

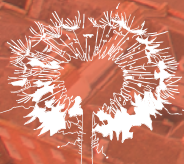


# LIVING COMMUNITY CHALLENGE HANDBOOK

JUNE 2016

LIVING COMMUNITY  
CHALLENGE<sup>SM</sup> 1.0

A Visionary Path to a  
Regenerative Future



INTERNATIONAL  
**LIVING FUTURE**  
INSTITUTE<sup>SM</sup>



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Living Community Challenge Handbook 1.0 | June 2016

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## THE INTERNATIONAL LIVING FUTURE INSTITUTE

The International Living Future Institute<sup>SM</sup> is a non-profit organization offering green building and infrastructure solutions at every scale—from small renovations to neighborhoods or whole cities. The mission of the Institute is to lead and support the transformation toward communities that are socially just, culturally rich and ecologically restorative. The Institute administers the Living Building Challenge<sup>SM</sup>, the built environment’s most rigorous and ambitious performance standard.

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SECTION

01

BACKGROUND

*Photo: Flickr user Gramicidin / CC BY-SA 2.0*  
"Bridge" in Bukit, Merah, Singapore, Central Singapore



The **Living Community Challenge (LCC) 1.0 Standard** was launched at the Living Future unConference in Portland, Oregon, USA, in May 2014. Since the launch, the International Living Future Institute (the Institute) has engaged with a range of diverse communities and explored the program in existing and new communities of various scales. Many have registered as Living Communities. Investigatory community research for the City of San Francisco yielded **The Living Community Challenge Patterns**, which begin to provide a set of tools and ideas for implementing a Living Community. Support from several foundations, including the Summit, Bullitt, Kresge, and Kendeda Foundations, enabled more in-depth LCC development and planning in specific districts in New Orleans; Normal, Illinois; the District of Columbia; and the First Hill neighborhood in Seattle. In particular, **Toward a Living Community: A Vision for Seattle's First Hill Neighborhood**, summarized the findings of work in First Hill, with specific directions in urban agriculture, watersheds and water use, energy, access and mobility, and biophilic communities. Core concepts that have been evolved through this work include energy and water footprinting, right-of-way reinvention, urban rewilding, human-scaled mobility, and neighborhood strategies generally. Over the last two years, the Living Community Challenge has helped communities to stretch to their furthest limits.

**With the development of this handbook, the LCC program now pivots to connect with more communities, designers, and change agents to spread its use to hundreds of neighborhoods and towns around the world.**

The intention of this handbook is to provide guidance and advice on planning for, designing, developing, inhabiting, and certifying a Living Community. It includes suggested directions for Masterplan contents and vignettes and inspirations for pulling the community in question to ever higher levels of performance and “Livingness.” Recognizing the early stages that the LCC is in, it seeks to help create boundaries and directions, without overly hardening into a tight frame. The LCC, like the Living Building Challenge (LBC) before it, will continue to evolve over the years

based on the knowledge created as actual streets, neighborhoods, towns, and cities explore what it means to be a Living Community.

This handbook avoids replicating the LCC Standard itself, and instead is a supportive illumination of the Standard. The Standard sets the context and raises the bar, while the handbook clarifies and elaborates. We encourage using the Standard and handbook together—referring to the intent and specific requirement in the Standard, and then using the handbook to address questions, process, and nuance. In particular, this Living Community Challenge Handbook begins to address more details about the process of becoming a Living Community, and what the Vision and Masterplan should be.

Finally, thanks to the Summit Foundation, whose financial support made creation of this handbook possible.



SECTION

02

CONTEXT & USE



Photo: Flickr user Gabriel Garcia Marengo / CC BY-NC-SA 2.0  
"Bradcordeiro"



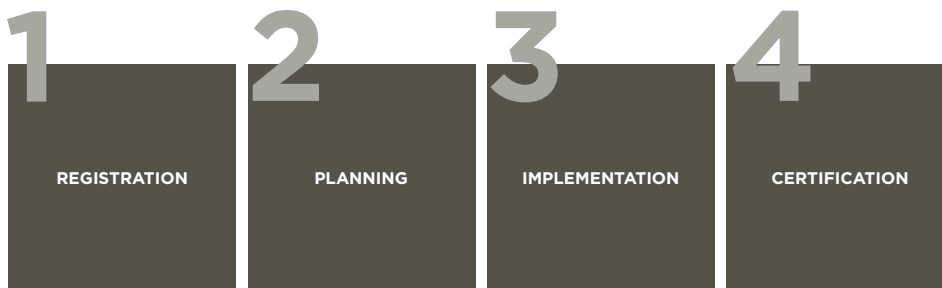
## Context and Use of the Living Community Challenge

### WHAT IS A LIVING COMMUNITY?

The Living Community Challenge (LCC) Standard provides an excellent overview of what the LCC seeks to create—a new era of community building and performance, and a new vision of urban design. It creates the frame, standards, and outcomes for what a Living Community should ultimately include and how it should perform. Rather than reiterate that information here, we encourage you to read pages 7-10 of the Standard itself, which can be found at [living-future.org/lcc/tools-resources](http://living-future.org/lcc/tools-resources).

