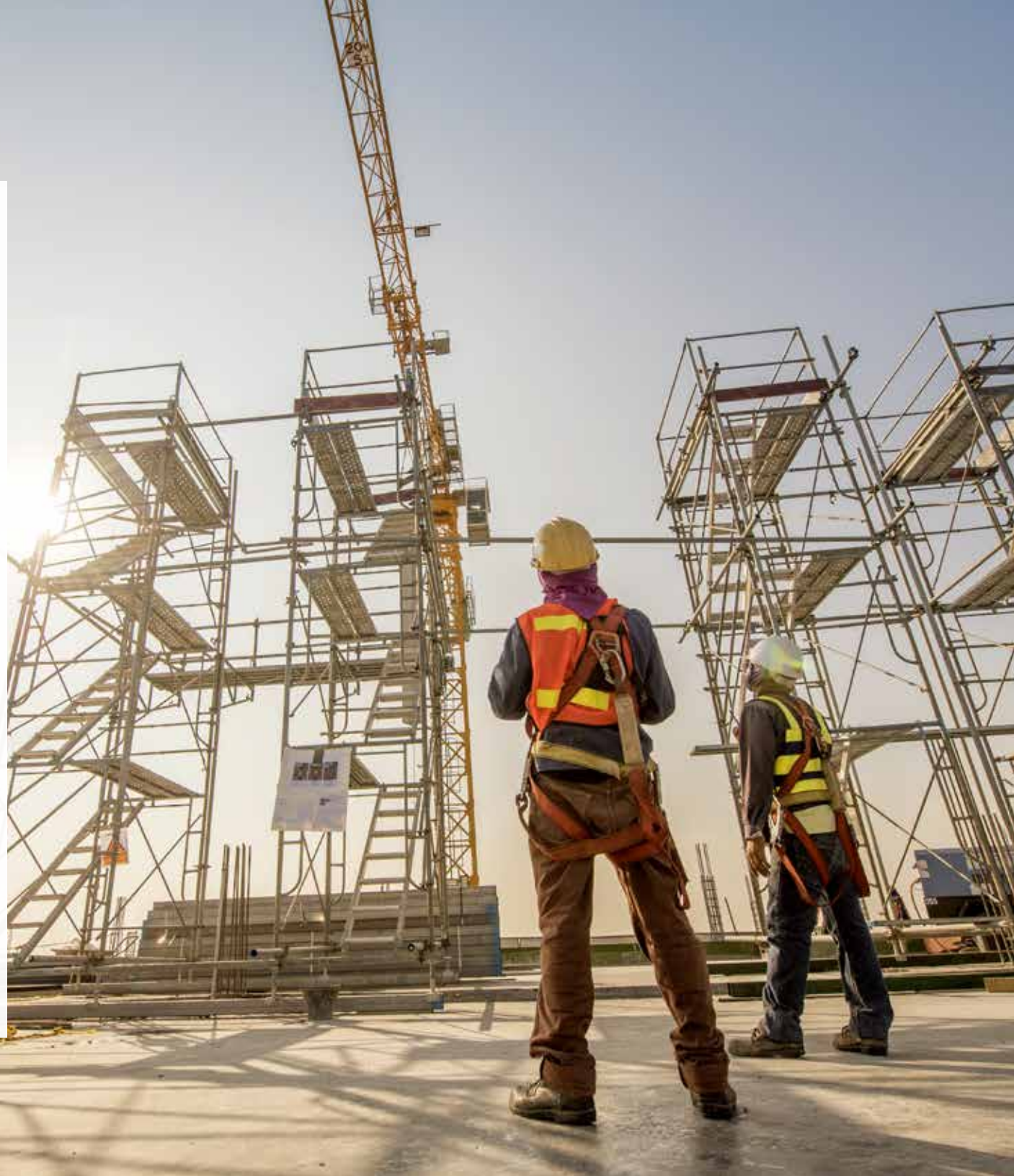
TYPOLOGIES

The Core Green Building Certification is versatile and applies to different project scopes, or Typologies. There are three Typologies, and teams must identify the one that aligns with the project's scope to determine which requirements apply.

NEW BUILDING: This Typology is for any project that encompasses the construction of a new building.





EXISTING BUILDING: This Typology is for any project that alters either the envelope or the major systems of a building.






INTERIOR: This Typology is for any project that does not alter either the envelope or the major systems of a building.



SUMMARY TABLE

Core Green Building Certification is composed of ten Imperatives. Some Imperatives are not required for all Typologies.

IMPERATIVE		TYPOLOGY		
		New Building	Existing Building	Interior
C1	Ecology of Place	Imperative Required for Typology	Requirement Dependent on Scope	Not Required for Typology
C2	 Human Scaled Living	Imperative Required for Typology	Requirement Dependent on Scope	Requirement Dependent on Scope
C3	 Responsible Water Use 	Imperative Required for Typology	Imperative Required for Typology	Requirement Dependent on Scope
C4	 Energy + Carbon Reduction	Imperative Required for Typology	Imperative Required for Typology	Requirement Dependent on Scope
C5	Healthy Interior Environment	Imperative Required for Typology	Imperative Required for Typology	Imperative Required for Typology
C6	Responsible Materials	Imperative Required for Typology	Imperative Required for Typology	Imperative Required for Typology
C7	Universal Access	Imperative Required for Typology	Requirement Dependent on Scope	Requirement Dependent on Scope
C8	Inclusion	Imperative Required for Typology	Imperative Required for Typology	Imperative Required for Typology
C9	Beauty + Biophilia	Imperative Required for Typology	Imperative Required for Typology	Imperative Required for Typology
C10	Education + Inspiration	Imperative Required for Typology	Imperative Required for Typology	Imperative Required for Typology

-  SCALE JUMPING ALLOWED
-  HANDPRINTING IMPERATIVE
-  IMPERATIVE REQUIRED FOR TYPOLOGY
-  REQUIREMENT DEPENDENT ON SCOPE
-  NOT REQUIRED FOR TYPOLOGY

TRANSECTS

Because the Core Green Building Certification is performance-based, the guiding principles and performance metrics apply regardless of where in the world the project is located—what changes is the specific mix of strategies and technologies—leaving it up to the genius of the design team to choose the most appropriate design response.

