



LIVING COMMUNITY CHALLENGESM 1.2

A Visionary Path to a
Regenerative Future



INTERNATIONAL
LIVING FUTURE
INSTITUTESM

NOTIFICATION

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NOW IS THE RIGHT TIME FOR A WORLD OF LIVING COMMUNITIES



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IMAGINE an entire community designed and constructed to function as elegantly and efficiently as a forested ecosystem: a community informed by its bioregion's characteristics, that generates all of its own energy with renewable resources, captures and treats all of its water, and operates efficiently and for maximum beauty.

IMAGINE a city block or a college campus sharing resources from building to building, growing food and functioning without a dependency on fossil fuel-based transportation.

IMAGINE true sustainability in our homes, workplaces, neighborhoods, villages, towns and cities—
Socially Just, Culturally Rich and Ecologically RestorativeSM

EMBRACE THE PSYCHOLOGY OF THE END GAME

The International Living Future Institute issues a challenge:

TO ALL DEVELOPERS, URBAN PLANNERS, ARCHITECTS, LANDSCAPE ARCHITECTS AND CONTRACTORS to create the foundation for a sustainable future in the fabric of our communities.

TO LOCAL, STATE AND FEDERAL POLITICIANS AND GOVERNMENT OFFICIALS to remove barriers to systemic change, and to realign incentives and market signals that 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 global civilization comprised of individual communities that create greater biodiversity, resilience and opportunities for life with each adaptation and development.

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EXECUTIVE SUMMARY: IMPACT ACROSS ALL SCALES OF DEVELOPMENT: FROM STREETS AND BLOCKS TO LARGE NEIGHBORHOODS AND CAMPUSES

The Living Community Challenge is an attempt to raise the bar, to extend the ideals established by the Living Building Challenge from the individual project site outward into the community at large. The Living Community Challenge defines the most advanced measure of sustainability in the built environment possible today and acts to diminish the gap between current limits and ideal solutions. This philosophy, advocacy tool and certification program covers communities and masterplans at all scales and is a unified tool for transformative design, allowing us to envision a future that is **Socially Just, Culturally Rich and Ecologically Restorative**. Whether the community is a single street or block, a park, a college campus or even a complete neighborhood for thousands of individuals, the Living Community Challenge provides a framework for master planning, design and construction and the symbiotic relationship between people and all aspects of the built environment. Indeed, “Living Community Challenge” is not merely a noun that defines the character of a particular solution for development and planning, but is more relevant if classified as a series of verbs—calls for action that describe not only the “building” of all of humanity’s longest-lasting artifacts, but also the relationships and broader sense of community and connectivity they engender. It is a challenge to immerse ourselves in such a pursuit—and many refer to the ability to do so as a paradigm shift.

Projects that achieve this level of performance can claim to be the “greenest” anywhere, and will serve as role models for others that follow. Whether the community effort is restorative, regenerative or operates with a net zero impact, it has a home in the construct of the Living Community Challenge.

Although it may seem to be ambitious to simultaneously achieve all of the requirements of the Living Community Challenge, understanding the Standard and documenting compliance is inherently easy: there are never more than twenty simple and profound Imperatives that must be met for any type of project, at any scale, in any location around the world. This Standard is decidedly not a checklist of best practices—the facets of the Living Community Challenge position the ideal outcome as an indicator of success. The specific methodology used to meet the expectations of the Living Community Challenge is assigned to the genius of the design and planning teams, who are expected to make informed decisions appropriate to the community, its inhabitants and its bioregion.

The Living Community Challenge is a cohesive standard, pulling together the most progressive thinking from the worlds of architecture, engineering, planning, landscape design and policy. It challenges us to ask the question: **How do we create communities that are good for all people through time?**

continued >>



Photo: Perati Komson / Shutterstock.com

What if every intervention resulted in greater biodiversity; increased soil health; additional outlets for beauty and personal expression; a deeper understanding of climate, culture and place; a realignment of our food and transportation systems; and a more profound sense of what it means to be a citizen of a planet where resources and opportunities are provided fairly and equitably?

A tall order to be sure.

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 few decades remain to completely reshape humanity's relationship with nature and realign our ecological footprint to be within the planet's carrying capacity. Incremental change is no longer a viable option.

Over the last twenty 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 community developments, 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. There are a lot of green master plans in existence, but few go far enough to address the depth of challenges we face over the next few decades.

continued >>



WE ARE ENTERING A PEAK OIL, PEAK WATER WORLD THAT IS GLOBALLY INTERCONNECTED YET ECOLOGICALLY IMPOVERISHED.

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 mean 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—reestablishing ourselves not separate from, but “part and parcel with creation.”²

¹ To quote Edward O. Wilson, one of the world's most distinguished scientists.

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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; the regulatory environment has embraced a series of reforms; and most importantly, a new sense of what is possible has permeated design communities as a result of the successful certification of the first Living BuildingsSM. The Living Community Challenge seeks to do for neighborhoods, towns and cities what the Living Building Challenge has done for individual structures. Many of the strategies we support within the Living Building Challenge work even better when applied at scale—indeed finding the right scale, the “sweet spot” for infrastructure where economics and environmental impact best align, is exciting.

THIS STANDARD IS AN ACT OF OPTIMISM AND BELIEF THAT WITH THE RIGHT TOOLS IN THE HANDS OF PASSIONATE, LITERATE AND SENSITIVE INDIVIDUALS, A REVOLUTIONARY TRANSFORMATION IS POSSIBLE. WE INVITE YOU TO JOIN US, SO THAT TOGETHER WE CAN CONTINUE TO FORGE AHEAD ON OUR PATH TOWARD RESTORATION AND A LIVING FUTURE.



LIVING COMMUNITY CERTIFICATION

A community achieves Living Community Certification by attaining:

- all Imperatives, and
- Living Building Certification for a majority of capital projects developed or renovated by the community²



ZERO ENERGY COMMUNITY CERTIFICATION

The marketplace has characterized zero energy in many different ways. The Institute has a simple definition:

One hundred percent of the community's energy needs on a net annual basis must be supplied by on-site renewable energy. No combustion is allowed.

The Zero Energy Community CertificationSM program uses the structure of the Living Community Challenge 1.2 to document compliance and requires:

- Imperatives to be achieved: 01, Limits to Growth; 06, Net Positive Energy (reduced to one hundred percent and does not require storage for resilience)
- Zero Energy Building CertificationSM for a majority of capital projects developed or renovated by the community²

As with Living Community and Petal Certification, ZE Community Certification is based on actual performance rather than modeled outcomes.

PETAL CERTIFICATION

Petal Certification requires the achievement of at least three of the seven Petals, one of which must be the Water, Energy, or Materials Petal.

- Imperatives to be achieved: 01, Limits to Growth, and 20, Inspiration + Education, are also required
- Living Building Petal Certification for a majority of capital projects developed or renovated by the community, aligned with the same LCC Petal²

² See pg 15 for more information

SOME USEFUL GUIDING INFORMATION

- The internal logic of the Living Community Challenge is based on pragmatic experience with what has already been built in the marketplace.
- This Standard is an evolving document. Periodically, new releases that update or provide clarification of the Imperatives will be published. A Living Community Challenge Handbook is available on the LCC website and should be referenced alongside the Living Community Challenge Standard (living-future.org/lcc).
- The Living Community Challenge does not dwell on basic best-practice issues, so it can instead focus on fewer, high level needs. It is assumed that to achieve this progressive standard, typical best practices are being met within the planning context. The implementation of this standard requires leading-edge technical knowledge, an integrated design approach, and proposed and actual design and construction teams well versed in advanced practices related to green building.
- Regional solutions are manifested in all Living Community Challenge projects due to a number of variables, including climate factors, building characteristics and whole systems thinking applied to the necessary scale. For example, becoming water-independent in the desert demands evolving a project's design to emulate a cactus instead of a tree. The built environment, at the levels of both structure and community, will be richer because of this response to place.

HOW THE LIVING COMMUNITY CHALLENGE WORKS

CREATING WORLD-CLASS COMMUNITY DEVELOPMENT

The Living Community Challenge is comprised of seven performance areas, or “Petals”: Place, Water, Energy, Health and Happiness, Materials, Equity, and Beauty and Spirit. Petals are subdivided into a total of twenty Imperatives, each of which focuses on a specific sphere of influence. This compilation of Imperatives can be applied to the master plan and/or completed construction of almost every conceivable community type, be it a small city block or street, a planned mixed-use residential development, a transit-oriented community, or a large college campus. Naturally, strategies to create Living Communities will vary widely by occupancy, use, construction type and location—but the fundamental considerations remain the same.