### LIVING COMMUNITY CHALLENGE – BASIC PROCESS

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



#### Registration

Registration is the first step in the process of becoming a Living Community. It is the Community's declaration of its intention to achieve the highest levels of environmental performance. It is a very simple process and opens up an array of resources for becoming a Living Community. By registering, a Community's project team may reach out to the Institute via [lcc.support@living-future.org](mailto:lcc.support@living-future.org) to request Clarifications and Exceptions to specific Imperatives.

#### Planning: Plan Creation and ILFI Review/Approval

Once the vision and general directions of the community have been set, the project team creates a Living Community plan—either a Vision Plan or Masterplan—as discussed in greater detail below. The Vision or Masterplan is reviewed by Institute staff, and when fully acceptable, is an approved by the ILFI, at which point the plan is known as an approved “Living Community Vision Plan” or “Living Community Masterplan”.

#### Implementation: Emerging Living Community

After creating a compliant Living Community Masterplan 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 Masterplan 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.

#### Certification: Living Community

Once a community has achieved all the Imperatives included in its targeted certification (Living Certification: full 20 Imperatives, or Petal Certification—see page 11 of the LCC v1.0 Standard), it becomes a Certified Living Community or Certified Petal Community.

These steps are explained in greater detail in Section 04: Process.

### WHY IS THE LIVING COMMUNITY CHALLENGE A USEFUL TOOL?

One of the key purposes of the LCC is to provide a series of requirements, embedded concepts, and thought frameworks for creating a community with the highest possible level of environmental performance and human livability. Communities seeking to become one of these forward-looking, next-generation restorative towns and neighborhoods can use the LCC as a system for guiding planning and development.

The LCC process is also a way to help a community coalesce around a common high-performance vision. Community development process is critical, but if it is unmoored from hope and forward vision, it doesn't deliver all it can to the community residents and workers. As designers and community developers, it is our responsibility to listen to, learn from, and inspire those who we serve. The LCC is an inspirational framework for leaders and doers who seek to nurture the places where they work to the farthest reaches of community potential.

A key aspect of the LCC is that it establishes net positive performance targets for the community that are based on the biomimetic principles of harvest, sharing, regeneration, and simplicity. Living Communities harvest their own energy, water, and food (nutrients), share them internally, and



## CONTEXT

then regenerate those elements. These net positive targets have broader ramifications for planetary performance, enabling the survival of all species, including our own. For those working to create or implement a climate action plan or other environmental goals, the LCC can enable the creation of an effective roadmap for getting to fossil fuel independence that addresses building, mobility, and manufacturing energy, within the context of other critical issues like water, health, and beauty.

In much more practical ways, the LCC system, particularly the Masterplan, creates a framework for building a Living Community by enabling the planning for community-based infrastructure, phasing, financing, and assignment of responsibility. The LCC also creates a system for community-wide averaging of energy and water use and harvest, allowing the whole community to live within its means.

### WHO CAN APPLY TO PURSUE THE LIVING COMMUNITY CHALLENGE?

Unlike LBC projects, which typically involve single ownership (and require owner authorization to register and certify), LCC projects may have many stakeholders and sources of authority. Knowledge about the LCC, let alone agreement to pursue it, may not exist throughout a community, particularly existing communities. Thus a range of actors may lead the effort to become a Living Community.

**1. Owners** In single ownership communities (typically new developments), or in existing communities that have a high proportion of significant legacy ownership (such as a university or government campus ingrained in a larger community), owners may instigate the process for LCC certification.

**2. Government Authorities** The LCC is a wonderful tool and framework to support the community planning efforts of municipalities, planning commissions, townships, counties, etc. These authorities would be appropriate leads on LCC efforts.

**3. Key Stakeholders** There are often quasi-governmental authorities, neighborhood associations, NGOs, development authorities, homeowners associations, chambers of commerce, etc., who have a substantial interest or core mission in improving their communities. These organizations are potential LCC leaders. However, due to their limited authority, they may lead only the effort to create Vision Masterplans, as described below.





