

# SCALING THE LIVING BUILDING CHALLENGE

Amanda Sturgeon FAIA, CEO



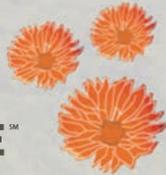
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**LIVING FUTURE**  
INSTITUTE



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



**LIVING  
BUILDING  
CHALLENGE<sup>SM</sup>**



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



**LIVING  
PRODUCT  
CHALLENGE<sup>SM</sup>**



**Reveal. Just. Declare.**



**CASCADIA**  
GREEN BUILDING COUNCIL



**ECOtone**<sup>LLC</sup>  
publishing company

**IT'S TIME TO  
IMAGINE A  
LIVING FUTURE  
AND A WORLD OF  
LIVING BUILDINGS**



INTERNATIONAL  
LIVING FUTURE  
INSTITUTE™



**you!**

**are the canary in the  
goldmine!**

CLIMATE CHANGE  
IS VERY, VERY  
REAL





time for regeneration

not baby steps...  
especially from our leaders



WE NEED TO  
CHANGE HOW WE  
SEE THE WORLD...  
HOW WE SEE  
THE FUTURE

# OUR MISSION

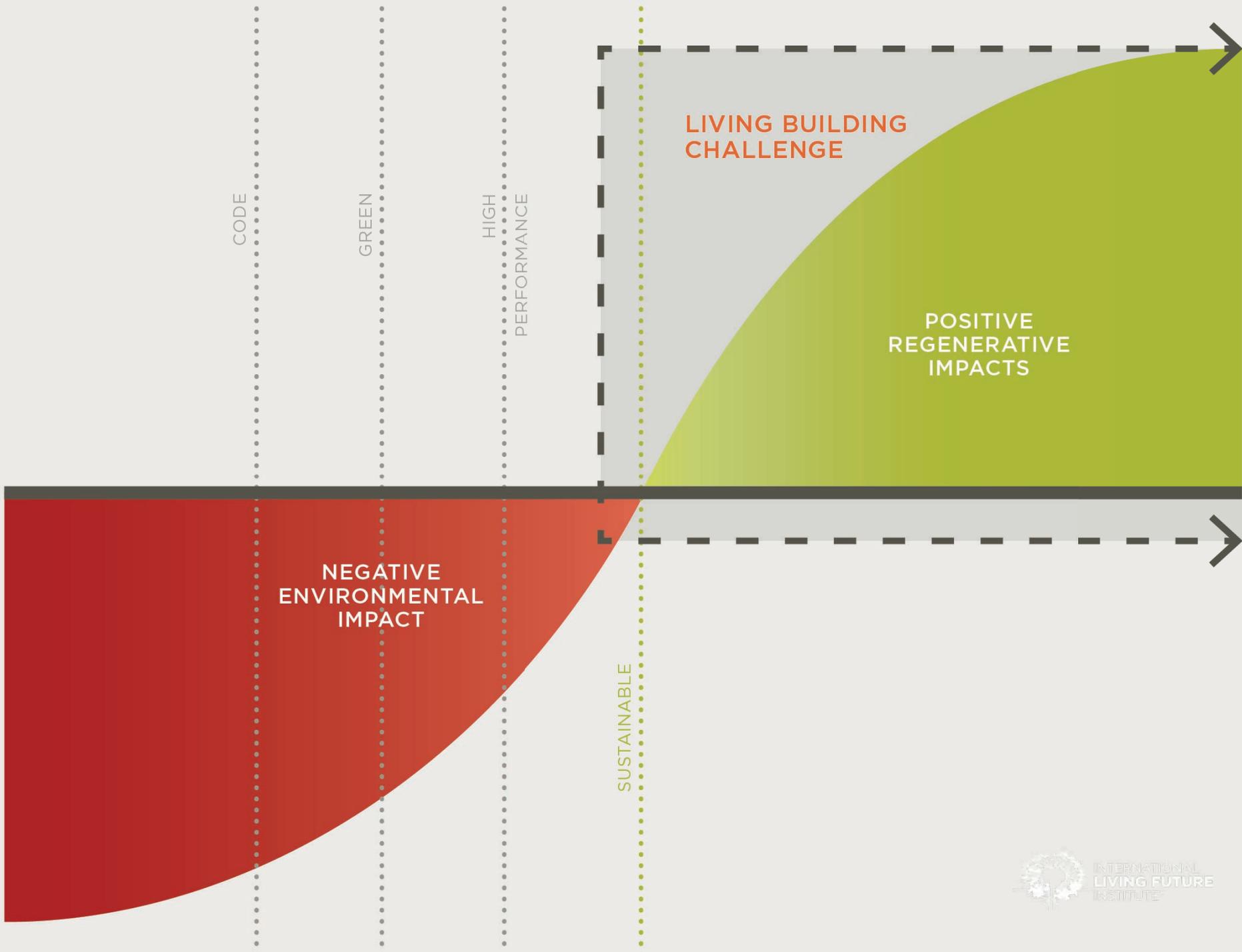
to help lead transformation of communities that are socially just, culturally rich and ecologically restorative