To encourage appropriate development in specific settings, Core follows the Living Building Challenge model of drawing on the work of Duany Plater-Zyberk & Company, who created the New Urbanism Transect model for rural to urban categorization.¹ The Transect is a powerful basis for planning and demonstrates that different types of standards befit different development realities.

The Living Transect, which is applied to all projects, is used to modify and apply exceptions to a number of requirements in the Core program. Living Transects are an adaptation of the original Transect concept; the primary modification has been a reclassification of Transect zones T3 and T4 to emphasize appropriate mixed-use densification rather than sprawl.²

Core encourages the transition of suburban zones to grow into either new urban areas with greater density; or to create balanced, mixed-use villages that can support full lives with minimal car trips; or to be restructured as new rural zones for food production, habitat, and ecosystem services.

¹ www.transect.org

² These are general descriptions. Refer to the 4.0 Place Petal Handbook for more information.

continued >>





L1



L2



L3



L4



L5

Photo: Joyfull / Shutterstock.com



L6

Photo: Andrew F. Kazmierski / Shutterstock.com

L1. NATURAL HABITAT PRESERVE:

This Transect is comprised of land that is set aside as a nature preserve or is defined as wildlands or sensitive ecological habitat. It may not be developed except in limited circumstances related to the preservation or interpretation of the landscape, as outlined in the Place Petal Handbook.

L2. RURAL ZONE:

This Transect is comprised primarily of land that is used for agriculture and food production-based development, as well as the outlying areas of small towns and villages.

L3. VILLAGE OR CAMPUS ZONE:

This Transect is comprised of relatively low-density mixed-use development found in rural villages and towns, and low-density neighborhoods outside of small cities, and may also include college or university campuses.

L4. GENERAL URBAN ZONE:

This Transect is comprised of light- to medium-density mixed-use development found in larger villages, small towns, or at the edge of larger cities.

L5. URBAN CENTER ZONE:

This Transect is comprised of a medium- to high-density mixed-use development found in small to mid-sized cities or in the first "ring" of a larger city.

L6. URBAN CORE ZONE:

This Transect is comprised of high- to very high-density mixed use development found in large cities and dense metropolises.

CORE GREEN BUILDING CERTIFICATION SPURS PROJECTS TO SUPPORT THE ECOLOGY OF PLACE, REDUCE TRANSPORTATION IMPACTS, USE ENERGY, WATER, AND MATERIALS WISELY, AND INCLUDE EVERYONE.

Depending on the technology, the optimal scale can vary when considering environmental impact, first cost and operating costs. To address these realities, Core has a Scale Jumping overlay to allow multiple buildings or projects to operate in a cooperative state—sharing green infrastructure as appropriate and allowing for environmental and social benefits to be achieved as elegantly and efficiently as possible. Refer to the summary table on page 22 to view all Imperatives that may employ the Scale Jumping overlay.³

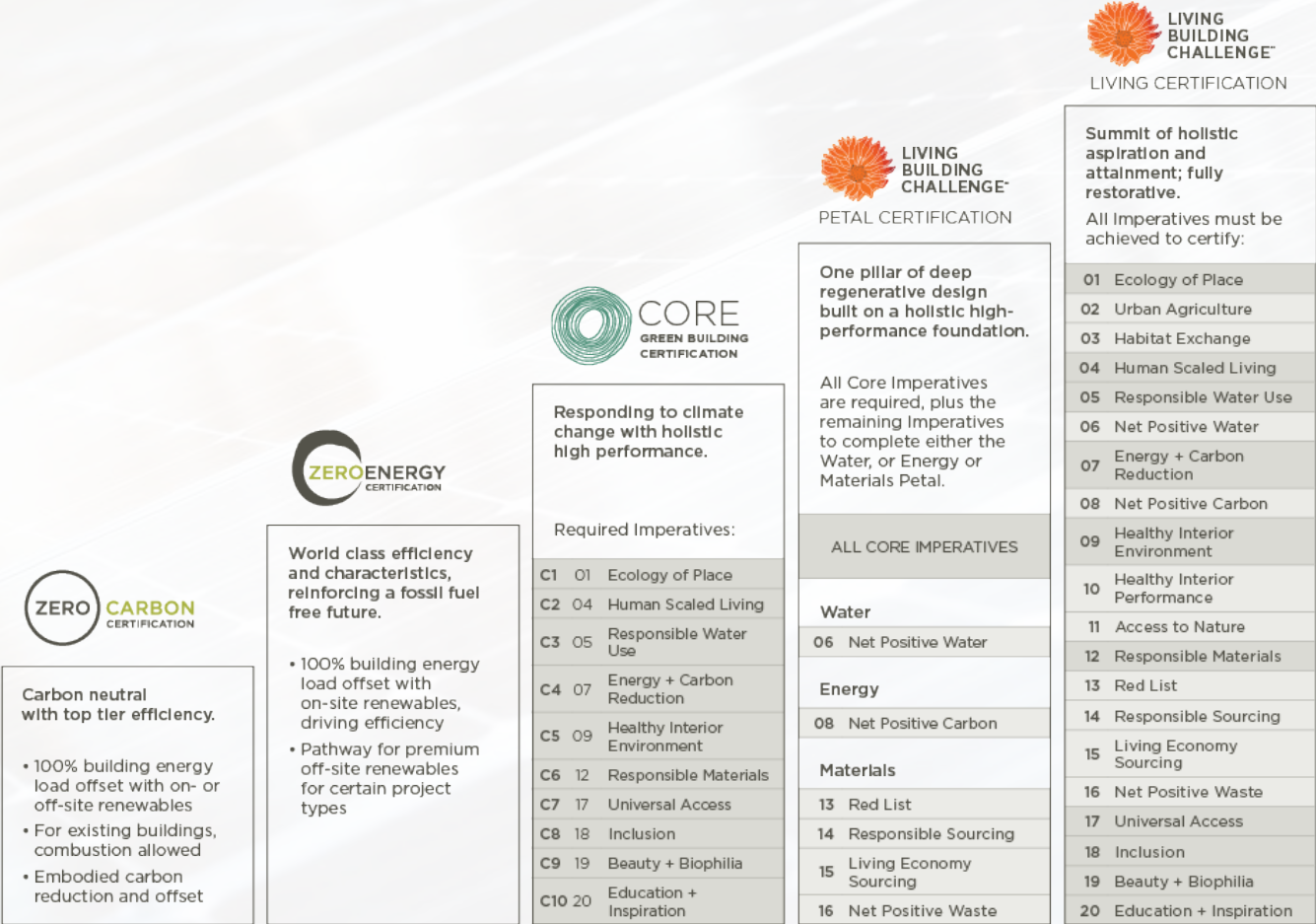


Imperatives where scale jumping are allowed are marked with this icon.

