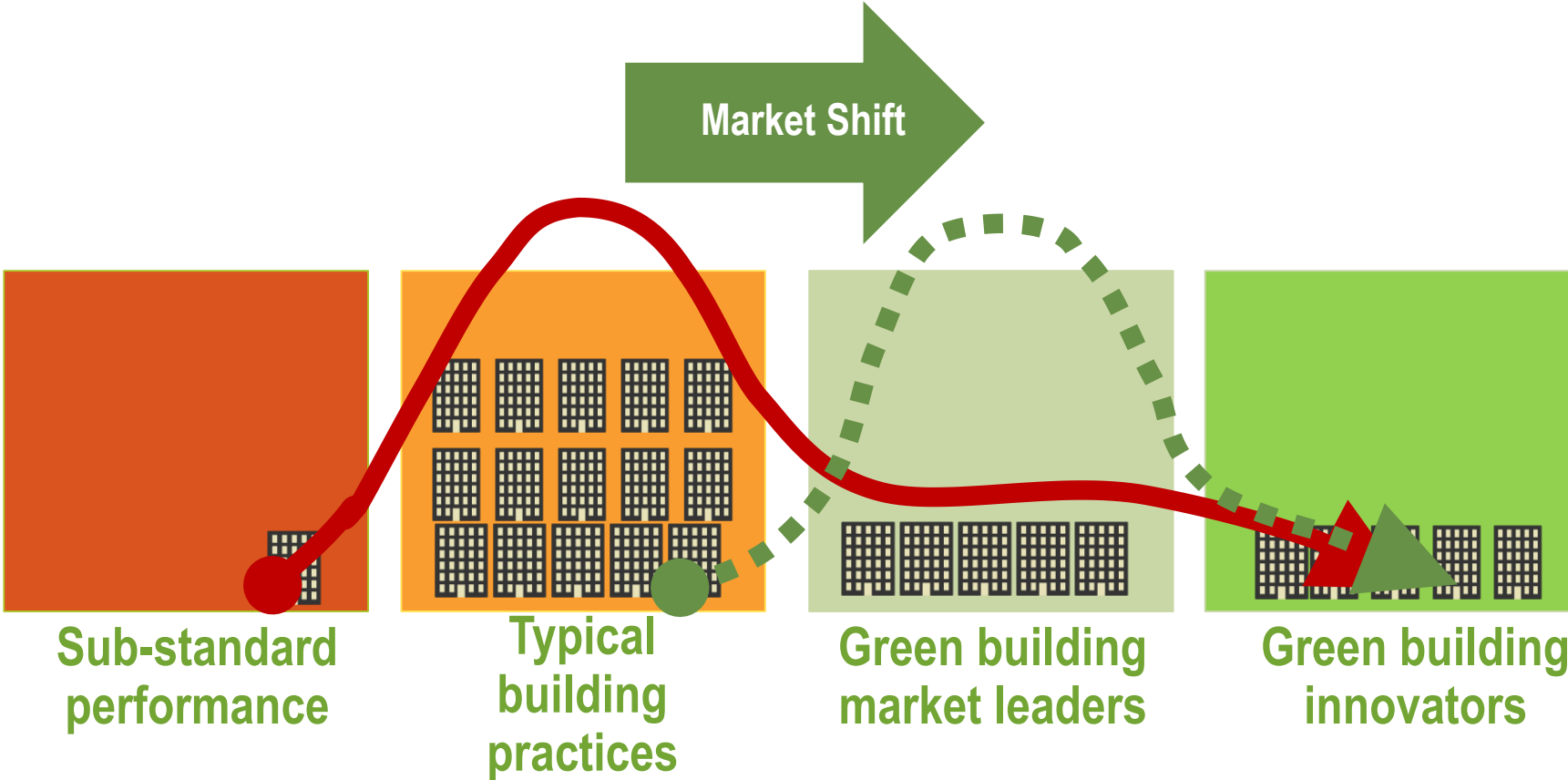




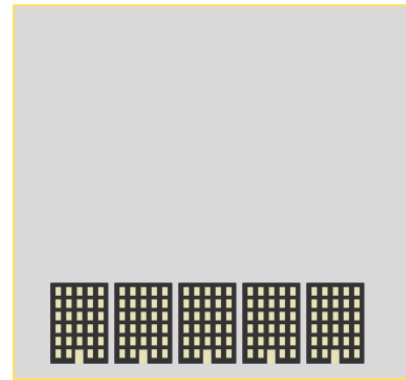
INTRODUCTIONS

GREEN BUILDING TOOLS

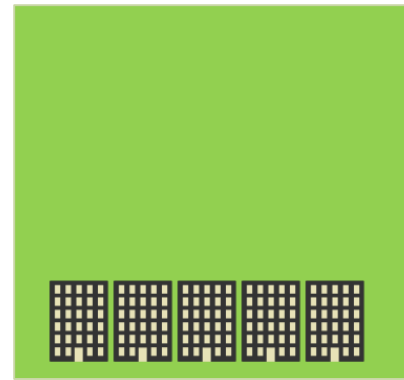


Current Market = 
Market Shift = 

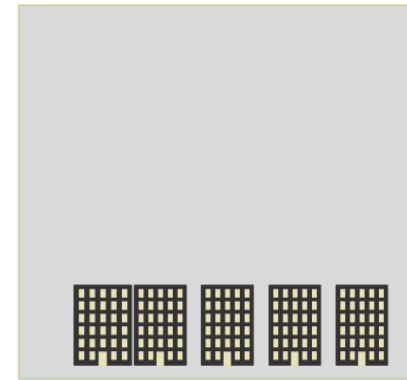
GREEN BUILDING TOOLS



Typical
building
practices



Green building
market leaders



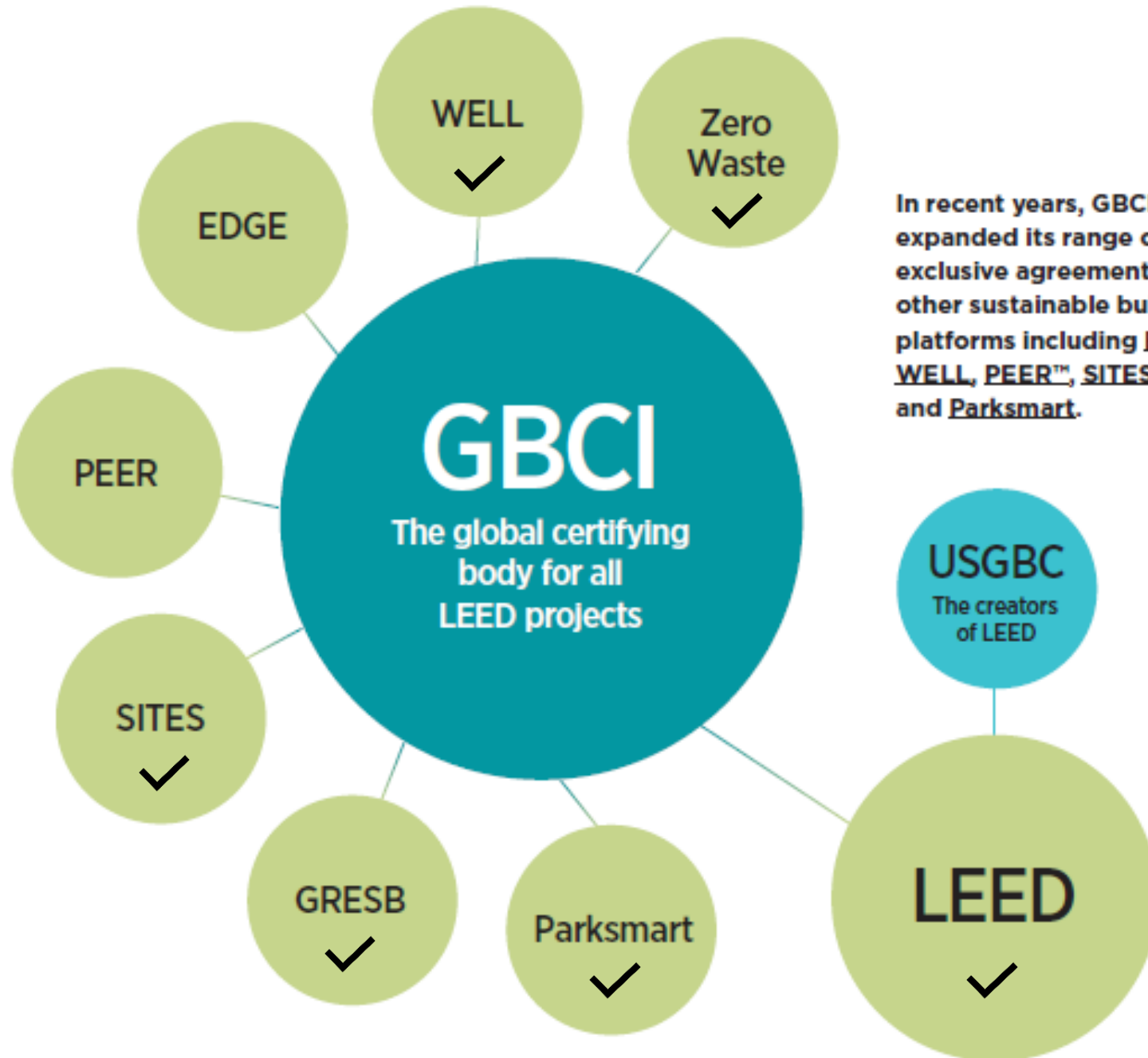