# CREATING A REGENERATIVE WORLD TOGETHER

In the words of Buckminster Fuller, our goal is simple —  
to “make the world work for  
100% of humanity in the  
shortest possible time through  
spontaneous cooperation  
without ecological offense or  
the disadvantage of anyone.”

Instead of a world that is merely a less bad version of the one we currently have, we ask a simple and profound question—

# WHAT DOES GOOD LOOK LIKE?



CODE

GREEN

HIGH  
PERFORMANCE

LIVING BUILDING  
CHALLENGE

POSITIVE  
REGENERATIVE  
IMPACTS

NEGATIVE  
ENVIRONMENTAL  
IMPACT

SUSTAINABLE



# BREAKING PARADIGMS, CREATING NEW MODELS



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# **LIVING BUILDING CHALLENGE<sup>SM</sup> 3.1**

**A Visionary Path to a  
Regenerative Future**



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INSTITUTE<sup>SM</sup>**



**LIVING  
BUILDING  
CHALLENGE™**

## CINCINNATI ZOO – PAINTED DOG EXHIBIT

CINCINNATI, OH

PETAL CERTIFIED LANDSCAPE + INFRASTRUCTURE | MATERIALS

# A GLOBAL MOVEMENT

8

CERTIFIED  
LIVING  
PRODUCTS

74

CERTIFIED  
LIVING  
BUILDINGS

8

COMMUNITIES  
PURSUING THE  
LIVING COMMUNITY  
CHALLENGE

1311

PRODUCTS WITH  
DECLARE LABELS

38

BUILDINGS  
WITH  
REVEAL  
LABELS

112

VOLUNTEER  
COLLABORATIVES  
IN 57 NATIONS

65

ORGANIZATIONS  
WITH  
JUST LABELS

390

PROJECTS  
PURSUING THE  
LIVING BUILDING  
CHALLENGE

762

AMBASSADORS

# INCREASING PROJECT SCALE

**Perkins + Will: 105,842 sf**

Minneapolis, MN - Commercial  
Renovation