³ Refer to the v4.0 Petal Handbooks for more information on Scale Jumping by Imperative.

Registration is the first step toward Core Green Building Certification and is accessible through ILFI membership. Registered projects can benefit from many Institute resources, such as the opportunity to submit program clarification and exception requests through the Dialogue. To register a project, teams will need to provide basic information about the project, owner, and team, most of which can be updated later as the project evolves.

Once projects have completed construction and a 12-month performance period, they can certify under one of the many building certification paths administered by ILFI.



OTHER INTERNATIONAL LIVING FUTURE INSTITUTE CERTIFICATIONS



LIVING BUILDING CHALLENGE™

LIVING BUILDING CHALLENGE CERTIFICATION

Living Certification is for projects striving for the highest level of sustainability and regenerative design. A project achieves Living Certification by attaining all Imperatives assigned to its Typology. All twenty Imperatives are required for New Buildings, and the other Typologies have similar, but scope dependent requirements..

PETAL CERTIFICATION

Petal Certification is for projects that want to do a deep dive into one particular issue area, or Petal of the Living Building Challenge. This certification requires the achievement of all the Core Imperatives, in addition to all Imperatives in either the Water, Energy, or Materials Petal.



ZERO ENERGY CERTIFICATION

Zero Energy (ZE) Certification is for projects focused on achieving net zero energy through the on-site production of renewable energy. The marketplace has characterized net zero energy in many different ways, but ILFI has a simple definition:

One hundred percent of the building's energy needs on a net annual basis must be supplied by on-site renewable energy, with no combustion.



ZERO CARBON CERTIFICATION

Zero Carbon (ZC) Certification is for projects focused on impacting climate change through energy and materials. This certification requires that one hundred percent of the operational energy use associated with the project be offset by new on- or off-site renewable energy. It also requires a targeted energy efficiency level and a reduction in the embodied carbon of the project's primary materials.⁴ In addition, one hundred percent of the carbon emissions impacts associated with the construction and materials of the project must be disclosed and offset. For additional information about membership, registration and certification, including links, see pages 33, 34, + 39.

⁴ See glossary and v4.0 Materials Petal Handbook for more information.

A monarch butterfly with dark wings and white spots is perched on a bright orange flower. The background is a soft, blurred mix of teal and orange. The text "CORE IMPERATIVES" is overlaid in large, white, bold, sans-serif capital letters.

CORE IMPERATIVES

PLACE



CORE IMPERATIVE

1

ECOLOGY OF PLACE

(LBC IMPERATIVE 01)

The intent of this Imperative is to protect wild and ecologically significant places and encourage ecological regeneration and enhanced function of the communities and places where projects are built.

All projects must avoid building on pristine greenfield, wilderness, prime farmland or in a floodplain unless they meet an exception.⁵ Projects must preserve thriving vibrant ecological environments and habitats.

All project teams must document site and community conditions prior to the start of work, including but not limited to identification of the project's "reference habitat(s)".

All projects must demonstrate that they contribute positively to the ecology of their place and restore or enhance the ecological performance of the site towards a healthy ecological baseline. On-site landscape must be designed to mature and evolve, and emulate the functionality of the reference habitat, as appropriate to the project's Transect.⁶

All project teams must assess cultural and social equity factors and needs in the community and consider those identified needs to inform design and process decisions.

No petrochemical fertilizers or pesticides can be used for the operation and maintenance of the on-site landscape, including urban agriculture.

⁵ Refer to the v4.0 Place Petal Handbook for exceptions to the limits on project locations.

⁶ Refer to the v4.0 Place Petal Handbook for more information regarding the emulation of the reference habitat, including specific aspects to consider.

PLACE

CORE IMPERATIVE

2

HUMAN-SCALED LIVING

(LBC IMPERATIVE 04)



SCALE JUMPING PERMITTED

The intent of this Imperative is to contribute toward the creation of walkable, pedestrian-oriented communities that reduce the use of fossil fuel vehicles.

All projects must maintain or increase the density of the site and support a human-powered lifestyle. All projects (except single family residential) must also:

- Be built to an appropriate scale for their neighborhood.
- Provide places for occupants to gather and connect with the community.
- Provide sufficient secure, weather-protected storage for human-powered vehicles and facilities, such as showers and lockers, to encourage biking.⁷
- Provide at least two electric vehicle charging stations or one per thirty spaces, whichever is greater.
- Minimize impervious surface parking to no more than 20% (Transects 1-3), 15% (Transect 4), 5% for (Transect 5) and 0% (Transect 6) of the Project Area and ensures that any surface parking area larger than 20m x 30m is separated with planted areas.⁸

All projects (except single family residential) must:

- Either reduce single-occupancy vehicle (SOV) trips and trips by fossil fuel-based vehicles by 30% over an established baseline relevant to the projects region and occupancy type, or (see next page)

⁷ Projects must demonstrate how they have addressed on-site bike storage opportunities in order to meet the intent of this Imperative.

⁸ For maximum parking guidelines refer to the 4.0 Place Petal Handbook.

PLACE



CORE
IMPERATIVE

2

HUMAN-
SCALED
LIVING

(LBC IMPERATIVE 04)



SCALE JUMPING PERMITTED



- Implement at least four of the following best practices:
 - Consideration and enhancement of pedestrian routes, including weather protection on street frontages.
 - Advocacy in the community to facilitate the uptake of human-powered and public transportation.
 - A transit subsidy for all occupants of the project (if owner occupied) or a requirement for tenant employers to provide such a subsidy.
 - Carpool coordination assistance.
 - Car sharing or efficient fleet vehicle access.
 - Regular survey of occupants to determine current fossil fuel-based SOV trips.

Single-family homes (all Transects) must assess how occupants can reduce their transportation impact through car sharing, use of public transportation, alternative fuel vehicles, or bicycles and implement at least two identified strategies.



WATER



CORE IMPERATIVE

3

RESPONSIBLE WATER USE (LBC IMPERATIVE 05)



SCALE JUMPING PERMITTED

The intent of this Imperative is to encourage projects to treat water like a precious resource, minimizing waste and the use of potable water, while avoiding downstream impacts and pollution.