There are four general procedural stages in becoming a Living Community:

1. Registration:

Once a project reaches the scale and diversity of a community, it may register for the Living Community Challenge. The following criteria shall be met to register for the LCC:

1. Diversity of uses: Access to the essential components of livability (places to: eat, sleep, work, play, and where services are provided)*;
2. Multiple buildings;

3. At least one multi-modal street;
4. Shared infrastructure (energy, water, streets) is optional, but is an indicator of LCC projects

Projects that do not meet criteria 1 through 3 are encouraged to pursue the Living Building Challenge.

*The Community must evaluate the potential to support a diversity of uses based on the following occupancy types within a defined catchment area³ surrounding the project site: Residential; Commercial (Business or Mercantile); Assembly; Educational; Civic & Institutional; Light Industrial (Factory, Storage). Pedestrian-oriented communities are optimized when all occupancy types are represented and not one is demonstrably dominant. The diversity of occupancy types may be satisfied within the community project boundary, or within a defined catchment area that includes the community project boundary and surrounding areas. Additionally, the Community may not lower the density of the existing site or the catchment area.

continued >>

³ The catchment area is defined as a one-kilometer offset from the boundary of the Community. Exclude water bodies, freeways etc.

HOW THE LIVING COMMUNITY CHALLENGE WORKS

2. Planning: Living Community Vision Plan and Master Plan:

Living Community Vision Plan

Acknowledging the complexity of existing communities and the time frame of new development, this optional phase supports the coalescence of a community around a common vision. Prior to start of construction a Living Community Master Plan must be prepared.

Living Community Master Plan

The Institute recognizes that it can take years and sometimes decades to develop master plans, then years more for those plans to evolve into completed projects ready for occupancy. The Living Community Master Plan Compliance acknowledges this reality and now reviews master plans as the first stage toward Living Community Certification. This powerful new tool can guide developers and planners during a project's critical conceptual phases, public review or planning efforts, acknowledging and certifying world-class planning efforts at this critical early juncture.

Living Community Master Plan Compliance requires a plan review with supporting documentation and no on-site audit or third-party auditor. Compliance is valid for up to three years, after which the community's or project's plans must be resubmitted if construction has not yet begun. If the project has moved to the construction phase, then it is no longer

eligible to be designated a Living Community Master Plan, but can instead apply for Emerging Living Community designation to begin building toward Living Community Certification.

Upon receiving Living Community Master Plan Compliance, developers may not market their project as a Living Community. They may promote the fact that they have created a compliant Living Community Master Plan for what aspires to be a Living Community upon completion of construction.

When any phase of a planned development's construction is complete, developers may apply for Petal or Living Community Certification. So it is feasible for a single project to contain certified built elements and compliant plans at the same time.

3. Implementation: Emerging Living Community

After creating a compliant Living Community Master Plan and moving into the construction phase, a community will apply for an Emerging Living Community designation. An Emerging Living Community embarks on the path to becoming a fully Certified Living Community. This process will vary greatly, depending on the size, type, and details of the community in question. The approved Living Community Master Plan will provide a general outline and timeline for the process of becoming a Certified Living Community during this period, and the community must follow the outline and timeline to maintain its status of Emerging Living Community.

continued >>

HOW THE LIVING COMMUNITY CHALLENGE WORKS

4. Certification: Living Community Certification

Once a planned Living Community has completed construction and has a minimum of twelve months of continuous operation, it may apply for Petal or Living Community Certification (assuming that the compliant Living Community Master Plan has not been undermined by actual infrastructure implementation). Because a Community is often built in phases, the Community may work with the Institute to determine if the phase is significant enough to trigger certification for that portion of the development. This is likely a suitable strategy for large community or campus plans.

Existing buildings within the community or buildings not under the ownership of the Community do not have to be certified as Living Buildings (although they are encouraged to be). However, all built infrastructure within the Living Community must meet the requirements of the LCC program. A majority of capital projects developed or renovated by the community (50% or more by area or individual building count) must meet the Living Building Challenge for the project to earn Living Community Challenge certification. In the situation where the community does not own or develop any buildings, at least one building must be certified to the Living Building Challenge Standard. Imperatives 01-06 are considered Community-Wide Imperatives where compliance with the requirements should be averaged throughout the entire community boundary. Imperatives 07-20 are considered Community Asset Imperatives where compliance is determined by the application of the requirements throughout the community-owned buildings and infrastructure.



continued >>

HOW THE LIVING COMMUNITY CHALLENGE WORKS

When the project is ready for certification, after twelve months of proven performance with 85% of the development occupied as intended, a third-party audit will be organized by the International Living Future Institute to ensure compliance with all pertinent Imperatives.⁴

There are two rules for Living Community Certification:

1. All Imperatives are mandatory for Living Certification.
2. Certification is based on actual, rather than modeled or anticipated, performance.

Therefore, projects must be operational for at least twelve consecutive months prior to evaluation.

⁴ Full occupancy is defined as “occupied as intended for the long-term.” The community must be occupied, not just leased, to contribute to the 85% threshold.



Photo: Art Kononov / Shutterstock.com

To encourage proper development in specific settings, the Standard draws on the work of Duany Plater-Zyberk & Company,⁵ who created the New Urbanism Transect model for rural to urban categorization. The Transect is a powerful basis for planning, and demonstrates that different types of standards benefit different development realities. The Living Transect™, which applies to several Imperatives throughout the Living Community Challenge, is an adaptation of the original Transect concept; the significant modification herein is a reclassification of Transect zones T3 and T4 to emphasize appropriate mixed-use densification.

The Challenge promotes the transition of suburban zones to grow into new urban areas with greater density.

**THE CHALLENGE PROMOTES
THE TRANSITION OF SUBURBAN
ZONES TO GROW INTO NEW URBAN
AREAS WITH GREATER DENSITY.**

⁵ www.transect.org

continued >>



L1



L2



L3



L4



L5



L6

Every project must define the community's site boundary, then select a Living Transect category based on the community's current zoning from the following options:

L1. NATURAL HABITAT PRESERVE (GREENFIELD SITES):

This is comprised of land that is set aside as a nature preserve or is defined as sensitive ecological habitat. It may not be developed except in limited circumstances related to the preservation or interpretation of the landscape, as described in Imperative One: Limits to Growth. There is a temporary exception that allows a neighborhood project to be constructed on a greenfield site in least-developed, newly industrialized or other countries with a low Human Development Index rating, where it can be clearly demonstrated that predominant societal land-use pressures require the allowance of partial development as a condition to preserve the majority of the property as a conservation area.

L2. RURAL AGRICULTURE ZONE: This is comprised of land with a primary function for agriculture and development that relates specifically to the production of food as described in Imperative Two: Urban Agriculture. Small towns and villages do not apply. (Floor Area Ratio of ≤ 0.09)

L3. VILLAGE OR CAMPUS ZONE: This is comprised of relatively low-density mixed-use development found in rural villages and towns, and may also include college or university campuses. (FAR of 0.1 - 0.49)

L4. GENERAL URBAN ZONE: This is comprised of light- to medium-density mixed-use development found in larger villages, small towns or at the edge of larger cities. (FAR of 0.5 - 1.49)

L5. URBAN CENTER ZONE: This 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. (FAR of 1.5 - 2.99)

L6. URBAN CORE ZONE: This is comprised of high- to very high-density mixed use development found in large cities and metropolises. (FAR of ≥ 3.0)

LIVING COMMUNITY CHALLENGE PROJECTS HAVE THEIR OWN ‘UTILITY,’ GENERATING THEIR OWN ENERGY AND PROCESSING THEIR OWN WASTE. THEY MORE APPROPRIATELY MATCH SCALE TO TECHNOLOGY AND END USE, AND RESULT IN GREATER SELF-SUFFICIENCY AND SECURITY. YET, THE IDEAL SCALE FOR SOLUTIONS IS NOT ALWAYS WITHIN A PROJECT’S PROPERTY BOUNDARY.

Depending on the technology, the optimal Living Community scale can vary when considering environmental impact, first cost and operating costs. To address these realities, the Living Community Challenge has a Scale Jumping overlay to accommodate communities of varying sizes to operate in a cooperative state—sharing green infrastructure as appropriate and allowing for Living Communities to be achieved as elegantly and efficiently as possible. Refer to the summary matrix on page 19 to view all Imperatives that may employ the Scale Jumping overlay.