**Brickworks: 113,000 sf**

Melbourne, Australia - Retail

**Google: 237,198 sf**

Chicago, IL - Corporate  
Renovation

**Confidential: 484,376 sf**

Cambridge, MA - Laboratory +  
Education Center

**Microsoft: 640,000 sf**

Silicon Valley, CA - Corporate  
Campus

**Confidential: 1.1 million sf**

CA - Corporate Campus



LIVING  
BUILDING  
CHALLENGE  
2.1

BULLITT CENTER | SEATTLE, WA

LIVING CERTIFIED





**LIVING  
BUILDING  
CHALLENGE**

# GOOGLE CHICAGO RENOVATION

**CHICAGO, IL**

237,198 SQUARE FEET | PURSUING PETAL CERTIFICATION



**LIVING  
BUILDING  
CHALLENGE**

**ETSY HEADQUARTERS**  
**NEW YORK CITY, NY**

198,635 SQUARE FEET | PURSUING PETAL CERTIFICATION





**MICROSOFT SILICON VALLEY CAMPUS**  
**640,000 SF**

We have 58 Zero Energy buildings today

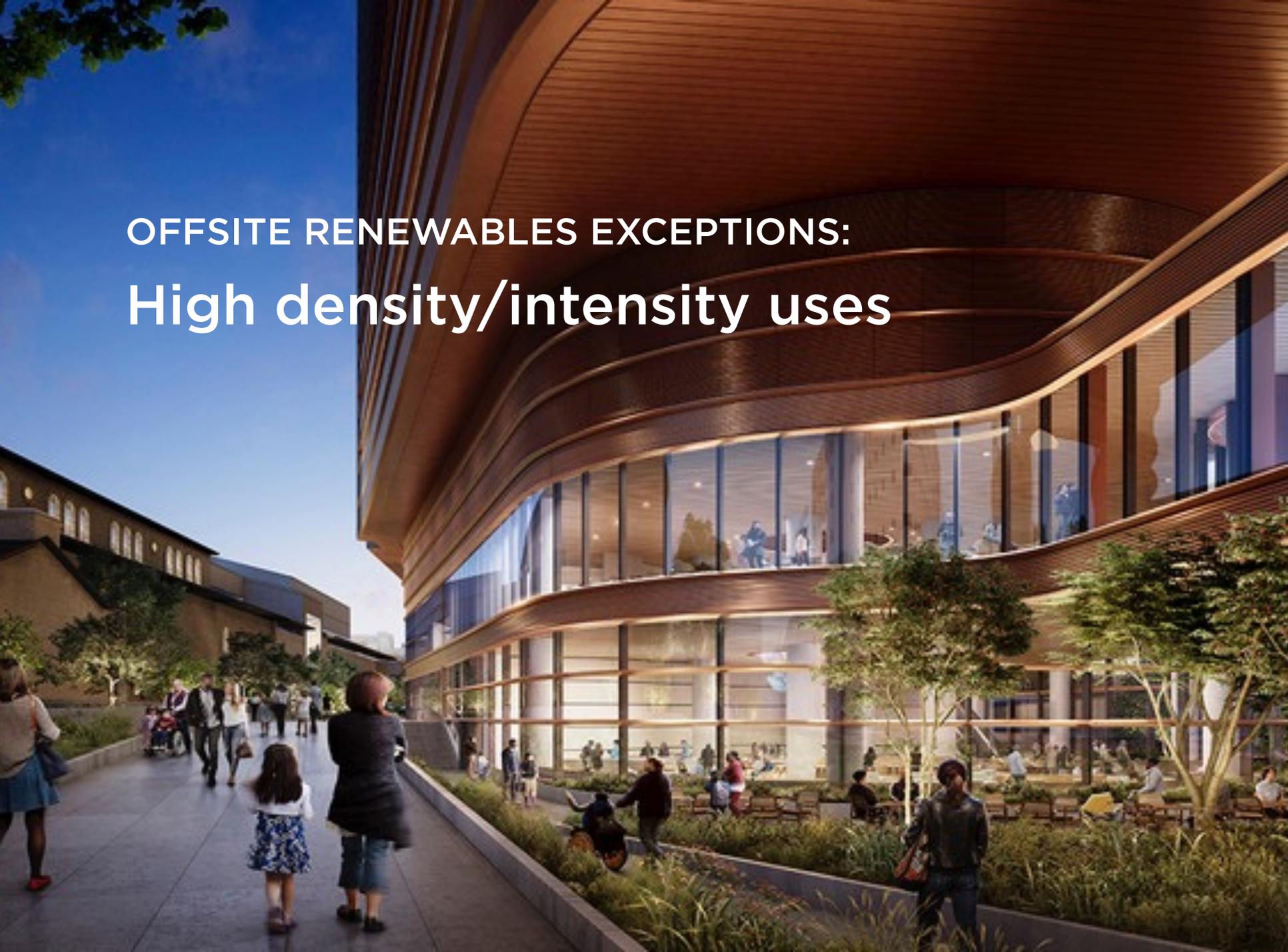






**Now simplified and strengthened**

OFFSITE RENEWABLES EXCEPTIONS:  
High density/intensity uses



# OFFSITE RENEWABLES EXCEPTIONS: Tenant Improvements



The image features a dramatic sunset sky in shades of orange, red, and yellow. In the foreground and midground, the silhouettes of several high-voltage electrical transmission towers and their associated power lines are visible. The towers are complex lattice structures, and the lines crisscross the sky. The overall scene is a silhouette of a power grid against a bright, low sun.

OFFSITE RENEWABLES EXCEPTIONS:  
**Grid constrained locations**



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**nbi** new buildings  
institute