## WHAT IS THE RELATIONSHIP BETWEEN THE LIVING COMMUNITY CHALLENGE AND THE LIVING BUILDING CHALLENGE?

The answer is simple: any type of community that wishes to become a Living Community can use the LCC program. Existing or new, a handful of stakeholders and residents or thousands, a street or a city—all can use the LCC. The ramifications of these differences in scale and age are discussed in much greater detail below.

The Living Building Challenge best serves single buildings but is also appropriate for multiple buildings with the same owner who can combine the buildings' infrastructure needs through Scale Jumping.

For example, a five-unit, single-family detached residential project without any shared infrastructure is clearly an LBC project. The same residential project with shared heating, renewable infrastructure, or water treatment systems might be eligible to pursue the Living Building Challenge (using Scale Jumping), or the Living Community Challenge if the diversity of uses (Imperative 04 Human Powered Living) has been reached. Once a project scales to a community or neighborhood, with different owners, occupancy types, and infrastructure that could be owned by a third party, the Living Community Challenge is the best program to use. If you are unclear which standard your community should pursue, please contact the Institute for additional guidance.

## MUST EVERY BUILDING WITHIN A LIVING COMMUNITY BE A LIVING BUILDING?

The Living Community Challenge Standard v1.0 is clear that “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 program. All buildings owned or developed by the community must meet the Living Building Challenge for the project to earn full Living Community certification status.” 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. There is a clear delineation between the Imperatives that must be achieved community-wide (distributed/averaged) and those that individual community assets (organizations,

buildings, and infrastructure) are required to achieve.

### Community-Wide Imperatives

While the Imperatives' performance targets apply to the entire community, in many cases, they may be distributed / averaged throughout the community:

- **Imperative 01: Limits to Growth:**
  - Every building within the community must meet the site location requirements.
  - Landscape requirements apply to the rights of way. Landscape requirements do not apply within a private site boundary unless the site is owned or developed by the community.
- **Imperative 02: Urban Agriculture:** Minimum percentage required is based on the entire community, but may be distributed, concentrated, and/or averaged throughout the community.
- **Imperative 03: Habitat Exchange:** The required minimum area is based on the entire community boundary. In communities with both new and existing development, parcels with existing buildings within the community or buildings not under the ownership of the community do not need to be included in the area required for IO3 Habitat Exchange (although they are encouraged to be). However, the area of all built infrastructure within the Living Community and all parcels owned or developed by the community must be included in the area required for habitat exchange.
- **Imperative 04: Human-Powered Living:** Bike storage (which may be distributed / averaged) and maximum percentage of any occupancy is based on the entire community boundary and total number of community occupants.
- **Imperative 05: Net Positive Water:** The community must be net positive, but performance may be distributed, concentrated, and/or averaged throughout the community.
- **Imperative 06: Net Positive Energy:** The community must be net positive, but performance may be distributed, concentrated, and/or averaged throughout the community.

# CONTEXT

## Community Asset Imperatives

The remaining Imperatives' performance targets, i.e.,

- Imperatives 07-20,

must be achieved by community organizations, buildings, and infrastructure for a community to achieve Living Community Challenge certification. These include:

- Public or community-owned buildings;
- Buildings directly owned by the project developer;
- All improvements within rights of way;
- Parks and open space;
- Public or commonly owned areas;
- Community associations or organizations implementing the operational requirements of the Imperatives (Imperative 07, Civilized Environment; Imperative 10, Resilient Community Connections; and Imperative 16, Universal Access to Community Services)

Any of the built features subject to Community Asset Imperatives must be certified through the Living Building Challenge.

For example, see Basic Community Layout on the right:

## BASIC COMMUNITY LAYOUT



- COMMUNITY BOUNDARY:**  
All parcels, right-of-ways and infrastructure within the LCC community boundary are included in Community-Wide Imperative requirements.
- OTHER DEVELOPMENT:**  
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). See Community-Wide Imperative description.
- COMMUNITY OWNED DEVELOPMENT:**  
(Buildings & Infrastructure): All buildings owned or developed by the community must meet the Living Building Challenge for the project to earn full Living Community Certification status. All built infrastructure within the Living Community must meet the requirements of the program. See Community Asset Imperative description.



# CONTEXT

As stated above, the Community-Wide Imperatives must be met by the entire community. For example, for Imperative 06, Net Positive Energy, the energy use of the entire community, including every building, must be offset by an adequate amount (105% in the case of Net Positive Energy) of community-generated renewables.