Imperatives where Scale Jumping is allowed are marked with this icon.

The Institute will consider Scale Jumping beyond the community based on project scale, occupancy and energy demand on a case-by-case basis:

02. Urban Agriculture: Scale Jumping is limited to the region and within 100 miles of the Community with strong preference for Community Supported Agriculture and local areas adjacent to Community boundary.

05. Net Positive Water: Scale Jumping is limited to the watershed of the Community only.

06. Net Positive Energy: Scale Jumping is allowed only where opportunities for conservation and renewables are exhausted within the boundary of the Community and the Scale Jump renewables are owned by and within 100 miles of the Community.

 Solutions beyond project footprint are permissible

THE 20 IMPERATIVES OF THE LIVING COMMUNITY CHALLENGE

	LIVING COMMUNITY CHALLENGE	
PLACE		01. LIMITS TO GROWTH
	 SCALE JUMPING	02. URBAN AGRICULTURE
		03. HABITAT EXCHANGE
		04. HUMAN-POWERED LIVING
WATER	 SCALE JUMPING	05. NET POSITIVE WATER
ENERGY	 SCALE JUMPING	06. NET POSITIVE ENERGY
HEALTH & HAPPINESS		07. CIVILIZED ENVIRONMENT
		08. HEALTHY NEIGHBORHOOD DESIGN
		09. BIOPHILIC ENVIRONMENT
		10. RESILIENT COMMUNITY CONNECTIONS
MATERIALS		11. LIVING MATERIALS PLAN
		12. EMBODIED CARBON FOOTPRINT
		13. NET POSITIVE WASTE
EQUITY		14. HUMAN SCALE + HUMANE PLACES
		15. UNIVERSAL ACCESS TO NATURE & PLACE
		16. UNIVERSAL ACCESS TO COMMUNITY SERVICES
		17. EQUITABLE INVESTMENT
		18. JUST ORGANIZATIONS
BEAUTY		19. BEAUTY + SPIRIT
		20. INSPIRATION + EDUCATION

PLACE



Photo: littleny / Shutterstock.com

PLACE

RESTORING A HEALTHY
COEXISTENCE WITH NATURE



PETAL INTENT

The intent of the Place Petal is to clearly articulate in a Community where it is acceptable for people to build and how to protect and restore a place once it has been developed, and to encourage the creation of Communities that are once again based on the pedestrian rather than the automobile. In turn, these Communities should be supported by local and regional agriculture, since no truly sustainable Community can rely on globally sourced food production.

The continued spread of sprawl development threatens the few wild places that remain. The decentralized nature of our Communities impedes our capacity to feed ourselves in a responsible way and also increases transportation impacts and pollution. As flat, prime land for construction diminishes, more and more development tends to occur in sensitive areas that are easily harmed or destroyed. Invasive species threaten ecosystems, which are already weakened by the constant pressure of existing human developments.

Automobiles, often used as single occupancy vehicles, have become integral to our Communities when we should depend on “people power”—walking and bicycling—as the primary mode of travel, and supplement it with shared transit.

IDEAL CONDITIONS + CURRENT LIMITATIONS

The Living Community Challenge envisions a moratorium on the seemingly never-ending growth outward, and a focus instead on compact, connected communities filled with individual Living Buildings and populated with mindful citizens. It is designed to conserve the natural resources that support human health and the farmlands that feed us. As previously disturbed areas are restored, the trend is reversed and nature’s functions are invited back into a healthy interface with the built environment.

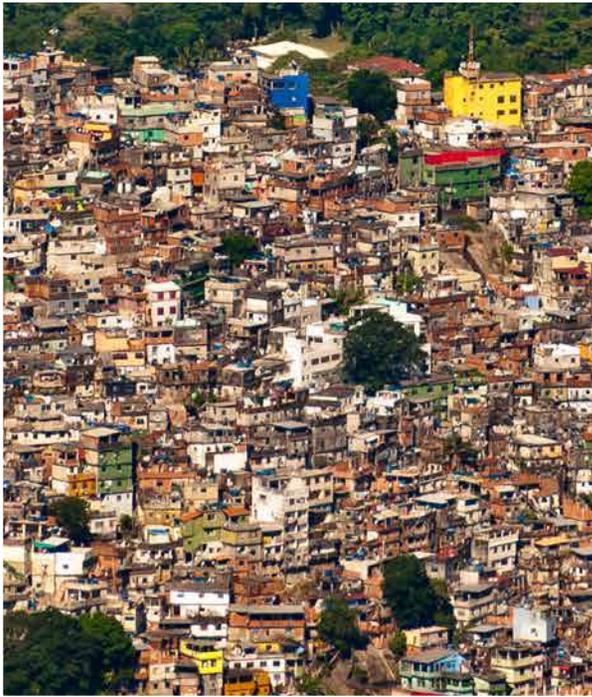
Human behavior and attitudes are the most significant barriers to transforming our developed surroundings. There is a frontier mentality that seems to encourage people to keep pursuing the next open territory and to value the untouched site more than the secondhand site. Humanity is territorial by nature, and we tend to view our impacts through a narrow lens. It is not unusual for us to encourage unhealthy solutions, so long as they are “not in my backyard” and allow us the social stature to “keep up with the Joneses.” We must erase the taboos associated with certain forms of transit that have the potential to connect Living Communities to one another and the notion of reclaiming abandoned industrial and commercial facilities, and we must once again give our regard to the many others that cohabit the earth with us.



SCALE JUMPING PERMITTED
FOR **URBAN AGRICULTURE**
(IMPERATIVE 02)

PLACE

LIMITS TO GROWTH



Projects in developed countries may only be built on greyfields or brownfields, previously developed⁶ sites that are not classified as on or adjacent to any of the following sensitive ecological habitats:⁷

- Wetlands: maintain at least 15 meters, and up to 70 meters of separation
- Primary dunes: maintain at least 40 meters of separation
- Old-growth forest: maintain at least 60 meters of separation
- Virgin prairie: maintain at least 30 meters of separation
- Prime farmland
- Within the 100-year flood plain

The Community must document site conditions prior to the start of work and identify the project’s “reference habitat(s).”⁶ On-site landscape must be designed so that as it matures and evolves it increasingly emulates the functionality of indigenous ecosystems with regard to density, biodiversity, plant succession, water use, and nutrient needs. It shall also provide wildlife and avian habitat appropriate to the Community’s transect through the use of native and naturalized plants and topsoil. No petrochemical fertilizers or pesticides can be used for the operation and maintenance of the on-site landscape.⁶

A Community in a developing country may build on a greenfield site as long as the project permanently conserves (through a partnership with a reputable land trust) twice as much land on or adjacent to the Community as is developed.

6 Greenfield communities that are immediately adjacent to sites developed before 12/31/2007 on at least 75% of the project boundary are allowed.
 7 Refer to the LCC Handbook for clarifications and exceptions. There are cases when building on a greenfield or a sensitive ecological habitat is allowed based on project type, Transect or other conditions.

PLACE

URBAN AGRICULTURE

The Community must integrate opportunities for agriculture appropriate to the scale and density of the Community using the Floor Area Ratio (FAR)⁸ as a basis for calculation. The urban agriculture area can be aggregated in a central area or dispersed throughout the Community.

The basic chart below outlines mandatory agricultural allowances:



PERCENT OF THE COMMUNITY AREA FOR FOOD PRODUCTION

Project F.A.R.	Minimum Percent Required
< 0.09	50%
0.10 - 0.24	30%
0.25 - 0.49	25%
0.5 - 0.74	20%
0.75 - 0.99	15%
1.0 - 1.49	10%
1.5 - 1.99	5%
2.0 - 2.99	2%
> 3.0	1%

⁸ Refer to the LCC Handbook for exceptions to L1 Transect and FAR clarifications.

PLACE

HABITAT EXCHANGE



03

For each hectare of development, an equal amount of land away from the Community⁹ must be set aside in perpetuity through the Living Future Habitat Exchange Program¹⁰ or an approved Land Trust organization.



HABITAT
LIVING FUTURE EXCHANGE

⁹ Refer to the LCC Handbook for exceptions and clarifications.