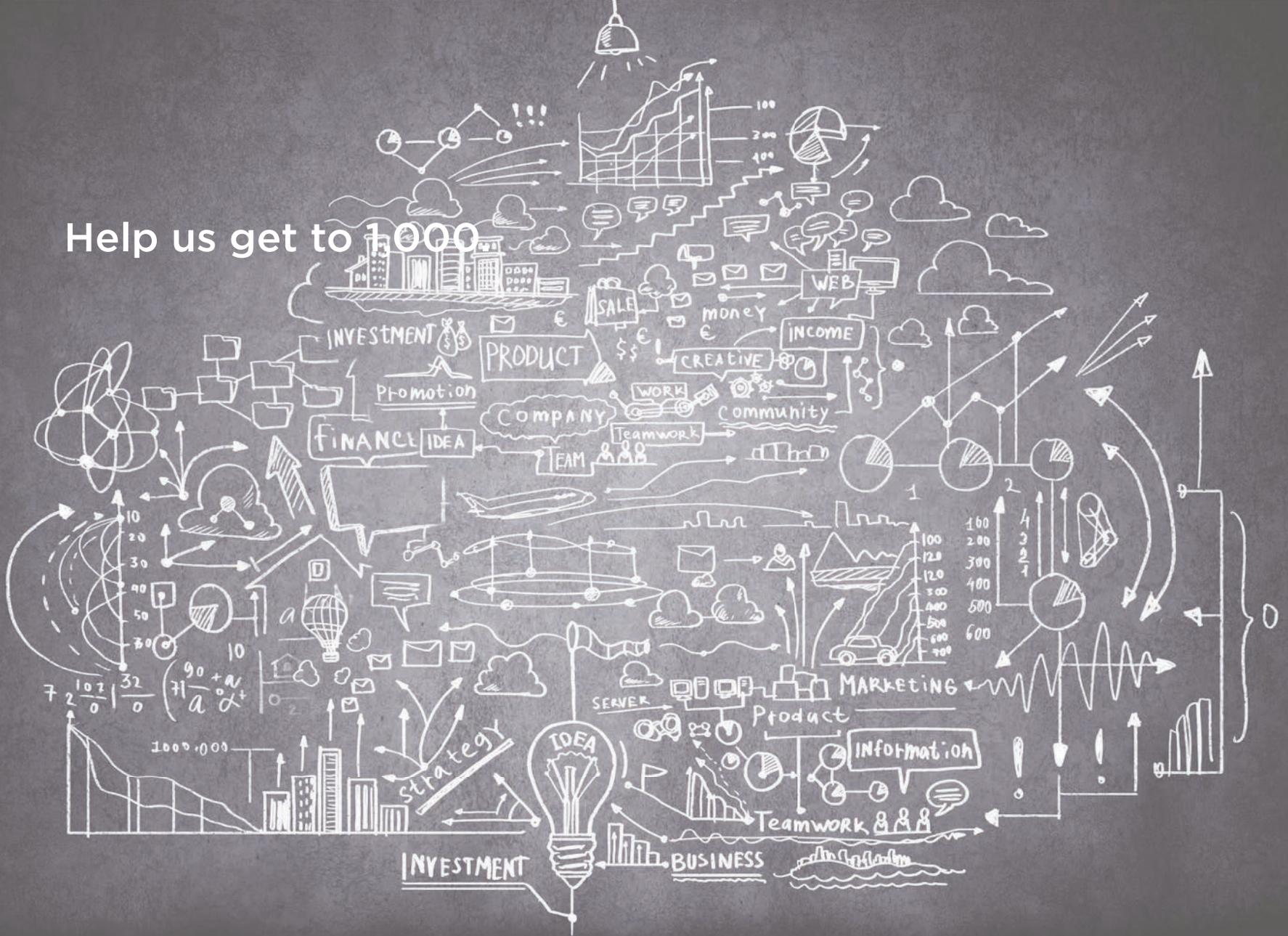
**WE ARE BUILDING A WORLDWIDE MOVEMENT**



Every building is a catalyst for change.