All projects must not use potable water for irrigation, and use less water for the project's other needs than a baseline regional building of the same type at the following rates:⁹

- New Building: 50%
- Existing Buildings and Interiors: 30%

Affordable housing projects may use water handprinting combined with project efficiency to meet water savings goals.

All projects must treat all stormwater on site, through natural or mechanical means and without chemicals, and manage all stormwater based on both pre-development hydrology and current ecological conditions, as determined by a qualified professional.

All projects on a Combined Sewer Overflow (CSO) system, or in a floodplain (based on an exception) must incorporate stormwater detention and avoid sheet flow off the site.

⁹ Refer to the 4.0 Water Petal Handbook for clarifications and exceptions, including an exception based on jurisdictional refusal of the designed systems. That exception does not apply to irrigation systems.



ENERGY



CORE IMPERATIVE

4

ENERGY + CARBON REDUCTION (LBC IMPERATIVE 07)



SCALE JUMPING PERMITTED

The intent of this Imperative is to treat energy as a precious resource and minimize energy-related carbon emissions that contribute to climate change.

All projects must achieve a reduction in total net annual energy consumption (after accounting for on-site renewable power), as compared to a typical existing building with comparable climate, size, use and occupancy, and combustion must be limited as follows:¹⁰

	NEW BUILDING	EXISTING BUILDING	INTERIOR
ENERGY PERFORMANCE REQUIREMENT	70% reduction from an equivalent building baseline	50% reduction from an equivalent building baseline	35% reduction from an equivalent building baseline
COMBUSTION LIMITS	Not Allowed (except through existing exceptions)	Allowed for HVAC systems that are not in project scope. Phase out plan and advocacy are required.	
RENEWABLES	Must be on-site to count towards the efficiencies above.		

All projects must meter energy used by the project.

New or Existing Building projects must demonstrate a 20% reduction in the embodied carbon of primary materials compared to an equivalent baseline.¹¹ Existing Buildings may count in-situ materials against the required twenty percent.

All projects (except Landscape + Infrastructure) must select interior materials with lower than industry average carbon footprint for product categories for which embodied carbon data is readily available.¹²

All projects must be designed to be “zero ready” through strategies such as designating area(s) and/or pre-installing wiring and connections for both electric vehicle charging and future installation of renewable energy systems.

¹⁰ Projects must establish their baseline through using tools such as Zero Tool, World Bank EDGE or other approved tools.

¹¹ Refer to the v4.0 Energy Petal Handbook for recommended tools to establish a baseline

¹² Refer to the v4.0 Energy Petal Handbook for relevant interior product categories and industries averages.

HEALTH + HAPPINESS



CORE IMPERATIVE

5

HEALTHY INTERIOR ENVIRONMENT (LBC IMPERATIVE 09)



SCALE JUMPING PERMITTED

The intent of this Imperative is to promote good indoor air quality and a healthy interior environment for project occupants.

All projects must:

- Comply with the current version of ASHRAE 62, or international equivalent.
- Prohibit smoking within any buildings or enclosed spaces, and within 25' of any building opening, including air supply vents.
- Develop a Healthy Indoor Environment Plan specific to the project's building type and location. The plan must address cleaning protocols, the prevention of particulates and toxins through an entry approach and implementation of at least one strategy to improve air quality.
- Provide views outside and daylight for 75% of regularly occupied spaces.
- Provide direct exhaust for kitchens, bathrooms, and janitorial areas.



MATERIALS

CORE IMPERATIVE

6

RESPONSIBLE MATERIALS (LBC IMPERATIVE 12)

The intent of this Imperative is to set a baseline for transparency, sustainable extraction, support of local industry and waste diversion for all projects.

All projects must demonstrate a positive impact on the building products market through responsible selection of materials.

The project must contain one Declare label product per 200 sq m, up to twenty distinct products. All other product manufacturers must, at a minimum, receive a letter requesting they disclose their ingredients and identify any Red List content.

50% of wood products must be FSC, salvaged, or harvested on site either for the purpose of clearing the area for construction or to restore or maintain the continued ecological function of the site.

20% or more of the materials construction budget must come from within 500 kilometers of construction site.¹³

The project must divert 80% of the construction waste material from the landfill and provide dedicated infrastructure for the collection of recyclables and compostable food scraps during occupancy.

When a project is targeting all Materials Imperatives, it is not necessary to document this Imperative, since all requirements are superseded by Imperatives 13-16.

¹³ "Materials construction budget" is defined as all material costs and excludes labor, soft costs, and land. Declare products and salvaged materials may be counted at twice their value. Certain natural building materials may include labor cost in their calculation. Refer to the v4.0 Materials Petal Handbook for more information.



EQUITY



CORE IMPERATIVE

7

UNIVERSAL ACCESS

(LBC IMPERATIVE 17)



The intent of this Imperative is to allow equitable access to, and protections from any negative impacts resulting from the development of, Living Building projects.

All projects must make all primary transportation, roads and non-building infrastructure that are considered externally focused (e.g. plazas, seating or park space) equally accessible to all members of the public regardless of background, age, ability, and socioeconomic class—including the homeless—with reasonable steps taken to ensure that all people can benefit from the project's creation.¹⁴

Projects in Transects L3-L6 (except single-family residences) must provide for and enhance the public realm through design measures and features that are accessible to all members of society, such as street furniture, public art, gardens, and benches.

All projects must safeguard access for those with physical disabilities through designs meeting either the Principles of Universal design (United States Access Board), the Americans with Disabilities Act (ADA) and the Architectural Barriers Act (ABA) Accessibility Guidelines, or international equivalent.¹⁵

No project may block access to, nor diminish the quality of, fresh air, sunlight, and natural waterways for any member of society or adjacent developments. Projects must also appropriately address any noise audible to the public.

- **Fresh Air:** Projects must protect adjacent property from any noxious emissions that would compromise its ability to use natural ventilation. All operational emissions must be free of Red List items, persistent bioaccumulative toxicants, and known or suspect carcinogenic, mutagenic and reprotoxic chemicals.

¹⁴ Refer to the v4.0 Equity Petal Handbook for exceptions and clarifications regarding access.