Green building
innovators

Green Business Certification Inc. (GBCI)

The premier organization independently recognizing excellence in green business
industry performance and practice globally.



www.gbci.org/



In recent years, GBCI has expanded its range of exclusive agreements to other sustainable building platforms including EDGE, WELL, PEER™, SITES, GRESB, and Parksmart.



LEED

GBCI administers the LEED certification program, performing third-party technical reviews and verification of registered projects to determine if they have met the standards set forth by the LEED rating system. Dedicated technical experts ensure building certification meets the highest levels of quality and integrity.

LEEDV4 SYSTEM GOALS



Reduce contribution to **global climate change**



Enhance individual **human health**



Protect and restore **water resources**



Protect and enhance **biodiversity and ecosystem services**



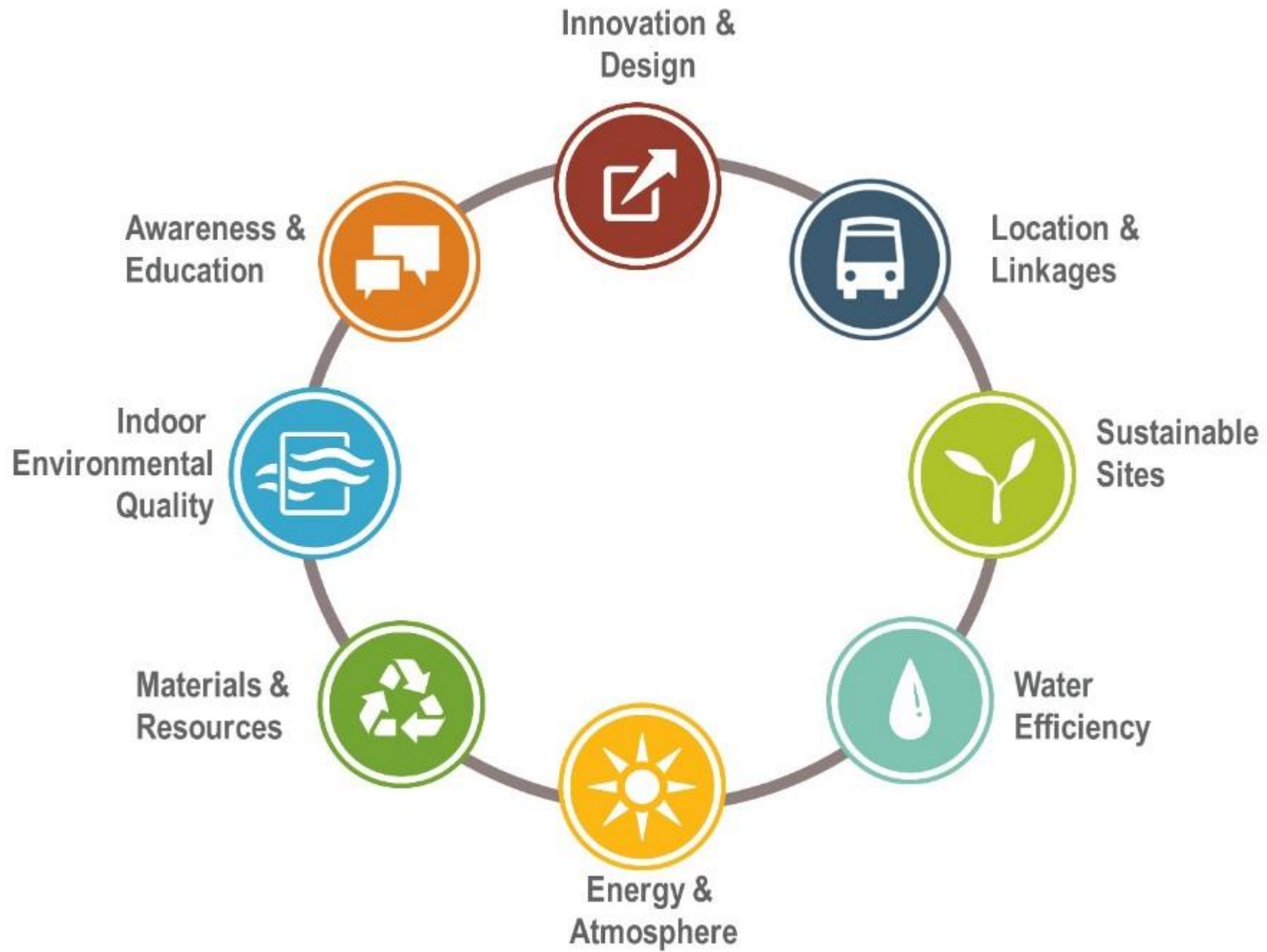
Promote **sustainable and regenerative** material cycles