Help us get to 1,000

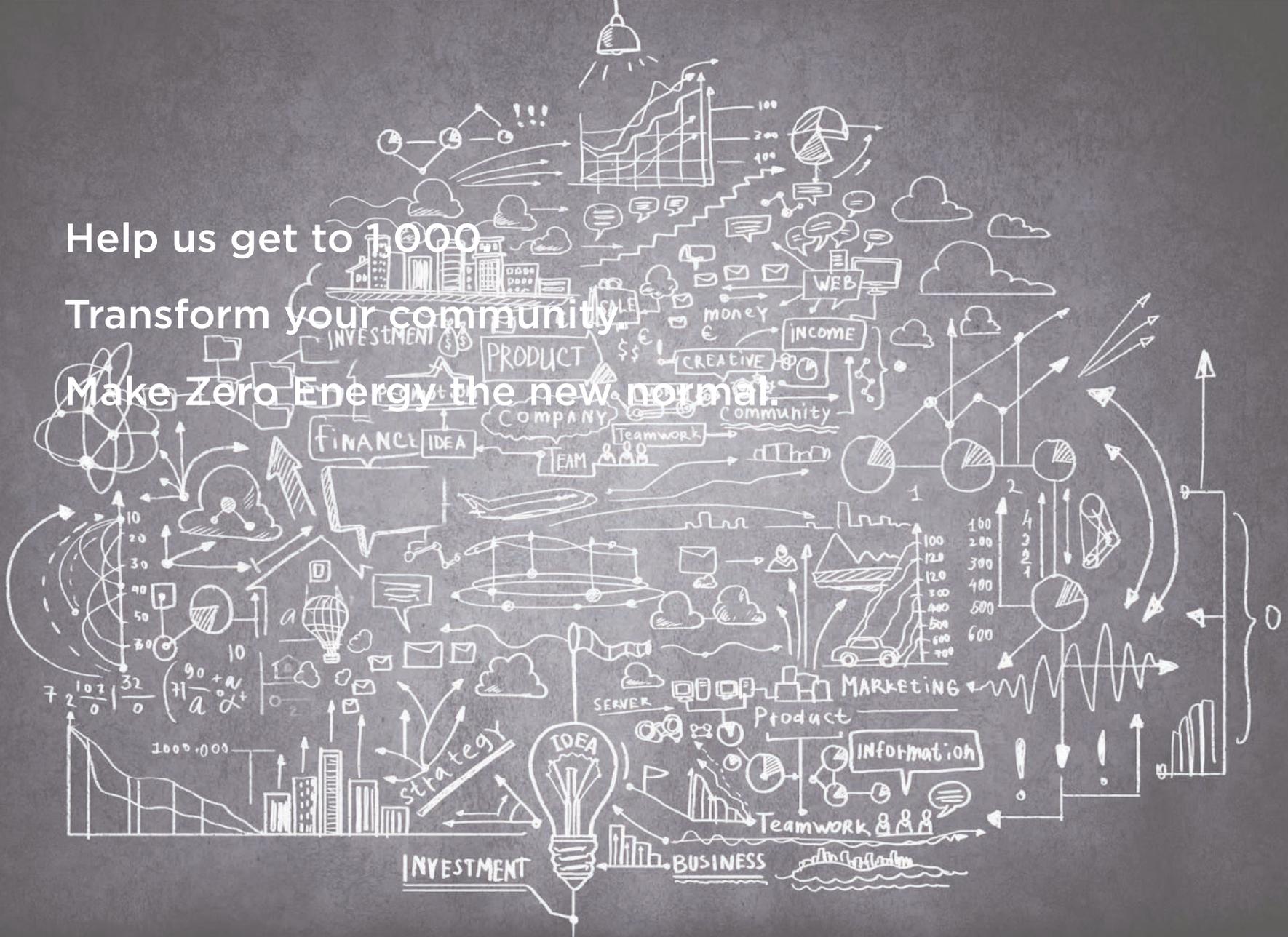




Help us get to 1,000

Transform your community

Make Zero Energy the new normal.





Help us get to 1,000

Transform your community

Make Zero Energy the new normal.

Email [ZE.SUPPORT@LIVING-FUTURE.ORG](mailto:ZE.SUPPORT@LIVING-FUTURE.ORG)  
to register your project today.

INVESTMENT → BUSINESS → TEAMWORK

# HEALTH & HAPPINESS



LIVING  
BUILDING  
CHALLENGE™

Environments designed to  
optimize our well-being  
by connecting people  
with nature



OLD OAK DOJO

BOSTON, MA | UNITED STATES

FULL LIVING CERTIFIED



**“The values of biophilia ...  
require that we seek to  
harmonize nature with  
humanity if we are to achieve  
a just, secure, sustainable,  
fulfilling, and loving future.”**

**— Stephen Kellert**

STEPHEN R. KELLERT

# BIOPHILIC DESIGN AWARD



Remembering Stephen R. Kellert,  
Who Explored Links Between People  
and Nature



**gb&d**

## KELLERT'S BIOPHILIC DESIGN ELEMENTS & ATTRIBUTES

### ENVIRONMENTAL FEATURES

Color  
Water  
Air  
Natural ventilation  
Plants  
Animals  
Natural materials  
Views and vistas  
Façade greening  
Geology and landscape  
Habitats and ecosystems  
Fire

### NATURAL SHAPES + FORMS

Botanical motifs  
Tree and columnar supports  
Animal (mainly vertebrate) motifs  
Shells and spirals  
Egg, oval and tubular forms  
Arches, vaults, domes  
Shapes resisting straight lines and right angles  
Simulation of natural features  
Biomorphy  
Geomorphology  
Biomimicry