Energy use and energy generation may be averaged across the entire community to achieve compliance with the Imperative—every building need not achieve the Imperative independently. Some buildings may be more efficient, some less; some buildings may have much more renewable generation than they use, some less; there also may be community generation, but to be LCC certified, the community as a whole must comply with the Imperative.

The following is a basic schematic example for Imperative 06, Net Positive Energy.

Within a community that achieves the Community-Wide Imperative 06, Net Positive Energy, every individual building within the community (regardless of private or community ownership/development) will also have achieved that Imperative for purposes of Living Building Challenge Certification. Buildings not required to achieve LBC Certification should consider that they may apply achievement of LCC Community-Wide Imperatives (such as I06 Net Positive Energy) to their building-specific LBC Certification should they wish to pursue the LBC.

As stated above, all buildings subject to the Community Asset Imperatives must also achieve LBC certification, and other non-community buildings may as well, at their owner's discretion. LCC Masterplans (discussed on pg 22) should detail a process for streamlined LBC review and reduced LBC fees for these buildings so that any Imperatives achieved through the LCC process do not need to be reassessed through the LBC certification. In many cases, individual building LBC certification for Community-Wide Imperatives may involve very little process, since individual buildings would simply need to be tracked relative to the overall performance of the community as a whole.

## NET POSITIVE COMMUNITY LAYOUT



SECTION

03

ENGAGEMENT



Photo: Flickr user EGLondres / CC BY-NC-ND 2.0  
"Kids" in Copenhagen, Denmark



## Engagement and the Living Community Challenge

### ENGAGING THE COMMUNITY

Before delving more deeply into a discussion of the LCC process, it is critical to recognize that each community is deeply unique. Each human community has its own culture, organizations, politics, relationships, personalities, and history. So too does each physical community have its own topography, geology, hydrology, climate, and ecology, as well as existing built infrastructure, streets, and buildings, if any. These unique elements must drive and inform how each community evolves, and in the case of the Living Community Challenge, whether the community chooses to pursue the Challenge and what paths it takes to achieve it.

For those leading or initiating the LCC process for the community, it is critical to first recognize the characteristics of the community and invite them to inform how the process of engagement should occur, and what type of LCC plan should be pursued (Vision Plan or Masterplan).

#### Governance and Authority

As suggested above, some project teams approach the planning process with total authority over implementation—this is typically the case only in new communities, where the process of becoming a Living Community is more technical. In existing communities, the project team and applicant may only be one major stakeholder (in a field of many disparate stakeholders) and simply wield influence or persuasive vision. In this scenario, engagement with the community in a mutual narrative of change and evolution is critical.

#### Consensus and Knowledge

Similarly, there may be a wide range of understanding or even awareness about the LCC within large, diverse existing communities. The process should meet the needs of the community audience, and LCC plans (Vision Plan and Masterplan) should therefore provide an appropriate level and type of detail—some may be best with a focus on renderings, others with planning maps, and yet others with detailed implementation pathways.

#### Age, Time Frame, and Level of Certainty

Evolving communities, both new and existing, will have wide ranges of anticipated progress. A single-owner campus may be anticipated to achieve Living Community performance within five years. An existing

college campus or urban village within a city may expect to take a couple of decades to achieve a similar level of transformation. Again, levels of certainty or uncertainty based on build-out or redevelopment horizons should be reflected in the overall process.

#### Complexity and Level of Detail

Some Living Communities will be small, with only several types of uses and simple infrastructure, and others may be quite large, with substantial vertical and horizontal complexity and a combination of existing, retrofit, redeveloped, and new construction. This development scale will result in a substantial difference in the complexity and level of detail of the Living Community Vision Plan and Masterplan as well as in the implementation during the Emerging Living Community phase.

### IMPLEMENTATION: VISION PLANS AND MASTERPLANS

For communities that are new, owned by one owner, or under a jurisdictional master planning process, creating a more traditional Living Community Masterplan will be feasible.

For those communities that are existing, complex, and struggling to coalesce the neighborhood around a common vision or entice their municipality to step forward and create a Masterplan, a Living Community Vision Plan is the first step toward becoming a Living Community.

The power of the Living Community Challenge program is the opportunity to create a hopeful vision that can catalyze and inspire a community of diverse owners and stakeholders to move in the same direction. Living Community Vision Plans are particularly potent for communities where there is little consensus or even awareness about community planning and visioning, but Vision Plans are catalyzing for all types and scale of community development. Vision Plans focus on the question of “What does good look like?” for the community but may not contain the detail of the individual steps needed to get there.