¹⁵ Refer to the v4.0 Equity Petal Handbook for exceptions, such as those for private residences and historic structures. ADA and ABA Accessibility Guidelines are available online: www.access-board.gov/guidelines-and-standards/buildings-and-sites/about-the-ada-standards

EQUITY



CORE
IMPERATIVE

7

UNIVERSAL
ACCESS

(LBC IMPERATIVE 17)

- Sunlight: Projects must demonstrate that shading of adjacent building will not result in negative impacts to the occupants of those buildings.
- Natural Waterways: Projects may not restrict access to the edge of any natural waterway, except where such access can be proven to be a hazard to public safety or would severely compromise the function of the project.¹⁶ No project may assume ownership of water contained in these bodies or compromise the quality of water that flows downstream. If the project's boundary is more than sixty meters long parallel to the edge of the waterway, it must incorporate and maintain an access path to the waterway from the most convenient public right-of-way.¹⁸

¹⁶ This corresponds to a neighboring building that is at least two stories in L2-L3; four stories in L4; eight stories in L5; and sixteen stories in L6.

¹⁷ Public access thoroughway must allow approach to waterway from land for pedestrians and bicyclists, and from the water via boat. No infrastructure to support any water-based transport is required. For example, a working dock or marina might need to restrict shoreline access for safety reasons. A private residence may not.

¹⁸ The easement containing the pathway must be at least three meters wide and allow entry to both pedestrians and bicyclists.



EQUITY



CORE IMPERATIVE

8

INCLUSION

(LBC IMPERATIVE 18)

The intent of this Imperative is to help create stable, safe, and high-paying job opportunities for people in the local community, and support local diverse businesses through hiring, purchasing, and workforce development practices.

All projects must have a Just label for at least two project team organizations that have an integral role in decisions during both design and construction phases, and an additional five organizations involved in the project must complete a self-assessment.¹⁹

In addition, project teams must either include diverse stakeholders from vulnerable or disadvantaged populations in the design, construction and operations and maintenance phases at the following levels:

- 1) 20% of design contract and/or construction contracts, and 10% of maintenance contracts must be with JUST organizations that achieve the Diversity category, or are registered Minority, Woman, or Disadvantaged Business Enterprises (MWD BE) organizations, or international equivalent; and

Workforce development/training/community benefits agreements, registered apprentice programs, and similar programs are employed for 10% of the General Contractor's project contracts, and/or project maintenance contracts.

OR

- 2) the project may donate .1% of the construction cost to a regional, community-based nonprofit organization focused on equity and inclusion.

¹⁹ living-future.org/just

Just.

Organization Name: ABC Corporation
Organization Type: Service Provider
Headquarters: Seattle, Washington
Office Locations: 30
Number of Employees: 10,750

Social Justice Indicators:

Diversity & Inclusion	Employee Benefits
<input checked="" type="checkbox"/> Gender Diversity	<input checked="" type="checkbox"/> Health Care
<input checked="" type="checkbox"/> Ethnic Diversity	<input checked="" type="checkbox"/> Retirement Provision
<input checked="" type="checkbox"/> Inclusion	<input checked="" type="checkbox"/> Family/Medical Leave
<input checked="" type="checkbox"/> Engagement	<input checked="" type="checkbox"/> Training/Education
Equity	Stewardship
<input checked="" type="checkbox"/> Full-Time Employment	<input checked="" type="checkbox"/> Local Communities
<input checked="" type="checkbox"/> Pay-Scale Equity	<input checked="" type="checkbox"/> Volunteering
<input checked="" type="checkbox"/> Freedom of Association	<input checked="" type="checkbox"/> Animal Welfare
<input checked="" type="checkbox"/> Living Wage	<input checked="" type="checkbox"/> Charitable Giving
<input checked="" type="checkbox"/> Gender Pay Equity	<input checked="" type="checkbox"/> Positive Products
Employee Health	Purchasing & Supply Chain
<input checked="" type="checkbox"/> Physical Health	<input checked="" type="checkbox"/> Equitable Purchasing
<input checked="" type="checkbox"/> Well-Being	<input checked="" type="checkbox"/> Supply Chain

THE SOCIAL JUSTICE LABEL 2.0

ABC-001 EXP. 12/30/2020

INTERNATIONAL LIVING FUTURE INSTITUTE™



BEAUTY

CORE IMPERATIVE

9

BEAUTY + BIOPHILIA (LBC IMPERATIVE 19)

The intent of this Imperative is to connect teams and occupants with the benefits of biophilia and incorporate meaningful biophilic design elements into the project.

Projects must be designed to include elements that nurture the innate human/nature connection. Each project team must engage in a minimum of one all-day exploration of the biophilic design potential for the project. The exploration must result in a biophilic framework and plan for the project that outlines strategy and implementation ideas for the following:²⁰

- How the project will be transformed by deliberately incorporating nature through Environmental Features, Light and Space, and Natural Shapes and Forms.
- How the project will be transformed by deliberately incorporating nature's patterns through Natural Patterns and Processes and Evolved Human-Nature Relationships.
- How the project will be uniquely connected to the place, climate, and culture through Place-Based Relationships. The project must meaningfully integrate public art and contain design features intended solely for human delight and the celebration of culture, spirit, and place appropriate to the project's function.

The framework should include a record of the exploration day and goals for the project, as well as historical, cultural, ecological, and climatic studies that thoroughly examine the site and context for the project. The plan must contain methods for tracking biophilia at each design phase to ensure sufficient implementation of the framework.

²⁰ Each of the biophilic design elements is outlined on table 1-1, p. 15 of *Biophilic Design: The Theory, Science, and Practice of Bringing Buildings to Life* by Stephen R. Kellert, Judith H. Heerwagen, and Martin L. Mador.



BEAUTY

CORE IMPERATIVE

10

EDUCATION + INSPIRATION (LBC IMPERATIVE 20)

The intent of this Imperative is to provide educational materials about the operation and performance of the project to the occupants and the public in order to share successful solutions and catalyze broader change.

All projects must provide:

- A Living Building Challenge Case Study.
- An annual open day for the public.²¹
- A copy of the Operations and Maintenance Manual.²²

All projects (except single-family residential) must:

- Provide a simple brochure describing the design and environmental features of the project.
- Install interpretive signage that teaches visitors and occupants about the project.
- Develop and share an educational website about the project.
- Include one Living Future Accredited Professional on the project team.