### NATURAL PATTERNS + PROCESSES

Sensory variability  
Information richness  
Age, change and the patina of time  
Growth and efflorescence  
Central focal point  
Patterned wholes  
Bounded spaces  
Transitional spaces  
Linked series and chains  
Integration of parts to wholes  
Complementary contrasts  
Dynamic balance and tension  
Fractals  
Hierarchically organized ratios and scales

### LIGHT + SPACE

Natural light  
Filtered and diffused light  
Light and shadow  
Reflected light  
Light pools  
Warm light  
Light as shape and form  
Spaciousness  
Spatial variability  
Space as shape and form  
Spatial harmony  
Inside-outside spaces

### PLACE-BASED RELATIONSHIPS

Geographic connection to place  
Historic connection to place  
Ecological connection to place  
Cultural connection to place  
Indigenous materials  
Landscape orientation  
Landscape features that define building form  
Landscape ecology  
Integration of culture and ecology  
Spirit of place  
Avoiding placelessness

### EVOLVED HUMAN-NATURE RELATIONSHIPS

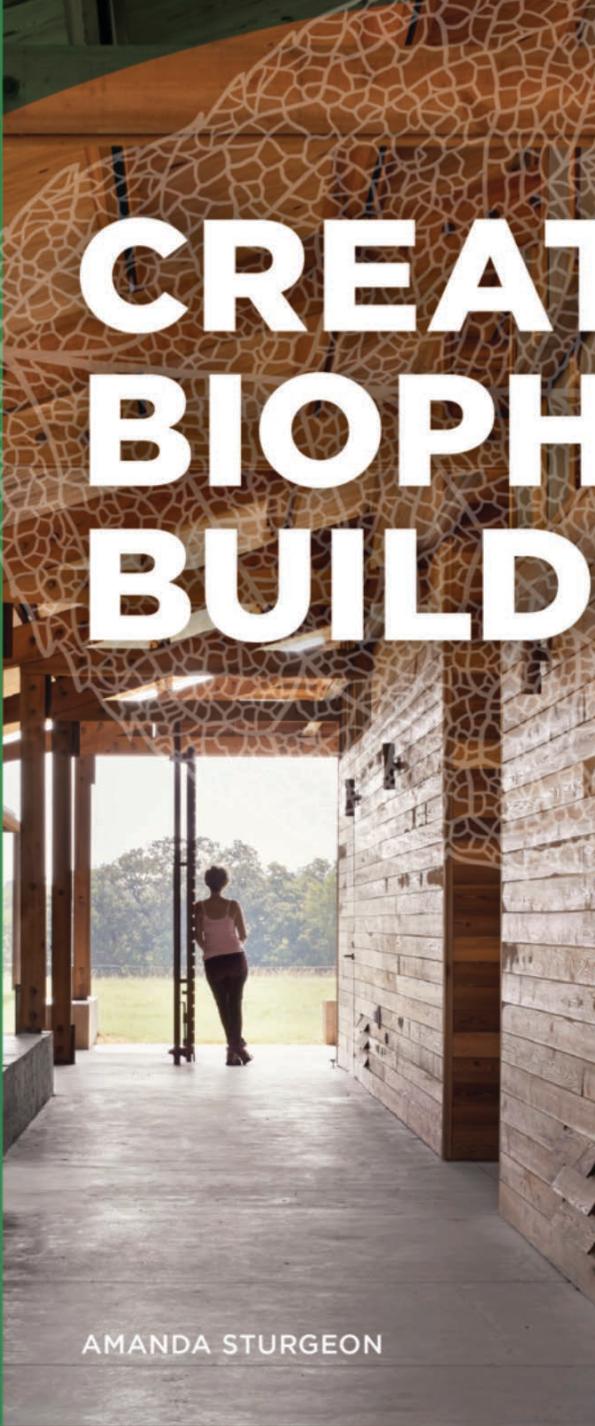
Prospect and refuge  
Order and complexity  
Curiosity and enticement  
Change and metamorphosis  
Security and protection  
Mastery and control  
Affection and attachment  
Attraction and beauty  
Exploration and discovery  
Information and cognition  
Fear and awe  
Reverence and spirituality