¹⁰ See www.living-future.org/exchange

PLACE

HUMAN-POWERED LIVING



The Community should contribute toward the creation of walkable, pedestrian-oriented communities and provide public transit linkages to surrounding neighborhoods. It shall be predominantly designed for humans and human-powered mobility, rather than for cars.

Public bike storage shall be conveniently distributed throughout the Community, enough for 15% of the Community occupants.

A network of safe, secure, and pleasant walkways and bikeways, adequate to enable human-powered transportation and mass transit as the primary means of mobility, shall be provided throughout the Community. The Community must provide a mobility plan, which addresses and demonstrates at a minimum the following:

PROJECTS IN ALL TRANSECTS:

- Public bike storage shall be conveniently distributed throughout the Community, enough for 15% of the Community occupants
- A walkway network comprised of enhanced pedestrian routes
- At least one electric vehicle charging station
- A bicycle network that provides separation from vehicles
- Advocacy in the community to facilitate the uptake of human-powered transportation

PROJECTS IN TRANSECTS L3-L6 MUST ALSO PROVIDE:

- Enhanced pedestrian routes, including weather protection on street frontages
- At least one public transit route within the community

The Community may not cause the predominant occupancy type within the catchment area¹¹ to exceed the maximum percentage allotted in the table below:

TRANSECT	L1	L2	L3	L4	L5	L6
Maximum percentage of any single occupancy type within catchment area	-	-	70%	60%	50%	40%

¹¹ Refer to catchment area footnote on pg 13.

WATER



Photo: aceshot1 / Shutterstock.com

WATER

CREATING WATER INDEPENDENT SITES,
BUILDINGS AND COMMUNITIES



PETAL INTENT

The intent of the Water Petal is to realign how people use water and to redefine “waste” in the built environment, so that water is respected as a precious resource. Scarcity of potable water is quickly becoming a serious issue as many countries around the world face severe shortages and compromised water quality. Even regions that have avoided the majority of these problems to date due to a historical presence of abundant fresh water are at risk: the impacts of climate change, highly unsustainable water use patterns, and the continued drawdown of major aquifers portend significant problems ahead. A water-independent community is a stronger, more resilient community, and the Challenge calls for Communities that honor the realities of each project’s bioregion.

IDEAL CONDITIONS AND CURRENT LIMITATIONS

The Living Community Challenge envisions a future whereby all buildings, infrastructure, and communities are configured based on the carrying capacity of the development’s site: harvesting sufficient water to meet the needs of an entire population while respecting the natural hydrology of the land, the water needs of the ecosystem the site inhabits, and those of its neighbors. Indeed, water can be used and purified and then used again—and the cycle repeats.

Currently, such practices are often illegal due to health, land use and building code regulations (or because of the undemocratic ownership of water rights) that arose precisely because people were not properly safeguarding the quality of their water. Therefore, reaching the ideal for community-wide water use means challenging outdated attitudes and technology with decentralized site-or district-level solutions that are appropriately scaled and efficient.



SCALE JUMPING PERMITTED

WATER

NET POSITIVE WATER



05



Community water use and release must work in harmony with the natural water flows of the Community and its surroundings.

100%¹² of the Community's water needs must be supplied by captured precipitation or other natural closed loop water systems, and/or by recycling used Community water, and must be purified as needed without the use of chemicals.

All stormwater and water discharge, including grey and black water, must be treated and managed at the Community scale either through reuse, a closed loop system, or infiltration.

¹² There is an exception for water that must be from potable sources due to local health regulations, Refer to the LCC Handbook for requirements.

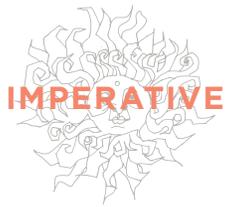
ENERGY



photo: CreativNatur.nl / Shutterstock.com

ENERGY

RELYING ONLY ON
CURRENT SOLAR INCOME



PETAL INTENT

The intent of the Energy Petal is to signal a new age of planning, wherein a proposed Community relies solely on renewable forms of energy and operates year-round in a pollution-free manner. In addition, it aims to prioritize reductions and optimization before technological solutions are applied to eliminate wasteful spending—of energy, resources, and dollars. The majority of energy generated today is from highly unsustainable sources, including coal, gas, oil and nuclear power. Large-scale hydro, while inherently cleaner, results in widespread damage to ecosystems. Burning wood, trash or pellets releases particulates and carbon dioxide (CO₂) into the atmosphere and often strains local supplies of sustainably harvested biomass. The effects of these energy sources on regional and planetary health are becoming increasingly evident through climate change, the most worrisome major global trend attributed to human activity.

IDEAL CONDITIONS AND CURRENT LIMITATIONS

The Living Community Challenge envisions a safe, reliable and decentralized power grid, founded on renewable energy that supplies incredibly efficient buildings and infrastructure without the crutch of combustion. Living Communities will incorporate energy systems capable of supporting and sustaining entire districts, which will infuse strength and resiliency into the proposed Community.

Although there has been considerable progress made to advance renewable energy technologies, there is still a need for a greater yield from these systems and for new ways to store the energy they generate. These, together with the current cost of the systems available, are the major limitations to reaching our goals.



SCALE JUMPING PERMITTED

ENERGY

NET POSITIVE ENERGY



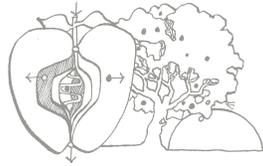
06

105% of the Community's energy needs¹³ must be supplied by Community-generated renewable energy on a net annual basis, including all energy for water and waste conveyance.

Use of combustion-based energy supply is not allowed. A Community must provide local energy storage for resiliency.¹⁴

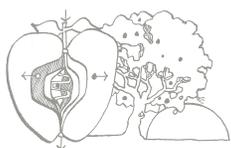
- ¹³ For all buildings and infrastructure (e.g. traffic signals, street lights and fixed mobility systems such as bike share stations and electric bus lines). Energy use may be averaged across the entire community.
- ¹⁴ Energy storage must be provided for one week of the critical and emergency services for the Community, such as fire stations, community centers, and water treatment systems.

HEALTH & HAPPINESS



HEALTH & HAPPINESS

MAXIMIZING PHYSICAL AND PSYCHOLOGICAL HEALTH AND WELL BEING



PETAL INTENT

The intent of the Health and Happiness Petal is to focus on the major conditions that must be present to create robust, healthy Communities filled with happy, productive people, rather than to address all of the potential ways that our neighborhoods and cities can compromise the human experience. Most development that occurs overlooks the requirements necessary to create a healthy and positive backdrop for our lives and instead focuses on parking counts, vehicular traffic and maximum instant property value. This Petal provides the framework for positive planning decisions at the street, block, district and community scales.

IDEAL CONDITIONS AND CURRENT LIMITATIONS

The Living Community Challenge envisions nourishing, highly productive and healthful environments incorporated into indoor and outdoor spaces throughout the Community. However, even best-laid plans require acceptance and engagement by projects' inhabitants and owners. It is difficult to ensure that places will remain vibrant over time, since sensory aspects such as air quality, thermal control, and visual comfort can easily be compromised in numerous ways. It can also be complicated to ensure optimal conditions due to the unpredictable nature of how people operate and maintain the interior and exterior spaces where they live, work and recreate.



HEALTH & HAPPINESS

CIVILIZED ENVIRONMENT



The Community must promote frequent social connections between people and plan for the ongoing connectivity that creates a Civilized Environment for all by having adequate staff positions (either volunteer or paid)¹⁵ to oversee the ongoing inclusion of the following Community initiatives:

- Local food program
- Car and bike sharing program
- Transit information center
- Community tool sharing
- Community book library
- Children, teen, adult and senior art and recreation programs
- Community “Hub” for information sharing and community meetings

The Community must honor its heritage through actively protecting buildings considered to have historical significance by the local or regional historic preservation society. The Community must inventory local heritage sites or facilities and maintain a current preservation plan.

¹⁵ A Community with four buildings or less must only incorporate two or more initiatives.

HEALTH & HAPPINESS

HEALTHY NEIGHBORHOOD DESIGN



The Community must incorporate design features and strategies to promote and optimize the health and well-being of its residents. The Community must provide:

Transects 1-2:

Not required

Transects 3-6:

- Access for residents and occupants to either dedicated walking trails, sidewalks or pedestrian paths directly accessible from every building.
- Passive recreation in the form of parks, plazas, squares and bike trails no further than ½ mile from any point in the Community.
- Active recreation such as pools, tennis or ball courts, fitness centers, soccer/football/rugby fields or skateboard parks within ½ mile from any point in the Community, scaled appropriately to the density and population of the development.
- A health and wellness education plan¹⁶ applicable to every resident that is kept current on a Community website.