²¹ See v4.0 Beauty Petal Handbook for how this requirement applies to residential projects

²² See v4.0 Beauty Petal Handbook for how this requirement applies to residential projects



An aerial photograph showing a dense, vibrant green forest on the left side of the frame, which meets a bright turquoise body of water on the right. The water has a slightly rippled texture. The word "RESOURCES" is overlaid in large, white, bold, sans-serif capital letters across the center of the image, spanning both the forest and the water.

RESOURCES

ADDITIONAL RESOURCES FOR DEEPER ENGAGEMENT

THE LIVING BUILDING CHALLENGE WEBSITE

An online resource for project teams and others, the Living Building Challenge section of Living-future.org provides the Living Building Challenge Standard document and the resources that support the certification process—including fee schedules for certification, detailed case studies of certified projects, and education resources. Additional project team resources are available to registered project teams. living-future.org/lbc

PETAL HANDBOOKS

The Petal Handbooks are a critical resource for project teams pursuing the Living Building Challenge. They contain the clarifications, exceptions, and definitions needed to fully understand Imperative requirements and compliance options. Because the Living Building Challenge program is continuously informed by the work that project teams are doing on the ground, the handbooks have been developed to clarify and consolidate the rules at a set point in time to provide a unified reference for project teams. They are periodically updated to include all current Dialogue posts. While the Petal Handbooks are an excellent reference tool, they should be used in conjunction with the Dialogue to ensure that the most up-to-date rulings are understood.

MEMBERSHIP

To begin the registration process, the project team leader is required to have a Premium Membership with the Institute. Once registered and logged in, members are directed to a landing page with links that provide access to the project registration form and allow them to update their account details. Digital versions of the Petal Handbooks are available for purchase to all International Living Future Institute members. A current fee schedule is published on the Institute's website. living-future.org/membership

THE DIALOGUE

The Dialogue is an online platform for the transparent exchange of ideas between project teams and the Institute—it is the official venue to request feedback on proposed strategies for meeting the requirements of the Living Building Challenge and related programs, including the Core Imperatives. The Dialogue allows for current unknowns to be

discovered and shared in real time as teams proceed with their projects and research. It provides teams with the flexibility to get information most relevant to their work, such as in-depth commentaries, compliance paths, clarifications, and temporary exceptions.

Organized by the Imperatives and filterable based on specific content, the activity in the Dialogue not only serves as a platform for distributing strategies for success, it also yields modifications to future releases of the Standard itself. In this way, the Dialogue captures the ongoing evolution of the programs and gives credit to the hundreds, if not thousands, of individuals who contribute to the process. Only project team members can post questions to the Dialogue, but responses are available to all ILFI members as searchable articles.

TRIM TAB

Trim Tab is the Institute's quarterly digital magazine and blog. Trim Tab features provocative articles, interviews, and news about people and designs transforming the built environment. Each digital issue is distributed via ILFI's full list of newsletter subscribers and archived on the Trim Tab site, free to all readers. living-future.org/trimtab.

RESEARCH

Despite the rigor of the Living Building Challenge, project teams are proving that the strict requirements of the program are very solvable. However, both perceived and real limitations to success still exist that are technical, regulatory, behavioral, or financial—or a combination of these influencing factors. In collaboration with partners in the design and construction field, local and state governments, and other forward-thinking nonprofits, the Institute is spearheading efforts to carry out cutting-edge research and create practical tools. The latest published reports are posted on the Institute's website: living-future.org/research.

TECHNICAL ASSISTANCE

APPROACH

The International Living Future Institute's (ILFI's) technical assistance is focused on building capacity within project teams to create buildings that are socially just, culturally rich, and ecologically restorative. ILFI staff work with project teams at critical points in the design and development timeline to ensure those teams have the information they need to meet Core requirements.

ILFI staff are not a substitute for any consultant or design team member. We support the project team through inspiration, education, and the review of key project documents and procedures specific to Core. Technical assistance is customized to help each project team capitalize upon their project's opportunities, identify and clear their project's specific hurdles, take advantage of the lessons learned from hundreds of other projects, and set the project on the road to successful certification under the Core program.

STANDARD SERVICES

The following services have been found to efficiently and effectively provide benefit to project teams - inspiring, educating and guiding team members to help them develop processes and make decisions that move them towards successful LBC certification. Please see our website for further information about each service: living-future.org/lbc/resources/#technical-assistance

- Feasibility study
- Charrette facilitation
- In-house workshops
- Biophilic design exploration.
- Design phase review
- Materials consulting
- On-going consulting

CUSTOMIZED SERVICES

Every project is unique. Customized consulting is available to help owners and teams navigate specific areas of interest or need. Some examples have included goal setting, RFP assistance, research on operations strategies, solar analysis, ideas for fundraising and funding, education program development, and application of LBC strategies across portfolios or campuses.

Please contact ILFI at LBC.consulting@living-future.org to discuss needs and to request a proposal.

The Institute is dedicated to transforming theory and practice in all sectors of the building industry, and offers several ways to enhance knowledge of deep-green building principles and practices, including the following:

PUBLIC IN-PERSON + ONLINE WORKSHOPS, LIVING FUTURE ACCREDITATION (LFA)

The Institute offers in-person and online workshops taught by expert faculty about the Living Building Challenge, other Living Future Challenges and ILFI transparency labels, and related topics. Workshops are continually developed throughout the year and are announced on the website and in our newsletters. On-demand courses (and pre-recorded webinars) are always available on our website.

To encourage the pursuit of this education, the Institute also offers Living Future Accreditation—the LFA is designed to acknowledge the most advanced and progressive-thinking professionals who are working toward a living future. Learn more on our website.

The Institute welcomes suggestions for future workshops and other educational content. Contact Institute staff to discuss options for hosting a workshop locally by emailing education@living-future.org.

LIVING FUTURE UNCONFERENCE

The Institute’s four-day Living Future unConference is the flagship annual event for leading minds in the green building movement seeking solutions to the most daunting global issues of our time. Out-of-the-ordinary learning and networking formats deliver innovative design strategies, in-depth case studies, cutting-edge technical information, and much-needed inspiration to achieve progress toward a truly living future. Conference sessions encourage a hopeful approach to the planet’s economic, ecological, and social challenges, and offer solutions for sites, infrastructure, buildings, neighborhoods and products.

The Living Future unConference offers project teams the opportunity to interact with other teams with similar project types, climates, or regulatory challenges to help model and scale LBC. Each Living Future hosts a project team summit and several face-to-face gatherings as well as ample networking opportunities.