Living Community Masterplans can be created once the community has built consensus, received funding, or has the municipality on board. The Living Community Masterplan should address high-level vision but be focused on providing an implementation roadmap for the community. Critically, an implementing authority should be identified and committed to the pursuit of the Masterplan.

# ENGAGEMENT

## TYPES OF COMMUNITIES

### New Community

#### *Single or Consolidated Ownership*

The most straightforward Living Communities are those under single or consolidated control, where a developer or consortium is developing a greyfield or an allowable growth management planned site as a new community. These communities range in complexity, but from a process standpoint are simplified in terms of decision making, due to fewer stakeholders and lack of existing residents and businesses.

These types of communities will be found in an array of locations and represent a wide range of community types. Most typical will be urban greyfield redevelopment sites, where a prior (often industrial) site is being converted to another use. Another development type is restorative, educational, or research campuses or communities in much lower density resource or rural areas, being developed on previously degraded sites. New communities will typically be ready to create a Living Community Masterplan but may also create a Living Community Vision Plan to assist with funding and surrounding neighborhood support.



Photo: Flickr user Daniel Lobo / CC BY 2.0  
"Ponce Street Market" in Atlanta, Georgia



# ENGAGEMENT

## Existing Community

### *Single Ownership*

A good example of this community type is an academic or government campus. They may have a wide range of energy and water use between buildings, and often include community-wide systems, such as district energy. They benefit substantially from dedicated campus planning offices, and frequently have carbon emission reduction targets, as well as offices of sustainability, which help drive restorative operations. At times they have signature Living Buildings that provide a living example of where the campus is headed. A good example of an existing community is Hampshire College which has two buildings pursuing the LBC, the RW Kern Center and Hitchcock Center on campus. The RW Kern Center is an academic campus building owned and operated by the college and serves as a living laboratory and gateway to campus. As part of Hampshire's commitment to creating a cultural village within their 800 acre campus, the college collaborated with Hitchcock Center for the Environment to build their new classroom building on campus. Given the existing nature of such campuses, however, their planning horizon can be quite long—even two or three decades.

These realities will be reflected in contents of their Living Community Masterplan, which typically will be part of a campus-approved or municipal-approved Masterplan. Because of the high level of authority campuses typically have, plans can reflect a detailed level of direction to each building. For example, an energy plan may outline specific energy use intensity (EUI) targets for each building on campus, to achieve overall net positive energy performance. On the other hand, the long time horizon of transformation may require certain elements of the Living Community Masterplan to be more exploratory. For example, a community-wide composting system may be planned to be built many years in the future, and exact system details may be unknown and/or subject to future technological/design evolution.



Hampshire College Campus in Amherst, Massachusetts  
Photo: Amanda Schwengel



# ENGAGEMENT

## Existing Community

*Multiple Ownership, A Few Large Parcels*

Another scenario is where a neighborhood is redeveloped, typically in or adjacent to an urban core, and ownership is spread amongst a group of developers and/or owners. Examples of this would be a stadium redevelopment district, a technology hub in an existing neighborhood, or a portion of a city where redevelopment is being directed by a governmental development authority.

The Institute has been working with the project team developing the Southwest District of Columbia Ecodistrict Plan, an instance of an existing community with many owners. In the District of Columbia, a 110-acre area south of the National Mall is expected to transform significantly over the coming decades. In anticipation of this, the National Capital Planning Commission, the federal government's planning agency for the District of Columbia, sponsored a planning study of the area (prepared by ZGF) to envision a high-performance, restorative district targeting aggressive levels of energy, water, and mobility efficiency.

The plan recognizes the operating parameters of the community. Incorporating about a dozen key public and private property owners and a number of federal agencies, and including the future Department of Energy headquarters, the plan seeks to provide a tangible vision for what the area could be. It provides a fair amount of detail, but falls short of becoming a prescriptive implementation roadmap. This is because the plan is intended to be a consensus-building tool to help organize the stakeholders around a common vision and understanding of what is possible. As consensus develops, planning will need to turn to implementation and assignment of responsibility. These issues are discussed further on pg 19.

Depending on where the community stands, stakeholders may use a Living Community Vision Plan to gain consensus around a vision, or, if a general consensus exists, a Living Community Masterplan may provide detailed infrastructure planning and preliminary engineering, expected resource use and harvest, and assignment of responsibilities between the parties.