¹⁶ Refer to the LCC Handbook for requirements.

HEALTH & HAPPINESS

BIOPHILIC ENVIRONMENT



The Community must be designed to include elements that nurture the innate human/nature connection. The Community 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 Community that outlines the following:¹⁷

- How the Community will be transformed by deliberately incorporating nature through Environmental Features, Light and Space, and Natural Shapes and Forms.
- How the Community will be transformed by deliberately incorporating nature's patterns through Natural Patterns and Processes and Evolved Human-Nature Relationships.
- How the Community will be uniquely connected to the place, climate and culture through Place-Based Relationships.
- The provision of sufficient and frequent human-nature interactions, throughout the Community to connect the majority of occupants with nature directly.

The Biophilic plan must contain methods for tracking Biophilia at each phase.

The plan should include historical, cultural, ecological, and climatic studies that thoroughly examine the site and context for the Community.

¹⁷ Each of the Biophilic Design Elements outlined on Table 1-1, Page 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 should be used as a reference.

HEALTH & HAPPINESS

RESILIENT COMMUNITY CONNECTIONS



The Community must incorporate design features, strategies and community-based programs to ensure resilience through infrastructure, community resources and social interactions in order to weather disruptions or disasters of any type. The Community must:

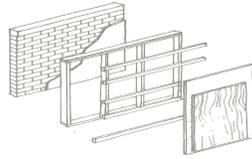
For Transects 5 & 6 (using the floodplain exception):

- Provide a place or places to allow 100% of residents to marshal and congregate in a dry, covered, and secure location that is out of the flood plain.
- Require that all facilities (except single-family residences) have a working back-up generator or battery back-up for emergency power needs that is located above the flood plain.

All Transects:

- Create, actively maintain on a yearly basis, and disseminate to all residents and tenants a disaster response plan that identifies emergency contacts and shelter locations and provides specific guidance for various types of disruption.
- Assign, train and keep current two “block captains” or building captains for every 500 residents. Captains should be highly versed in disaster response, first aid and general safety procedures. The positions may be voluntary.
- Maintain an emergency contact program tailored to the Community’s scale, such as a roster for all residents in both hard-copy and electronic forms for smaller communities.
- Have an active neighborhood watch and community program that has a mandate to look out for resident well-being and safety.
- Ensure that all sensitive infrastructures, such as lift stations, sub-stations, sewage treatment, community centers, schools and the like, are out of the flood plain.

MATERIALS



MATERIALS

ENDORISING PRODUCTS AND
PROCESSES THAT ARE SAFE FOR
ALL SPECIES THROUGH TIME



PETAL INTENT

The intent of the Materials Petal is to create a successful materials economy that is non-toxic, transparent and socially equitable. Throughout their life cycle, supplies and materials are responsible for many adverse environmental issues, including illness, squandered embodied energy, pollution, and resource depletion. The Imperatives in this section aim to remove the worst known offending materials and practices from Living Communities. When impacts can be reduced but not eliminated, there is an obligation not only to offset the damaging consequences associated with the construction process, but also to strive for corrections in the industry. At the present time it is impossible to gauge the true environmental impact and toxicity of the built environment due to a lack of product-level information.

IDEAL CONDITIONS + CURRENT LIMITATIONS

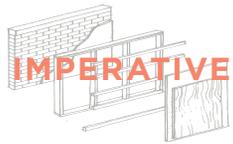
The Living Community Challenge envisions a future where all materials in the built environment are replenishable and regenerative, and have no negative impact on human and ecosystem health. The precautionary principle guides all materials decisions, first in the master plan phase through the Living Community Challenge and, later, through the Living Building Challenge as individual structures begin to take shape.

There are significant limitations to achieving the ideal for the materials realm. Product specification and purchase have far-reaching impacts, and although consumers are starting to weigh these impacts in parallel with other more conventional attributes, such as aesthetics, function and cost, the biggest shortcoming is due to the market itself. While there are a huge number of “green” products for sale, there is also a shortage of good, publicly available data that backs up manufacturer claims and provides consumers with the ability to make conscious, informed choices. Transparency is vital; as a global community, the only way we can transform into a truly sustainable society is through open communication and honest information sharing, yet many manufacturers are wary of sharing trade secrets that afford them a competitive advantage, and make proprietary claims about specific product contents.

Declare, the Institute’s ingredients label for building products, is a publicly accessible label and online database with an official connection to the Materials Petal. Not only does Declare contribute to the overt methodology for removing a temporary exception, it also provides a forum for sharing the information compiled by developers, designers and builders as part of their documentation requirements for certification. It is important for the Community to set material standards and to build them into the decision-making process for all future phases of the project.

MATERIALS

LIVING MATERIALS PLAN



11

In order to ensure responsible material use through time, the Community must develop an Implementation Plan to meet the following Imperatives from Living Building Challenge¹⁸ for all community facilities,¹⁹ common infrastructure²⁰ and landscapes that the Community controls and is in charge of developing.

- I10: Red List
- I12: Responsible Industry
- I13: Living Economy Sourcing

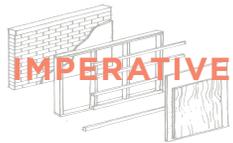
¹⁸ Refer to the current Living Building Challenge version at time of registration for compliance criteria.

¹⁹ Community provided assets: all buildings and landscapes owned or developed by the community, e.g. schools, community centers, daycare, athletic or common area facilities, storage, public or community-owned buildings.

²⁰ All improvements within rights of way, e.g. public or commonly owned areas, streets, bike lanes, sidewalks, plazas, lanes, parks and open space, etc.

MATERIALS

EMBODIED CARBON FOOTPRINT



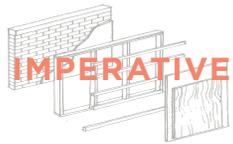
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The Community must account for the total embodied carbon (tCO₂e) impact²¹ from the construction of all Community infrastructure (built or projected) and Community-owned facilities (built or projected) through a one-time carbon offset within the project boundary.²²

- 21 Refer to the current Living Building Challenge Materials Petal Handbook version at time of registration for a list of approved carbon calculators.
- 22 There is an Exception for surplus renewable energy where if the surplus energy is returned to the grid for use by others, it can be used to satisfy an equivalent portion of the community's required carbon offsets.

MATERIALS

NET POSITIVE WASTE



The Community must strive to reduce or eliminate the production of waste during design, construction, operation, and end of life in order to conserve natural resources and to find ways to integrate waste back into either an industrial loop or natural nutrient loop.

The Community must create a Material Conservation Management Plan that sets the guidelines for all buildings, landscape, and infrastructure to minimize waste in each of the following phases:

- Design Phase, including the consideration of appropriate durability in product specification
- Construction Phase, including product optimization and collection of wasted materials
- Operation Phase, including a collection plan for consumables and durables
- End of Life Phase, including a plan for adaptable reuse and deconstruction

During construction, the community must divert wasted material to the following levels:

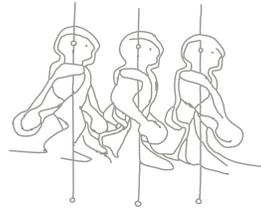
MATERIAL	MINIMUM DIVERTED/WEIGHT
Metal	99%
Paper & Cardboard	99%
Soil & Biomass	100%
Rigid foam, Carpet & Insulation	95%
All others - combined weighted average ²³	90%

There must be dedicated infrastructure for the collection of recyclables and compostable food scraps throughout the Community. Food composting must be compulsory in the Community, and compost must be reused within the Community as a nutrient source.

The Community must feature at least ten salvaged materials or reuse at least one existing structure.

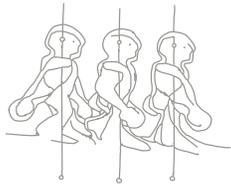
²³ Hazardous materials in demolition waste, such as lead-based paint, asbestos, and polychlorinated biphenyls (PCBs), are exempt from percentage calculations.

EQUITY



EQUITY

SUPPORTING A JUST,
EQUITABLE WORLD



PETAL INTENT

The intent of the Equity Petal is to correlate the impacts of design and development to their ability to foster a true sense of Community, whether that Community is composed of half a city block or an entire borough. A society that embraces all sectors of humanity and allows the dignity of equal access is a civilization in the best position to make decisions that protect and restore the natural environment. Until all Communities aspire to such greatness, our societies will always be less than they can be.