CREATING BIOPHILIC BUILDINGS

# CREATING BIOPHILIC BUILDINGS

AMANDA STURGEON

AMANDA STURGEON





JOSEY PAVILION



BERTSCHI SCHOOL



PHIPPS CENTER FOR SUSTAINABLE LANDSCAPES

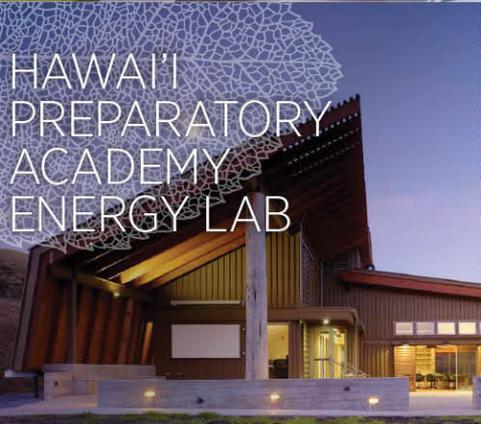


FRICK ENVIRONMENTAL CENTER



GLUMAC SHANGHAI OFFICE

144 DPI - NEED HIGHER RES



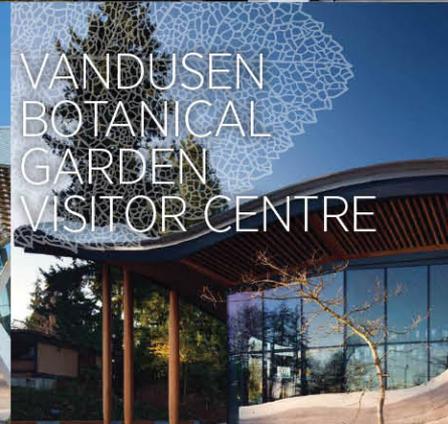
HAWAI'I PREPARATORY ACADEMY ENERGY LAB



BULLITT CENTER



SUSTAINABLE BUILDINGS RESEARCH CENTRE



VANDUSEN BOTANICAL GARDEN VISITOR CENTRE



R.W. KERN CENTER



DAVID & LUCILE PACKARD FOUNDATION



TE KURA WHARE



GOOGLE CHICAGO



MOSAIC CENTRE FOR CONSCIOUS COMMUNITY & COMMERCE

# FRICK ENVIRONMENTAL CENTER





**EVOLVED  
HUMAN-NATURE  
RELATIONSHIPS**





**PLACE-BASED  
RELATIONSHIPS**





LIGHT + SPACE

# TE KURA WHARE





**PLACE-BASED  
RELATIONSHIPS**





NATURAL  
SHAPES +  
FORMS





LIGHT + SPACE



A photograph of a modern building with vertical wood slat siding and large windows. A ramp with a metal handrail leads up to a set of stairs. Two children are walking on a paved path in the foreground. The building has a blue roof and a red door. The background shows a green landscape with trees.

“What Ivan Mercep had us do in the construction team was respect the design advice that we were bringing, not just as a crazy client, but to show that how our crazy, cultural needs were as relevant as the structural needs of the building—and we achieved it..”

**KIRSTI LUKE**



# MOSAIC CENTRE FOR CONSCIOUS COMMUNITY & COMMERCE



# ETSY HEADQUARTERS





# GOOGLE CHICAGO





BIOPHILIC  
DESIGN  
INITIATIVE

# INITIATIVE GOAL

To achieve broad adoption of Biophilic Design among the design community, building owners and cities.