SW Ecodistrict in 2030 in the District of Columbia  
Rendering: Courtesy of NCPC / Image by ZGF Architects



## Existing Community

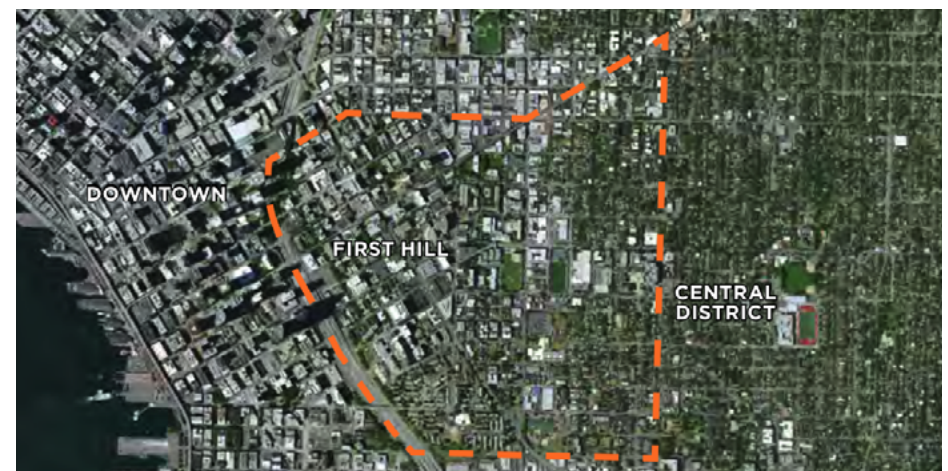
*Many Owners, Finer Texture, Hundred or Thousands of Constituents*

The most challenging community type is existing towns and neighborhoods with an array of small property owners, businesses and a multitude of occupancy types. These represent the significant majority of communities, and though challenging, are perhaps the most rewarding and most impactful of all Living Community planning. Indeed, if existing communities are unable to achieve the benefits and levels of performance provided by the Living Community Challenge, our efforts will be hollow.

In these communities, total consensus and even knowledge about the LCC will be challenging, and implementation will need to occur in broader strokes. Issues like materials use and reduction of energy and water use will need to be driven programmatically across the entire community, rather than building by building. Stakeholders like chambers of commerce or neighborhood associations can initiate the LCC process and begin a community conversation around aspiration and vision utilizing a Living Community Vision Plan. For actual implementation, however, leadership by the local government authority, which is able to control the rights of way, construct public infrastructure, and require implementation throughout the community through code, will be critical, and a Living Community Masterplan should be adopted. The pathway to get to this point will require a deliberate and steady engagement with the community by many influencers over a period of time.

Seattle's First Hill neighborhood is an example of an existing neighborhood with many owners and thousands of constituents. Beginning in fall of 2014, the Institute embarked on a process of engaging the community adjacent to its headquarters about the Living Community Challenge, supported by funding from several foundations, including the Bullitt Foundation, developer of the Bullitt Center, a signature Living Building. The task was daunting—reaching out to a complex neighborhood with a number of major stakeholders (four hospitals, a major affordable housing redevelopment, a Catholic cathedral, and a major regional university) and tens of thousands of residents and workers—but the effort has proved highly rewarding.

The process began with education and engagement about the LCC with dozens of community stakeholders representing a wide array of interests. This outreach culminated in a community LCC charrette, where participants assembled concepts and visions for the community. The outcome of this process was the creation of **Toward a Living Community: A Vision for Seattle's First Hill and Adjacent Neighborhoods**, a vignette study looking at the nature of the area and various ways that LCC ideas and principles might be incorporated in the area. This study represents what could be considered a precursor to an LCC Vision Plan—ideas, directions, and visions to introduce the community to the LCC and spark a conversation. Ideally, as the Institute continues to engage the community, impetus to take the next steps and apply LCC concepts to infrastructure, energy use, and street design will grow, and the LCC will be used to create an urban village plan.



## The Living Community Patterns

### A HELPFUL TOOL FOR DEVELOPING COMMUNITY VISION & BUILDING A LIVING COMMUNITY

Inspired by Christopher Alexander's book, *A Pattern Language*<sup>1</sup>, the Institute has adapted the concept of patterns to community design and development, starting first with the Institute Founder and Chairman Jason F. McLennan's Child-Centered Patterns<sup>2</sup>, and later through work for the City of San Francisco Planning Department, in the *Living Community Patterns*<sup>3</sup>. These patterns begin to explore the components in which sustainable communities can address many urban challenges. Within the context of the LCC, these patterns yield powerful synergies. These patterns—or strategies—can work at different scales, from the building and block up to the neighborhood level, and even for the city and region. Each pattern has a key sustainability feature and also achieves multiple objectives. The Institute encourages Community project teams to use the Patterns throughout their development, from concept through occupancy. The Patterns are often used as a conversation starter, as a tool to engage the community, and as a path to innovation to further evolve the community's potential to vision high levels of environmental, economic, and social performance.