AMBASSADOR NETWORK

The Ambassador Network is a global initiative to encourage the rapid and widespread adoption of restorative principles guided by the Living Building Challenge and the Living Community Challenge. Professionals from all walks of life are encouraged to sign up for the Ambassador Network and help us spread the word about a Living Future. The power of the network allows best practices and ideas to be shared globally, harnessing the best of social media and communication tools for rapid interchange. The Network has been designed to support the continued flow of ideas and solutions among participants and the Institute. It presents numerous options for engagement, and the Institute has created a wealth of related training materials and resources. More information about the Ambassador Network and the online applications are available on the Institute's website: living-future.org/ambassador.

Ambassador Presenters of “An Introduction to the Living Building Challenge”: Professionals who wish to shift the focus of green building conversations are trained through the Ambassador Network to deliver one-hour, informal introductory presentations to peers, local organizations, institutions, companies, and community groups. The presentations are delivered by volunteers, with the purpose of raising awareness around the Living Building Challenge. Ambassador Presenters help build local capacity for the formation of Living Building Challenge Collaboratives, forums for sustained discussions on restorative principles.

Living Building Challenge Collaboratives: In communities all over the world, the principles of the Living Building Challenge are being shared and disseminated by our growing network of Collaboratives. These community-based groups meet in person regularly to share knowledge and create the local conditions that support development of Living Buildings and Communities. Collaboratives are overseen by at least two trained Collaborative Facilitators, who are responsible for cultivating a welcoming environment for grassroots involvement and outreach. Each Living Building Challenge Collaborative has an active social media presence via Facebook and various other outlets. Visit living-future.org/ambassador to locate a Collaborative in your area, or contact us to learn how to start a new Collaborative in your city.

Continued advancement of the Living Building Challenge and Living Community Challenge will require many minds and great ideas. The Institute has established a presence through an array of online communication forums that make it possible to aggregate impressions, suggestions and insights—please reach out to us today to get involved and contribute to a Living Future!

f /livingbuildingchallenge and /livingfutureinstitute

@ @livingbuilding and @Living_Future

REGISTER A PROJECT

To register a project, a project team member must have a Premium Membership with the Institute. Visit the membership page on our website to become a member, or contact membership@living-future.org to renew your membership.¹ Premium Membership grants access to a variety of benefits and allows you to register for any of our programs.

Once the team has a Premium Membership, registration links can be found on the member dashboard. After providing some basic information about your project and paying the registration fee, team members can be added and have immediate access to view and begin uploading the documentation required for certification. Most of the information provided at the time of registration can be updated, by logging in to the project's dashboard.

¹ <https://living-future.org/membership-purchase>



CERTIFICATION DETAILS

SUBMIT FOR CERTIFICATION

When a project team has submitted all documentation required for certification in the project Portal, the project is eligible for certification. After the team notifies the Institute that the project is ready by writing to lbc.support@living-future.org, the team is invoiced for the certification fee. When the certification fee has been paid, the auditor will be given access to begin reviewing documentation and a site visit date will be coordinated.

For more step by step information on the certification process, refer to this article on the ILFI help desk.

Performance Period: All projects require twelve months of occupancy data before they can submit for certification.

Core Ready Recognition: Core Ready Recognition is available for projects that wish to have a preliminary ruling confirming initial efforts and the intent to certify. The Core Ready audit may take place any time after construction is complete. A Core Ready ruling does not constitute certification of the project, but does indicate that the project is on track and the ruling on each Imperative is likely to be carried forward to the certification audit. Although a Core Ready ruling is based on design predictions for water and energy, certification will still be based on performance, and a site visit by the Core auditor is required. If teams complete work on the project between the Core Ready audit and the certification audit that involves the use of new materials or makes other changes relevant to targeted Imperatives, additional documentation, such as a revised materials tracking sheet, must be submitted for review during the certification audit.

Ongoing monitoring of energy and water data, and ILFI access to that data is required for the Core Ready audit, continuing until the certification audit, to ensure the project is on track. In addition, the time a project can remain Core Ready without submitting for certification is limited.

For most projects, the same auditor will perform both Core Ready and certification audits, although this cannot be guaranteed. Only the certification audit will result in a Core Green Building Certification.

The following table identifies Imperatives that are eligible for Core Ready Audit and those that require additional documentation after the twelvemonth performance period.

IMPERATIVE	LBC READY AUDIT	CERTIFICATION AUDIT
C1: Ecology of Place	X	X
C2: Human-Scaled Living	X	
C3: Responsible Water Use	X	X
C4: Energy + Carbon Reduction	X	X
C5: Healthy Interior Environment	X	
C6: Responsible Materials	X	
C7: Universal Access	X	
C8: Inclusion	X	X
C9: Beauty + Biophilia	X	
C10: Education + Inspiration	X	X

Questions? Contact the Institute at lbc.support@living-future.org.

A BRIEF HISTORY OF THE CORE GREEN BUILDING CERTIFICATION

The Living Building Challenge was launched in 2006 and has had a significant impact – on markets, projects and the international conversation about what is possible and how to get there. As of 2019, 105 projects have been certified under the Living Building Challenge and well over 500 have registered, representing over a dozen building types in nearly every climate zone on the planet. The Challenge has begun to move from proving that Living Buildings are possible to scaling the program to new levels, and to new types and sizes of projects.

Amanda Sturgeon has led, with consultation from Jason McLennan and the staff, a new evolution of the Living Building Challenge. The Living Building Challenge 4.0 is yet another step in the evolution of the Challenge and recognizes the urgent need to scale, incorporating and launching a Core Green Building Certification (Core) that is based on the same fundamental principals as the Living Building Challenge – holistic approach verified through performance data. In addition, Core can bridge the gap between mainstream green building certification programs and the aspirations of the Living Building Challenge by removing many of the barriers that have been highlighted by our project teams to make achieving Living Certification more possible than ever.

As an iterative program, no change is possible to the Living Building Challenge without the feedback from our project teams, who are our “committees” on the ground, and from our third party auditors, who see firsthand where the opportunities and barriers lie. For them, and for the ground breaking work they have put in to put the Challenge into Action, we are grateful.

GLOSSARY

Adaptive reuse

The process of reusing a site or building for a purpose other than the original purpose for which it was built or designed.

Adjacent properties

Properties or developments that share a property line with the project.

Blackwater

Discharged water containing solid and liquid human wastes from toilets and urinals.