There is a disturbing trend toward privatizing infrastructure and creating polarized attitudes of “us” vs. “them”—allowing only those of a certain economic or cultural background to participate fully in community life. Although opposite on the spectrum, enclaves for the wealthy are only one step removed from the racial and ethnic ghettos that continue to plague our Communities. A subset of this trend is the notion that individuals can own access to nature itself, by privatizing admittance to waterways, beaches and other wilderness areas, cutting off most people from the few pristine environmental places that remain. Only by realizing that we are indeed all in this together can the greatest environmental and social problems be addressed.

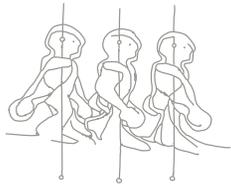
We need to aggressively challenge the notion that property ownership somehow implies that we can do whatever we like, even externalize the negative environmental impacts of our actions onto others. For example, consider these situations: when a polluting factory is placed next to a residential community, the environmental burdens of its operation are placed on the individuals who live in those houses. The factory is diminishing its neighbors’ rights to clean air, water and soil. When a building towers over another structure, its shadow diminishes that structure’s ability to generate clean and renewable energy, thereby impeding the rights to energy independence. We all deserve access to sunlight and clean air, water and soil, both within our homes and within our Communities.

We need to prioritize the concept of “citizen” above that of “consumer” while elevating the notion of “community” above that of “self.” Equity implies the creation of Communities that provide universal access to people with disabilities,

continued >>

EQUITY

SUPPORTING A JUST,
EQUITABLE WORLD



and allow people who can't afford expensive forms of transportation to fully participate in the major elements of society. Indeed, most projects in the built environment greatly outlive the original owner or developer—society inherits the legacies of bad decisions and good decisions alike. Since the act of community planning leading to sizeable development foreshadows a considerable environmental impact shared by all, there is an inherent responsibility to ensure that any development provides some public good and does not degrade quality of life.

IDEAL CONDITIONS AND CURRENT LIMITATIONS

The Living Community Challenge envisions developments that allow equitable access for all people regardless of physical abilities, age, or socioeconomic status.

Current limitations of reaching this ideal stem primarily from ingrained cultural attitudes about the rights associated with private ownership. It is necessary to change zoning standards in order to protect the rights of individuals occupying buildings and communities that are “downstream” of water, air and noise pollution, and who are adversely impacted due to lack of sunlight or exposure to toxins. Past attempts by zoning standards to protect people and communities from particularly egregious pollutants resulted in sterile single-use areas.

A healthy, diverse community is one that encourages multiple functions, and is organized in a way that protects the health of people and the environment. When planned development does occur, it can sometimes lead to gentrification of a community, raising property values and rental rates to such a level that it prices out the current inhabitants. A truly equitable community is one that provides a welcoming framework for people at all economic levels and ensures that a place doesn't push out the very people that helped to improve it, or who were its original residents.

EQUITY

HUMAN SCALE AND HUMANE PLACES



The project must be designed to create human-scaled rather than automobile-scaled places, so that the experience brings out the best in humanity and promotes culture and interaction. In context of the character of each Transect, there are specific maximum (and sometimes minimum) requirements that contribute to livable places.²⁴

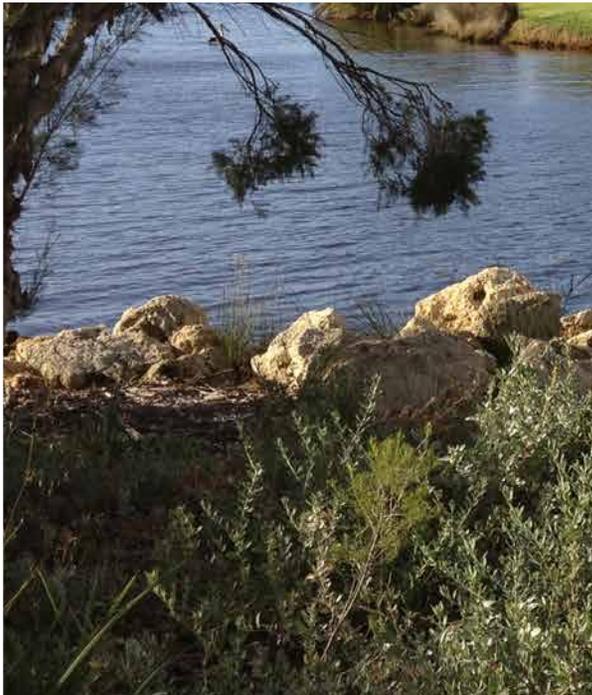
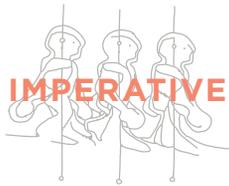
The project must follow the following design guidelines:

²⁴ Existing communities may be exempt from some prescriptive requirements of the I-14 table if they can: demonstrate the community is human-scaled; document advocacy measures have been conducted in alignment with the intent to create human-scaled rather than automobile-scaled places.

TRANSECT		L1	L2	L3	L4	L5	L6
Surface Cover	Maximum dimension of surface parking lot (including drive aisle) before a separation is required on all sides (except for vehicle egress paths)	20 m x 30 m					
	Surface parking as a percentage of the project area shall be limited to the following, based on the applicable Transect. This does not include structured or underground parking. In no case may the surface parking area be larger than 2,000 square meters.	20%	20%	20%	15%	5%	0%
TRANSECT		L1	L2	L3	L4	L5	L6
Streets + Intersections (applicable only if new streets are created as part of the Community)	One-lane road with passing places.	3 m	3 m	Not applicable to these Transects			
	Two-lane road	6 m	6 m	Not applicable to these Transects			
	Alley - maximum width			3 m			
	Community cueing street—maximum curb-to-curb width and required features	Not applicable		7.5 m 6' sidewalks, street trees in min 5' planter, and on-street parking on both sides of street			
	Community main street—maximum curb-to-curb width and required features	Development of this kind is not permitted in a Natural Habitat Preserve or Rural Agricultural Zone		10.5 m 7' sidewalk, street trees in min 6' planter, on-street parking on both sides of street			
	Maximum distance between trees in furnishing zone and planted median			9 m			
	Maximum distance between walking routes			100 m			
Maximum distance between human-powered vehicle routes			300 m				
TRANSECT		L1	L2	L3	L4	L5	L6
Signage	Number of large signs per Community. Advertising billboard are prohibited. <i>Signs are considered large when over four square meters; maximum sign size is six square meters.</i>	1					
TRANSECT		L1	L2	L3	L4	L5	L6
Proportion	Maximum single-family home size	N/A	425 m ²				
	Maximum footprint for any building with a single use, single owner or single tenant (excluding warehouses or factories)	3750 m ² excludes floor area of atriums, courtyards and daylight shafts					

EQUITY

UNIVERSAL ACCESS TO NATURE & PLACE



All primary transportation, roads and non-building infrastructure must be equally accessible to all members of the public, regardless of background, age and socioeconomic class—including the homeless—with reasonable steps taken to ensure that all people can benefit from the Community.

The public realm must be provided for and enhanced through design measures and features such as street furniture, public art, gardens and benches that are accessible to all members of society.

Access for those with physical disabilities must be safeguarded through designs meeting the Americans with Disabilities Act (ADA) and Architectural Barriers Act (ABA) Accessibility Guidelines.²⁶

The Community shall provide access to, and will not diminish the quality of, fresh air, sunlight and natural waterways for any member of society. The Community must also appropriately address any noise audible to the public.

Sunlight: Sunlight may not be blocked above a maximum height allotted for the Transect, per the following table:

TRANSECT	L1	L2-L3	L4	L5	L6
Maximum shade height on adjacent façade, measured on Winter Solstice between 10am — 2pm (meters)	-	6m	10m	15m	20m

Natural Waterways: The Community shall provide access to and access pathways along natural waterways, except where such access can be proven to be a hazard to public safety or would severely compromise the function of specific water-oriented industries. No private entity may assume ownership of water contained in these bodies or compromise the quality or quantity of water that flows downstream.

²⁶ access-board.gov. Private residences and historic structures are exempt.