Build a **green economy**

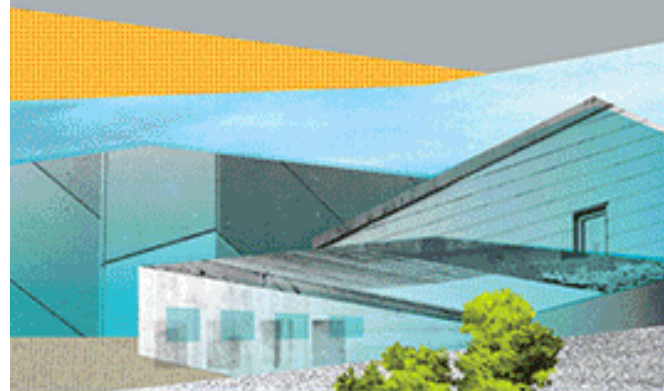


Enhance **community quality of life**



THIS is

LEED®



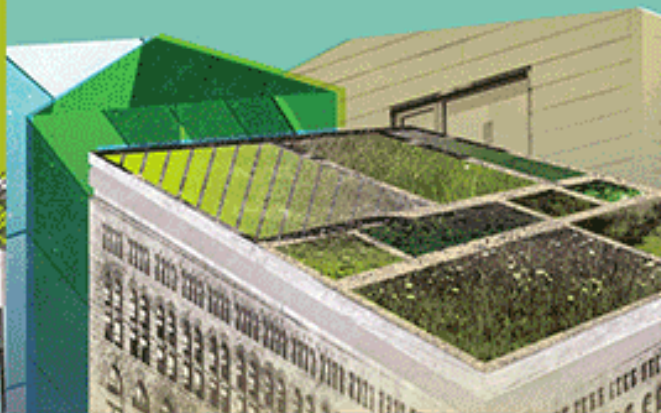
LEED® for

BUILDING DESIGN
+ CONSTRUCTION



LEED® for

BUILDING OPERATIONS
+ MAINTENANCE



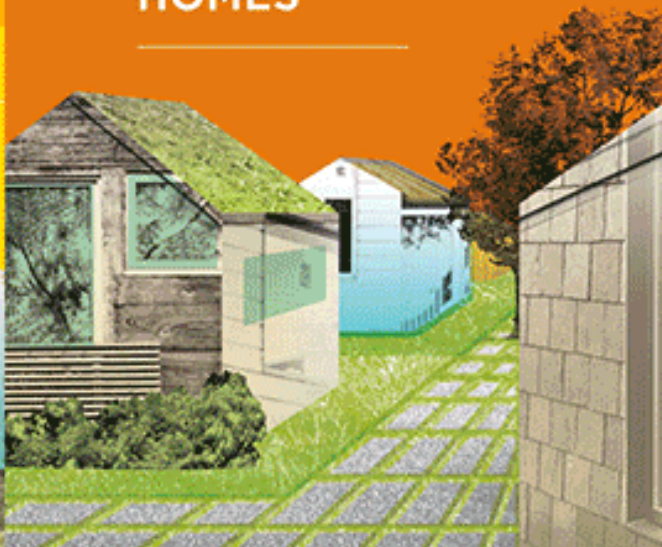
LEED® for

INTERIOR DESIGN
+ CONSTRUCTION



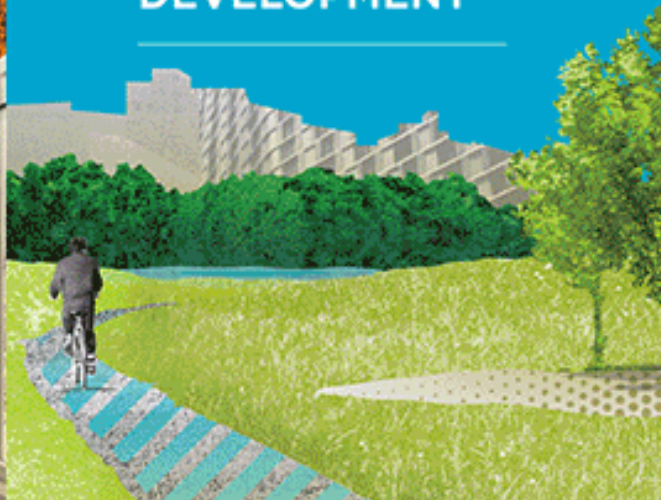
LEED® for

HOMES



LEED® for

NEIGHBORHOOD
DEVELOPMENT



Parksmart

GBCI administers Parksmart, formerly known as Green Garage Certification, the world's only rating system that defines, measures and recognizes high-performing, sustainable garages.