Robert Wood Johnson Foundation Grant

# BIOPHILIC DESIGN TRANSITION LAB

# BIOPHILIC DESIGN INITIATIVE

living-future.org/biophilic-design/



LOGIN 

PROGRAMS

EDUCATION + EVENTS

ABOUT US

GET INVOLVED

DONATE



## BIOPHILIC DESIGN INITIATIVE

GET INVOLVED

ABOUT THE INITIATIVE

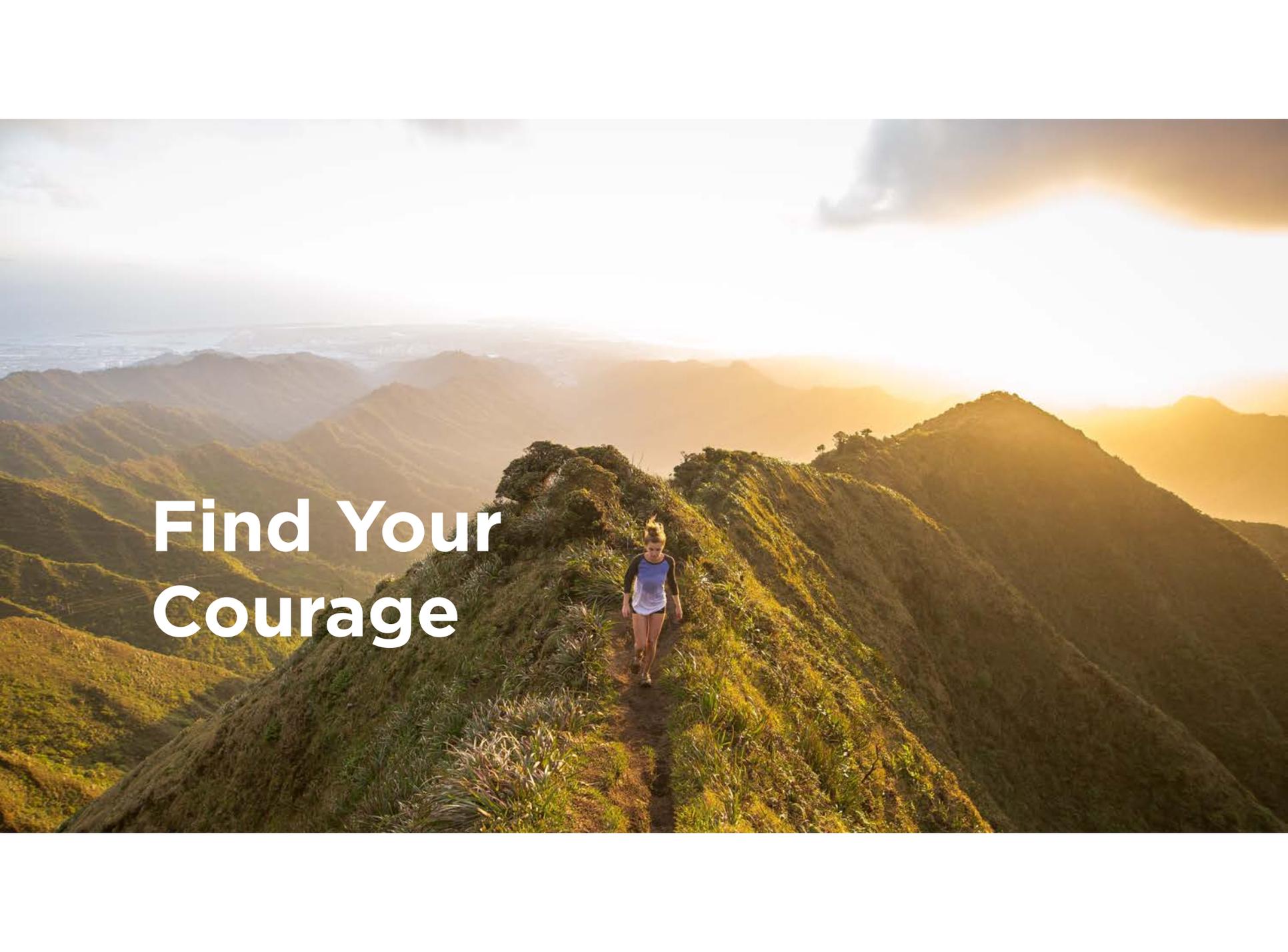
BIOPHILIC DESIGN AWARD

ADVISORY BOARD MEMBERS

## BIOPHILIC DESIGN INITIATIVE

**BIOPHILIC DESIGN IS THE PRACTICE OF CONNECTING PEOPLE AND NATURE WITHIN OUR BUILT ENVIRONMENTS AND COMMUNITIES.**

The International Living Future Institute has seen a demonstrated need among the Living Building Challenge community for Biophilic Design resources that can take the practice from theory to reality. While progress has been made to communicate what Biophilic Design is and to demonstrate why it is crucial to a Living Future, very little has been made around the process of how to achieve it. The International Living Future Institute has brought together leading experts in the field to form an Advisory Task Force that will lead the initiative through collaboration and inclusion of existing resources. This initiative aims to achieve the goal of broad adoption of Biophilic Design among the design community, building owners and cities.

A woman with blonde hair in a bun, wearing a blue and white long-sleeved shirt and shorts, is hiking on a narrow dirt path along a grassy mountain ridge. The sun is low on the horizon, creating a golden glow over the landscape. In the background, there are rolling hills and a distant cityscape under a cloudy sky. The overall mood is serene and inspiring.

**Find Your  
Courage**



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

**QUESTIONS?**