EQUITY

UNIVERSAL ACCESS TO COMMUNITY SERVICES



The Community must incorporate access to basic community services and amenities that support the health, dignity and rights of all people.

All residents must have access to the following within ½ mile directly²⁷ or ¼ mile to a public transportation line that provides direct (without transferring) access within 2 miles.

- Places to Shop - a grocery store or farmers market that has fresh produce and meat, a mixed-use commercial zone
- Places to Congregate - a community center or youth center/senior center
- Places to Work - an office building, light industrial or hospital/clinic
- Places to Learn - a daycare, school or higher education institution.

The Community must have a public transportation network that runs between 7am and 7pm (at a minimum), with range and capacity as outlined in the table below.

TRANSECT	REQUIREMENT
L3	One mode or line/ ½ mile
L4	Two modes or lines/ ½ mile
L5	Three modes or lines/ ½ mile
L6	Four modes or lines/ ½ mile

²⁷ Without having to cross any freeways.

EQUITY

EQUITABLE INVESTMENT



For every dollar of project cost,²⁸ the Community must set aside and donate half a cent to a charity²⁹ of its choosing or contribute to the Living Future Equity Exchange Program, which directly funds renewable infrastructure for charitable enterprises.^{30/31}

The Community must purchase the equity offset for all projects within its direct control and encourage the offset in all others.

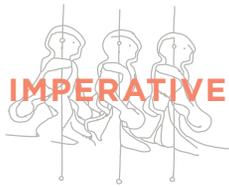


- 28 Defined as all project costs, soft costs and hard costs, excluding land costs.
- 29 The charity must be located in the country of the project and be a registered charity or 501 c 3.
- 30 www.living-future.org/exchange
- 31 Public agencies and charitable organizations are exempt from this requirement.



EQUITY

JUST ORGANIZATIONS



The Community must help create a more JUST, equitable society through the transparent disclosure of the business practices of the major organizations involved in constructing the Community. In all construction projects, at least two³² of the following project team roles must have a JUST Label for their organization:

- Architect of Record
- Planner of Record
- MEP Engineer of Record
- Structural Engineer of Record
- Landscape Architect of Record
- Owner/Developer
- Contractor
- Owner's Representative or Project Manager
- Sustainability Consultant
- Neighborhood Associations / Homeowner's Associations
- Development Authorities
- Chambers of Commerce
- Municipality

The Community must advocate for JUST participation to all future employers within the Community.³³

Just.

Organization Name:
Organization Type:
Headquarters:
Satellite Facilities:
Number of Employees:

Social Justice and Equity Indicators:

<p>Diversity</p> <input type="checkbox"/> Non-Discrimination <input type="checkbox"/> Gender Diversity <input type="checkbox"/> Ethnic Diversity	<p>Worker Benefit</p> <input type="checkbox"/> Worker Happiness <input type="checkbox"/> Employee Health Care <input type="checkbox"/> Continuing Education
<p>Equity</p> <input type="checkbox"/> Full Time Employment <input type="checkbox"/> Pay-Scale Equity <input type="checkbox"/> Employee/Union Friendly <input type="checkbox"/> Living Wage <input type="checkbox"/> Gender Pay Equity <input type="checkbox"/> Family Friendly	<p>Local Benefit</p> <input type="checkbox"/> Local Control <input type="checkbox"/> Local Sourcing
<p>Safety</p> <input type="checkbox"/> Occupational Safety <input type="checkbox"/> Hazardous Chemicals	<p>Stewardship</p> <input type="checkbox"/> Responsible Investing <input type="checkbox"/> Community Volunteering <input type="checkbox"/> Positive Products <input type="checkbox"/> Charitable Giving <input type="checkbox"/> Animal Welfare <input type="checkbox"/> Transparency

THE SOCIAL JUSTICE LABEL
 SPC-001 EXP. 10/26/2014

INTERNATIONAL LIVING FUTURE INSTITUTE™ justorganizations.com

An innovative social justice transparency platform through which organizations can shed light on their operations, including how they treat their employees and where they make financial and community investments.

22 Social and equity indicators.

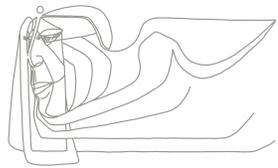
Asking all companies and organizations to accept social responsibility and to be truly transformative and transparent by publicly declaring and showcasing their social justice and equity policies and practices through the indicator metrics.

JUST label is valid for 24 months, starting with the date of issue.

JUST classification number.

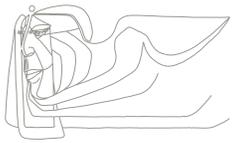
³² Over time, greater participation will be required, until eventually full disclosure is commonplace.
³³ This must be included either in the purchase or lease agreement or within Community governance bylaws.

BEAUTY



BEAUTY

CELEBRATING PLANS THAT PROPOSE TRANSFORMATIVE CHANGE



PETAL INTENT

The intent of the Beauty Petal is to recognize the need for beauty as a precursor to caring enough to preserve, conserve and serve the greater good. As a society we are often surrounded by ugly and inhumane physical environments. If we do not care for our homes, streets, offices and neighborhoods, then why should we extend care outward to our farms, forests and fields? When we accept billboards, parking lots, freeways and strip malls as being aesthetically acceptable, in the same breath we accept clear-cuts, factory farms and strip mines.

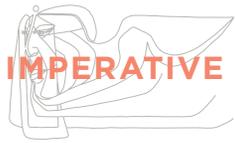
IDEAL CONDITIONS AND CURRENT LIMITATIONS

The Living Community Challenge envisions Communities that elevate our spirits. Mandating beauty is, by definition, an impossible task. And yet, the level of discussion and, ultimately, the results are elevated through attempting difficult but critical tasks. In this Petal, the Imperatives are based only on genuine efforts. We do not begin to assume we can judge beauty and project our own aesthetic values on others. But we do want to understand people's objectives and know that an effort was made to enrich people's lives with each square meter proposed in the plan. This intentionality must carry forth into a program for educating the public about the environmental qualities of their Living Community Challenge development.

There are no current limitations to this Petal other than our imaginations and what we as a society choose to value.

BEAUTY

BEAUTY & SPIRIT



IMPERATIVE



The Community must contain a meaningful integration of public art and design features on every block, street, and plaza, intended solely for human delight and the celebration of culture, spirit, and place appropriate to its function.

Public art must be located with a frequency and scale to have impact in the Community. At a minimum, public art must meet the following guidelines:³⁴

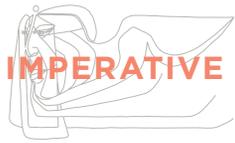
- A major installation for every 500 residents
- A minor installation for every 100 residents

³⁴ Refer to the LCC Handbook for requirements.



BEAUTY

INSPIRATION & EDUCATION



20

Educational materials about the design and operation of the Community must be provided to share the intent of and motivate others within the Community to make change. Projects must provide:

- An annual open day for the public.³⁵
- An educational website that shares information about the design and operation of the Community.
- A simple brochure describing the design and environmental features of the Community, as well as ways for occupants to optimize project function.
- Operations and maintenance manuals for all Community infrastructure.
- Interpretive signage that teaches visitors and occupants about the Community and its environmental goals and features.
- A Living Community Case Study to be posted on the Institute website.³⁶

³⁵ Community-owned facilities and infrastructure should be open to the public, and the Community should encourage all other buildings to participate.

³⁶ A case study posted on the Institute's website is required for each stage of review.

THE INSTITUTE CONTINUALLY WORKS TO CREATE RESOURCES THAT ADVANCE THE UNDERSTANDING AND IMPLEMENTATION OF THE PRINCIPLES OF THE LIVING COMMUNITY CHALLENGE, AND WE WANT TO ENSURE THAT ALL ENTHUSIASTS ARE AWARE OF THE VARIOUS WAYS TO LEARN MORE ABOUT AND PARTICIPATE IN THE EVOLUTION OF THE PROGRAM. THIS SECTION LISTS SEVERAL OFFERINGS CREATED BY THE INSTITUTE THAT EXPAND THE ROLE OF THE LIVING COMMUNITY CHALLENGE BEYOND A FRAMEWORK FOR DEVELOPMENT, TO AN OVERLAY FOR EDUCATION, OUTREACH AND ADVOCACY.

LIVING COMMUNITY CHALLENGE WEBSITE

living-future.org/lcc

The online resource for project teams and others, it provides the Living Community Challenge standard document and the resources that support the certification process—including fee schedules for certification and education resources. Detailed project team resources are being developed and will be available to registered projects.