- 1 Christopher Alexander, *A Pattern Language*, Oxford University Press, New York, 1972.
- 2 Jason F. McLennan, "Child-Centered Planning: A New Specialized Pattern Language Tool," Trim Tab 18, pp. 30-45.
- 3 [living-future.org/lcc/patterns](http://living-future.org/lcc/patterns)





## The Living Community Challenge in Action

### A VISION FOR COMMUNITY ENGAGEMENT

Each community must consider the nature of their community and the best way to move it toward a Living Community. The more established a community is, the more iterative and narrative the process will be in engaging about the LCC. Within the context of the LCC, the best process of engagement will be one where the community members and stakeholders are engaged as fully as possible, and the vision and benefits of the LCC are united with the desire, nature, and aspirations of the community. Project teams should not be afraid to be leaders, helping the community become better by pursuing the LCC. The framework of the Challenge also offers the opportunity to bring to life some of the most innovative ideas brought forth by the various groups in the community.



The community should also recognize where they have come from and build from previous environmental commitments of their neighborhood and city as a whole. The Living Community Challenge links well with other protocols and frameworks for community engagement, and these tools

should be considered for ensuring the durability of change and the fullest extent of inclusion.

The following is a roadmap of points of connection between engaging the community and the LCC certification process.





SECTION

04

PROCESS



## Living Community Challenge Process – The Details

The following diagram is an overview of the entire process of becoming a Living Community, from start to finish:

### LIVING COMMUNITY CHALLENGE CERTIFICATION PROCESS



### REGISTRATION

Registration is the first step in the process of becoming a Living Community. This can be accomplished at [living-future.org/node/add/project](http://living-future.org/node/add/project).

Prior to registering, the applicant should be sure that the project will meet the locational requirement of Imperative 01, Limits to Growth, as outlined in the **Living Community Challenge Standard v1.0**, p. 20. If a community does not meet this requirement, it is not appropriate for it to pursue the LCC. Institute LCC staff may be contacted at [lcc.support@living-future.org](mailto:lcc.support@living-future.org) if there is uncertainty.

### PLANNING: CREATING A LIVING COMMUNITY VISION OR MASTERPLAN

#### Basic Process

Just as each community is different, so too will each plan be different. The intent of the Living Community planning process is to create a helpful tool and roadmap for becoming a Living Community. The term “minimum viable product,” a concept from the software development world, is a helpful concept for creation of Living Community plans.

Where appropriate, and where a clear understanding of Living Community vision and implementation can be maintained, Living Community Masterplans may be combined with other planning efforts, rather than be a stand-alone effort. For example, a plan may be required for regulatory development approvals, sales purposes, or for state-sanctioned growth-management planning. Combining the Living Community planning needs with other planning and vision requirements is more efficient, reduces costs, and provides a more unified planning document that meets the entire needs of the evolution of the community.

## Vision Plan Contents

In terms of content and detail, Living Community Vision Plans should contain adequate information to convey purpose and create understanding amongst its constituency. At a minimum, Living Community Vision Plans should contain the following:

1. Geographic boundaries of community.
2. Broad statement and visuals representing key elements of the future Living Community.
3. Key community elements, buildings, and infrastructure, and suggested vision/opportunities.
4. Petal-by-Petal and Imperative-by-Imperative descriptions of the end goal for community. Where possible, potential implementation details should be described.
5. Outline of key stakeholders and implementation authorities.
6. Roadmap for community engagement.
7. Process and timeline, including creation and approval of community Living Community Masterplan, to maintain status as Emerging Living Community.
8. Upon review and approval of the Community's Vision Plan submission, a community is designated as having an approved Living Community Vision Plan. In keeping with the v1.0 Standard, upon receiving Living Vision Plan approval, a community may not market their project as a Living Community. They may promote the fact that they have created a compliant Living Vision Plan and will develop a Living Community Masterplan for what aspires to be a Living Community upon completion of construction.

Prior to start of construction, a Living Community Masterplan must be prepared.