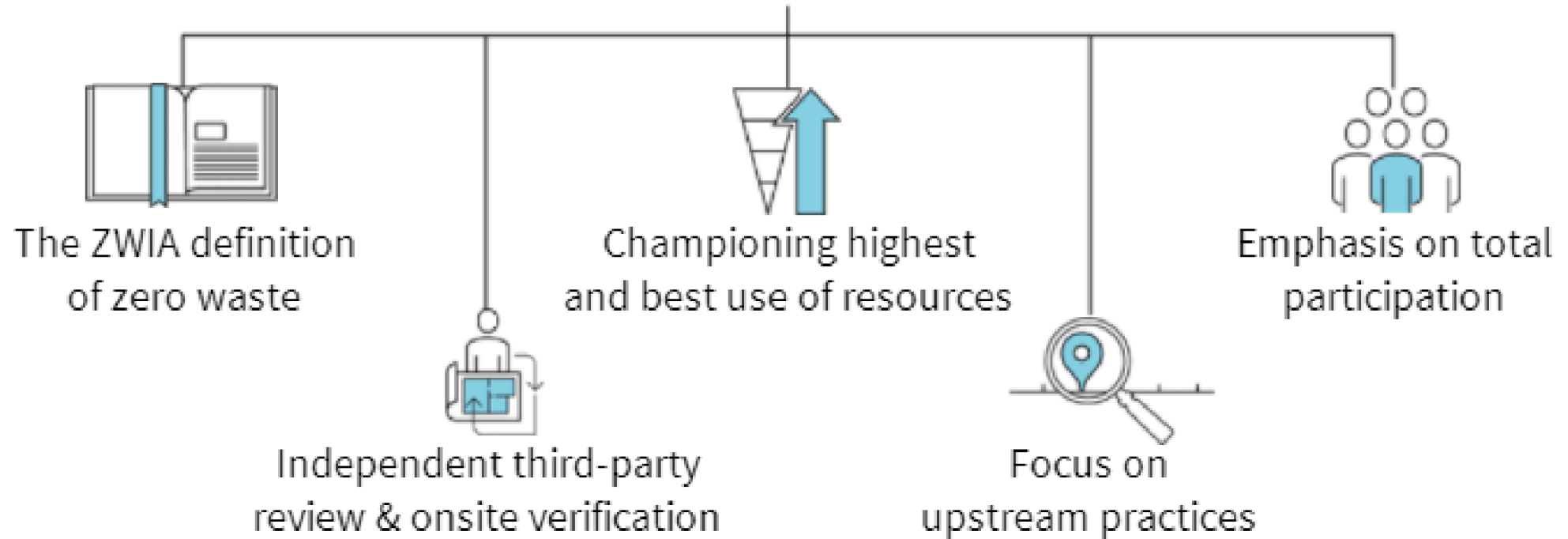
SITES

GBCI administers the Sustainable Sites Initiative (SITES®), a program that offers a systematic, comprehensive rating system designed to define sustainable sites, measure their performance, and ultimately elevate the value of landscapes.





X
TRUE



The image shows a bright, modern building interior with large glass windows and doors. Two large, semi-transparent circles are overlaid on the scene: a cyan circle on the left and a green circle on the right. The text 'WELL GREEN' is written in large, white, sans-serif capital letters across the center of these circles. The background shows people walking in a hallway and a person standing near a glass door on the right.

WELL GREEN

An aerial view of a city street at dusk, with a green overlay. The word "WELL" is written in large, white, stylized letters across the top. The background shows a city street with buildings, trees, and streetlights.

WELL

BUILDING STANDARD

Seven Concepts



air



water



nourishment



light



fitness



comfort



mind



GRESB

GRESB

GRESB is an independently operated subsidiary of GBCI. Established in 2009, GRESB is an investor-driven organization that is transforming the way we assess Environmental, Social and Governance (ESG) performance of real assets globally, including real estate portfolios and infrastructure assets.

2016

Real Estate
Assessment

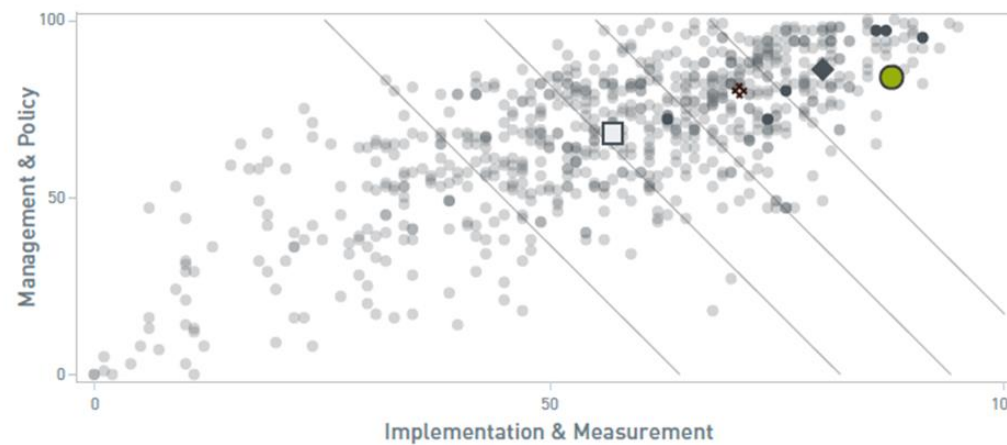
GRESB Sample Entity

Sample Fund Manager

Participation & GRESB Score



GRESB Model



● This Entity ◆ Peer Group Average ● Peer Group □ GRESB Average
● GRESB Universe + Asia x Europe * North America x Australia/NZ # Other