LIVING COMMUNITY CHALLENGE HANDBOOK

living-future.org/lcc/resources

The Living Community Challenge Handbook provides guidance, clarifications and exceptions to Living Community Challenge requirements.

INTERNATIONAL LIVING FUTURE INSTITUTE MEMBERSHIP

living-future.org/membership

Only Institute members can register a project, a current fee schedule is published on the Institute’s website. Once logged in, members are directed to a unique homepage with links to update account details and access to the project registration form.

REGISTER A PROJECT

Registration is the first step toward completing a Living Community and is accessible to Institute members. Registration fees can be found on the Living Community Challenge website; registration can be completed by using the link on the website.

LIVING BUILDING CHALLENGE

living-future.org/lbc

The Living Building Challenge is the companion program to the Living Community Challenge. It must be used for all Buildings developed or owned by the Community.

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TECHNICAL ASSISTANCE

Because the Living Community Challenge defines priorities on both a technical level and as a set of core values, it requires an approach to design and operation that is fundamentally different than the current conventional structure. The Institute wants every undertaking to be successful on multiple levels. It supports a project team's transformative process of adopting the principles of the Challenge by offering optional services that shift the mindset and provide practical knowledge.

In addition to the specific services noted below, the Institute can also fashion customized options to match a project's needs during the design phases. The project team administrator may inquire about or schedule technical assistance through the Living Community Challenge website.

In-House Workshops

The Institute offers optional, customized training as a service for organizations and project teams to ensure that everyone has a shared fundamental understanding of the Living Community Challenge or particular Petal area. Whether there is a specific area of interest or a desire for a private presentation of an established curriculum, the Institute can deliver customized educational sessions. The most common workshop requested is a full-day introduction to Living Community Challenge that also includes discussion of contextual information such as development patterns and density, and regulatory, financial, behavioral and technological barriers and incentives.

Living Community Consultation Service

Because Living Communities are developed over a long period of time, the Institute offers individual team consulting that can guide teams toward innovative yet feasible solutions for their Living Community Challenge project. The Institute's scope can include running workshops and charrettes, developing master plan graphics and plan outlines, and working with the design team to ensure that the Imperative rules have been integrated and absorbed.

Contact lcc.support@living-future.org for more information.



EDUCATION

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

Public Workshops + Webinars

The Institute offers in-person and online workshops taught by expert faculty about the Living Community Challenge and related topics. Workshops are continually developed throughout the year and are announced online and on the website. The Institute welcomes suggestions for future workshop content. Contact Institute staff to discuss options for hosting a workshop locally by emailing education@living-future.org.

Living Future unConference

The Institute's three-day 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, cutting-edge technical information, and much-needed inspiration to achieve progress toward a truly living future.

Education sessions encourage a hopeful approach to the planet's economic, ecological and social challenges, and offer solutions for Communities, Infrastructure and Buildings.



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TRANSFORMATIONAL THOUGHT
THE BUCKMINSTER SCHOOL OF THOUGHT

TRANSFORMATIONAL DESIGN
SMITH COLLEGE BECHTEL ENVIRONMENTAL CLASSROOM TAKES ON THE CHALLENGE

TRANSFORMATIONAL PEOPLE
JANINE BENYUS

ALSO IN THIS ISSUE
DECLARE: THE INGREDIENTS LABEL FOR BUILDING PRODUCTS

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TRANSFORMATIONAL THOUGHT
REGENERATING THE WHOLE

TRANSFORMATIONAL DESIGN
UNIVERSITY OF WOLLONGONG'S SUSTAINABLE BUILDINGS RESEARCH CENTRE

TRANSFORMATIONAL ACTION
STOP, COLLABORATE & LISTEN

TRANSFORMATIONAL PEOPLE
DAVID SUZUKI

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THE WATER PETAL

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ED MAZRIA

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IMPRESSIONS FROM THE AMBASSADOR SUMMIT

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Trim Tab

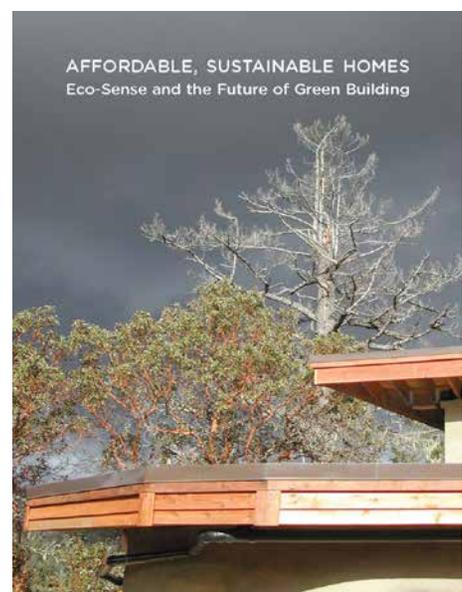
Trim Tab is the Institute's quarterly digital magazine. Each issue features provocative articles, interviews and news on the issues, designs and people that are truly transforming the built environment. Subscriptions are free, and a complete archive of past issues is available on the Institute's website: trimtab.living-future.org

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AFFORDABLE, SUSTAINABLE HOMES
 Eco-Sense and the Future of Green Building

TOWARD NET ZERO WATER:
 BEST MANAGEMENT PRACTICES FOR
 DECENTRALIZED SOURCING AND TREATMENT

Prepared by the Cascadia Green Building Council
 March 2011



The Greenest Building: Quantifying the Environmental Value of Building Reuse

A REPORT BY: **Preservation Green Lab**
 NATIONAL TRUST FOR HISTORIC PRESERVATION

WITH SUPPORT FROM: **THE LIVING FUTURE INSTITUTE**

IN PARTNERSHIP WITH: **CASCADIA GREEN BUILDING COUNCIL**, **SKANSKA**, **GreenBuilding.com**, **CSRF**, **Quantis**

Regulatory Pathways to Net Zero Water
 Guidance for Innovative Water Projects in Seattle

Phase II Summary Report

February 2011

City of Seattle

Prepared by: **CASCADIA GREEN BUILDING COUNCIL**

THE ECONOMICS OF CHANGE
 PROJECT OVERVIEW

JULY 2012

CONTENTS

- Research Partners
- Introduction
- The Economic Problem
- What's Needed?
- Catalyzing the Shift
- Next Steps
- Resources

WWW.LIVINGBUILDINGCHALLENGE.ORG/ECONOMICSOFCCHANGE

PROJECTS TAKING ROOT AND TAKING SHAPE

Living Building Challenge projects are taking shape in every kind of region and climate. In 2012, we celebrated an important milestone from the drawing board to the construction site and mass-rendering: breaking ground.

The year's most exciting development was the certification of the first two projects, Partner's Hill (Green Campus) and Green 22 (Oak Grove, California), under our Net Zero Energy Building Program.

TAKING SHAPE

The 2012 Research Living Building, Open House Living Building, and Living Building 2.0 are all taking shape. The Living Building Challenge is a global movement to create buildings that are truly sustainable and resilient.

AMBASSADOR NETWORK—SPREADING THE WORD ABOUT LIVING BUILDING CHALLENGE

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. Living Community Ambassadors will soon be added to the Network. 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/network

Ambassador Presenters of “An Introduction to the Living Community 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 Community Challenge. Ambassador Presenters help build local capacity for the formation of Living Future Collaboratives, a forum for sustained discussions on restorative principles.

Living Future Collaboratives: In communities all over the world, the principles of the Living Building Challenge and Living Community 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/network to locate a Collaborative in your area, or contact us to learn how to start a new Collaborative in your city.

OTHER WAYS TO GET INVOLVED

Continued advancement of the Living Building Challenge and Living Community Challenge will require many minds and great ideas. The Institute has established a presence on 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!

 [/livingbuildingchallenge](https://www.facebook.com/livingbuildingchallenge) and [/livingfutureinstitute](https://www.facebook.com/livingfutureinstitute)

 [@livingbuilding](https://twitter.com/livingbuilding) and [@Living_Future](https://twitter.com/Living_Future)

The Institute welcomes the use of the following hashtags:
[#livingcommunity](https://twitter.com/hashtag/livingcommunity) [#livingcommunitychallenge](https://twitter.com/hashtag/livingcommunitychallenge) [#ourlivingfuture](https://twitter.com/hashtag/ourlivingfuture)



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