Brownfield

With certain legal exclusions and additions, the term “brownfield site” means real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Brownfields are designated as such by the EPA, or by the equivalent state, county, or other jurisdictional body.

Chemical Abstracts Service (CAS) number

A unique numerical identifier for nearly every known chemical, compound, or organic substance.

Closed-loop water systems

Systems in which all water used on a project is captured, treated, used/reused, and/or released within the boundaries of the project area.

Combustion

Any burning or combustion of fossil fuels or wood products.

Consumables

Non-durable goods that are likely to be used up or depleted quickly. Examples include office supplies, packaging and containers, paper and paper products, batteries, and cleaning products.

Deconstruction

The systematic removal of materials from a building or project for the purposes of salvage, reuse, and/or recycling.

Diverted waste

All items removed from the project, including materials that are recycled, reused, salvaged, or composted.

Dune

A sand hill or sand ridge formed by the wind, usually in desert regions or near lakes and oceans.

Durables

Goods that have utility over time rather than being depleted quickly through use. Examples include appliances, electronic equipment, mobile phones, and furniture.

Energy needs

All electricity, heating, and cooling requirements of either grid-tied or off-the-grid systems, excluding back-up generators.

Floor Area Ratio (FAR)

$$\text{FAR} = \frac{\text{Gross Building Area}}{\text{Total Project Area}}$$

Forest Stewardship Council (FSC)

An independent, non-profit, membership-led organization that protects forests for future generations and sets standards under which forests and companies are certified. Membership consists of three equally weighted chambers—environmental, economic, and social—to ensure the balance and the highest level of integrity.

Greyfield

A previously developed property that is not contaminated to the level of a brownfield.

Greenfield

Land that was not previously developed or polluted.

Greywater

Water discharged from sinks, showers, laundry, drinking fountains, etc., but not including water discharged from toilets and urinals.

Halogenated flame retardants (HFRs)

HFRs include PBDE, TBBPA, HBCD, Deca-BDE, TCPP, TCEP, Dechlorane Plus and other retardants with bromine or chlorine.

Hazardous Material

Materials that have been deemed dangerous or carcinogenic for humans or the environment and require specific measures for disposal, such as asbestos, lead paint, or materials producing ionizing radiation.

Land trust

A nonprofit organization that, as all or part of its mission, actively works to conserve land by undertaking or assisting in land or conservation easement acquisition, or by its stewardship of such land or easements.

Landscape remnant

A pre-settlement native plant community or a plant community that has survived on a site to the present day.

Landscape restoration

Reversion of a plant community back to a pre-settlement state through management. Restorations usually involve removing a plant community that has taken over a native ecosystem or remnant and are often supplemented with seeds from plants that may have grown on the site.

Landscape succession

The gradual evolution of vegetation toward a more complex and ecologically appropriate state.

Manufacturer location

The final point of fabrication or manufacture of an assembly or building material.

Materials Construction Budget

All the material costs delivered to the site, excluding labor, soft costs, and land.

Native prairies

Diverse ecosystems dominated by grasses and other flowering plants called forbs; for the Challenge, native prairies can

be either “landscape remnants” or “landscape restorations.”

Naturalized plants

Plants that were introduced but are established as if native. Invasive plants that endanger native plants or ecosystems are not considered naturalized for the purposes of the Challenge.

Old-growth forest

Natural forests that have developed over a long period of time, generally at least 120 years, without experiencing severe, stand-replacing disturbance such as a fire, windstorm, or logging. Ecosystems distinguished by old trees and related structural attributes that may include tree size, accumulations of large dead woody material, number of canopy layers, species composition, and ecosystem function.

On-site landscape

The planted area not used to comply with the requirements of Imperative O2: Urban Agriculture. The strategies

implemented for each Imperative are not required to be mutually exclusive or physically separated.

Potable water

Water that is fit for human consumption.

Previously developed

A site with existing or historic structures or on-site infrastructure, or a site that has experienced disturbance related to building activity, including monoculture agriculture. Roads built for natural resource extraction (e.g., logging roads or mining areas) do NOT qualify a site as previously developed.

Primary dune

A continuous or nearly continuous mound or ridge of sand with relatively steep seaward and landward slopes immediately landward and adjacent to the beach and subject to erosion and overtopping from high tides and waves during major coastal storms. The inland limit of the

primary frontal dune occurs at the point where there is a distinct change from a relatively steep slope to a relatively mild slope.

Primary Materials

Materials that make up the majority of the structural, foundation and envelope components of projects; typically concrete, steel and/or wood.

Prime farmland

Land that has been used for agricultural production at some time during the four years prior to the relevant Important Farmland Map date, or in the five years prior to the project, and where the soil meets the physical and chemical criteria for Prime Farmland or Farmland of Statewide Importance as determined by the USDA Natural Resources Conservation Service (NRCS).

Pristine greenfield

Land that has not been impacted by humans and maintains thriving viable habitat. Land that has not been

developed, but has been altered and degraded through ranching, mono-culture agriculture, crowding, pollution or other means is not considered pristine greenfield for the purposes of I-01 Ecology of Place.

Project Area

The entire scope of the project and all areas disturbed by the project work including areas of construction, staging and conveyance, which is typically, but not necessarily, all land within the property line. Project Area must be consistent across all Imperatives.

Project water discharge

All water leaving the building including stormwater, greywater, and blackwater.

Renewable energy

Energy generated through passive solar, photovoltaics, solar thermal, wind turbines, water-powered microturbines, direct geothermal or fuel cells powered by hydrogen generated from renewably powered electrolysis.

Nuclear energy is not an acceptable option.

Salvaged materials

Used building materials that can be repurposed wholly in their current form or with slight refurbishment or alterations.

Sensitive ecological habitat

Habitat that is threatened, endangered, or particularly vulnerable to changes in the local ecology. Examples include, but are not limited to, wetlands, dunes, old growth forests, and native prairies.

Stormwater

Precipitation that falls on the ground surfaces of a property.

Systems furniture

A modular furniture system that might include work surfaces, cabinetry, file systems, flexible partitions, and desk chairs used to create or furnish a series of offices workspaces.

Total site area

The area of land in the Project Area, minus any sensitive ecological areas.

Wetland

Those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.





CORE
GREEN BUILDING
CERTIFICATION

1501 EAST MADISON STREET
SUITE 150
SEATTLE, WA 98122

tel: 206.223.2028

living-future.org