## Living Community Masterplan Contents

Living Community Masterplans should contain the information needed to describe the pathway for becoming a Living Community. Typical elements are as follows:

1. Vision: The plan should include elements describing the vision for the community, such as renderings, performance benchmarks, etc.
2. Overview Plans: Location of buildings, uses, public ownership, rights of way, utilities, and physical infrastructure.
3. Petal/Imperative Implementation Plans: Each Petal and associated Imperative should have a dedicated narrative and plan describing how the community will achieve each Imperative. Any organizational aspects should be described textually, and any physical elements should be shown on a plan and described within the bounds of what is known at the time of plan creation. Diagrams should be provided that detail at a system scale how achievement of Imperatives such as IO5, Net Positive Water, and IO6, Net Positive Energy, which require implementation across the entire community, will occur. Any obligations or building performance attributable to individual buildings or parcels should be provided. Anticipated use of Exceptions should be highlighted.
4. Overall process/timeline: This should outline the expected steps for development, redevelopment, infrastructure creation, any phasing, as well as LCC certification thresholds.
5. Roadmap for maintaining Emerging Living Community status and achieving LCC certification: While the LCC Standard establishes the overall requirements for when a community achieves Living status, each community will have different thresholds and sequencing for actual achievement, either by Petal or physically by phase. The Living Community Masterplan should then establish a timeline and thresholds for how the community will evolve and ultimately become a Living Community. Timelines and thresholds for how the community will maintain its Emerging Living Community status should be outlined here. The time period for becoming a Living Community may be quite long, even decades in the case of complex existing communities. Implementation thresholds of every two to three years, which outline key steps toward the community achieving full Living Community status, should be established and included in the Living Community Masterplan.



6. Process for certifying individual projects or buildings as Living Buildings under the umbrella of the LCC: In many cases, compliance with individual Imperatives at the building scale will be reviewed, or partially reviewed, at the community scale, while others, particularly Urban Agriculture, Energy, Water, and Materials, need to be reviewed at the building scale. The Living Community Masterplan should create a clear process for this review, by identifying which elements will be reviewed at the LCC scale and used as a starting point for the individual LBC review. The intent is to establish a clear hand-off point between LCC and LBC auditors to prevent duplication of review efforts.
7. Upon review and approval of the Community's Masterplan submission, a community is designated as having a compliant Living Community Masterplan. In keeping with the v1.0 Standard, upon receiving Living Community Masterplan Compliance, a community may not market their project as a Living Community. They may promote the fact that they have created a compliant Living Community Masterplan for what aspires to be a Living Community upon completion of construction.
  - a. LCC Standard v1.0, "Compliance is valid for up to three years, after which the [community's or] project's plan must be resubmitted if construction has not yet begun. If the [community or] project has moved into the construction phase, then it is no longer eligible [to be designated a] Living Community Masterplan."

## IMPLEMENTATION: EMERGING LIVING COMMUNITY PHASE

After creating a compliant Living Community Masterplan, and moving into the construction phase, a community may apply for an "Emerging Living Community" designation. Community members and developers may promote the fact that they have created an approved LCC plan and that the community is an Emerging Living Community, but it may not be called a Living Community.

During this period, steady progress toward becoming a Living Community must be made. Emerging existing communities must start the process of transformation through redevelopment and retrofit, and new communities must start building. For communities to maintain their Emerging Living Community status, they must maintain consistency with the timeline

established in the approved Living Community Vision or Masterplan. Communities with approved Living Community Vision Plans must prepare for and gain approval of a Living Community Masterplan within the time frame outlined in the Living Community Vision Plan, and communities with an approved Living Community Masterplan must develop in accordance with its implementation time frame.

## CERTIFICATION

When any physical portion of a community's Living Community performance has been achieved, applicants may apply for Petal or Living Community Certification. So it is feasible for a community to have areas that are Emerging and areas that are fully certified at the same time.

When a community achieves Living Community Challenge performance and is certified by the ILFI, it becomes a Living Community. It is possible that a portion of the community may achieve LCC performance prior to others, and it is entirely appropriate for these phases to be certified prior to the entire community achieving certification. In addition, for communities seeking full Living Community certification, the community, or phases of the community, may become Petal certified when they achieve a Petal level of performance. After Petal Certification, a Living Community may certify additional individual Petals as performance is achieved.



An aerial photograph of a city park, likely St. James's Park in London, featuring a central pond, a large green lawn with several circular paths, and a dense canopy of trees in various shades of green and yellow. The park is surrounded by a dense urban environment with numerous brick buildings and streets. The right side of the image is overlaid with a semi-transparent orange-red filter.

# LIVING COMMUNITY CHALLENGE<sup>SM</sup> 1.0 HANDBOOK

A Visionary Path to a  
Regenerative Future

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June 2016



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