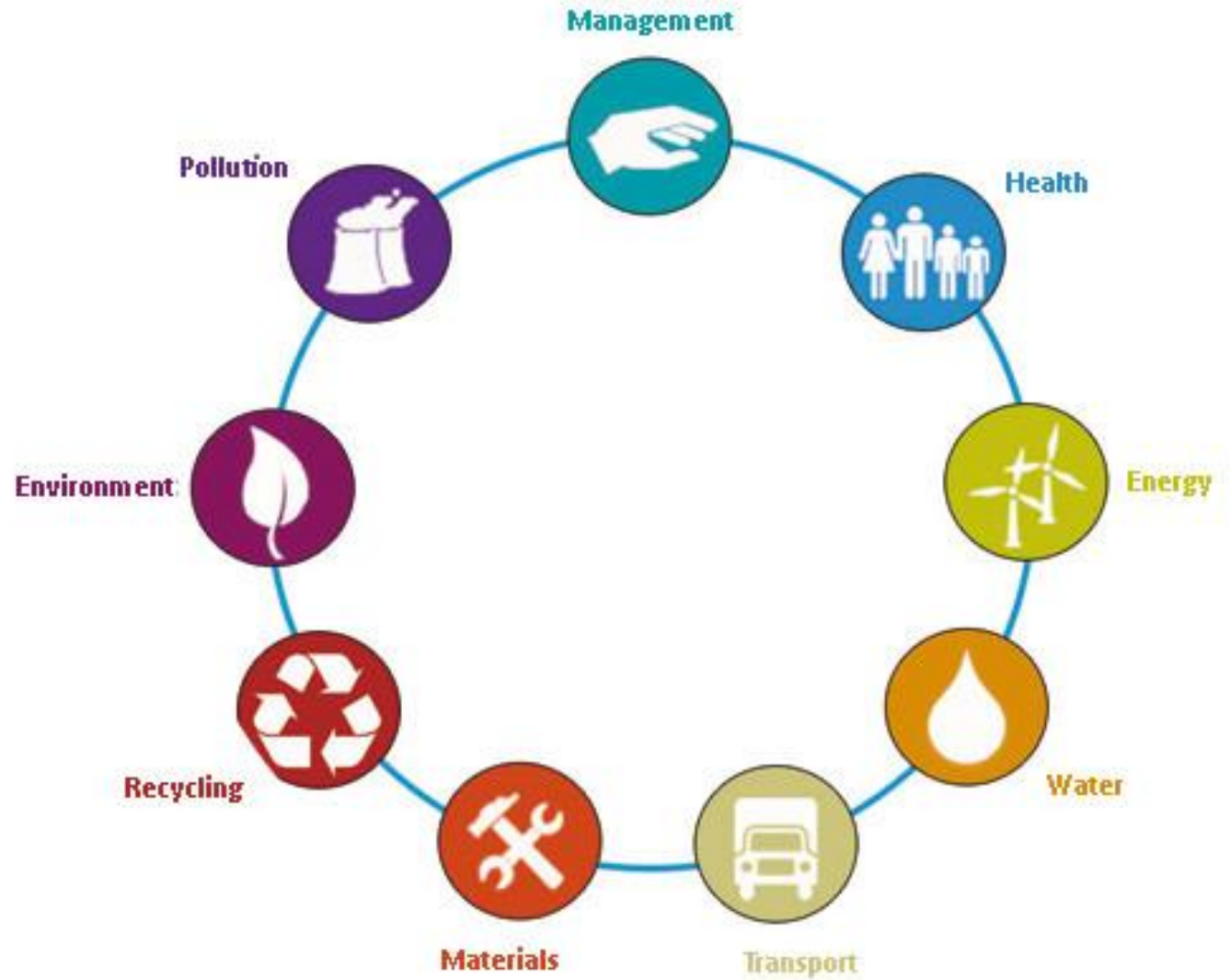




BREEAM[®]

Rating Systems

BREEAM[®]
delivered by **bre**



BREEAM®

delivered by bre

BREEAM UK Communities
BREEAM UK Infrastructure New Construction (pilot)
BREEAM UK New Construction 2014
BREEAM UK Datacentres 2010
BREEAM UK Domestic Refurbishment 2014
BREEAM UK Non-Domestic Refurbishment & Fit-Out 2014
BREEAM UK New Construction Bespoke
BREEAM UK Non-Domestic Refurbishment Bespoke

UNITED
KINGDOM

Home Quality Mark

UNITED
KINGDOM

BREEAM UK Protocols

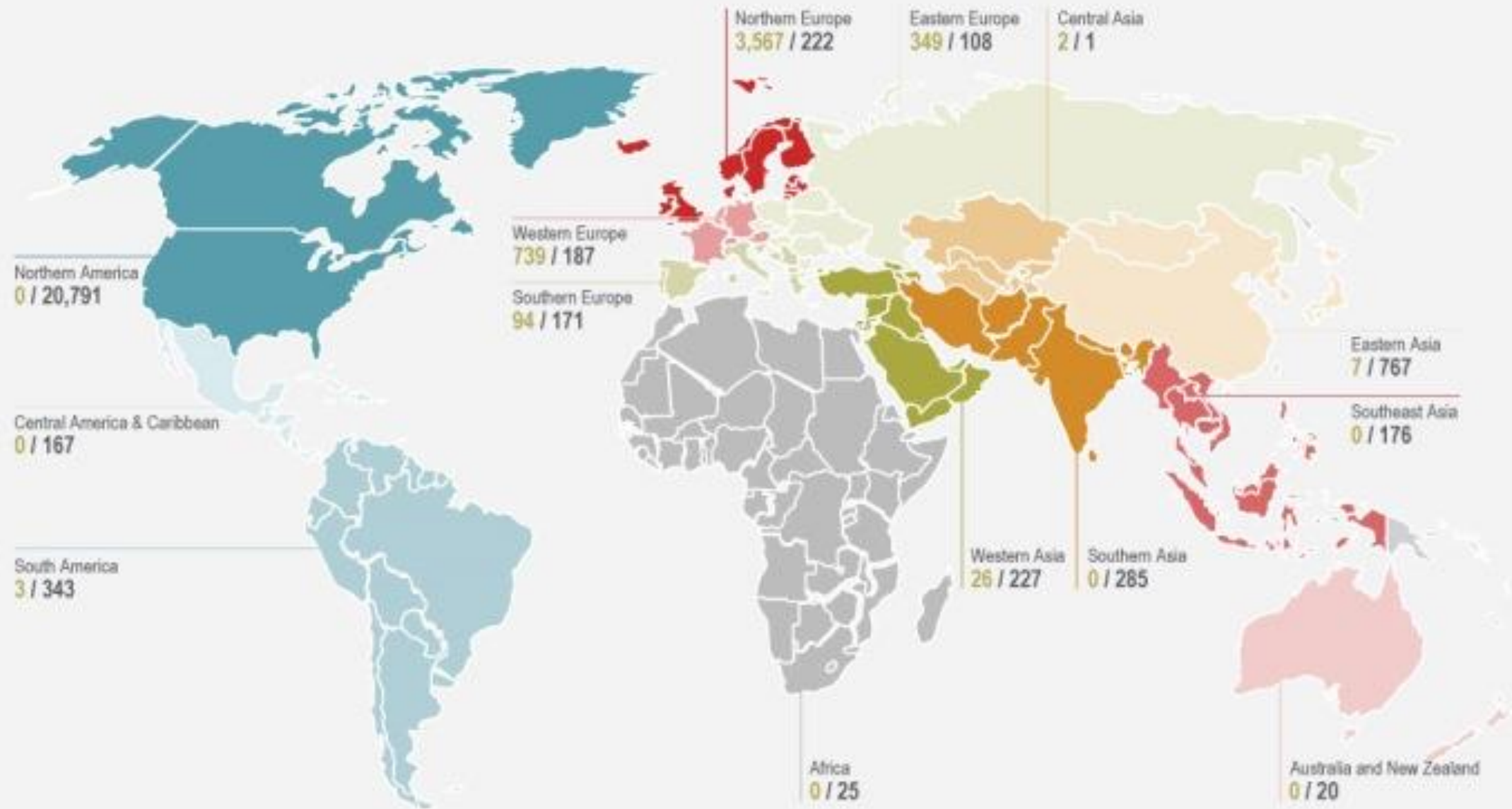
BREEAM International In-Use
International Infrastructure (Pilot)
BREEAM International 2013
BREEAM International Non-Domestic
Refurbishment & Fit-Out 2015

INTERNATIONAL

BREEAM NL New Construction (Netherlands)
BREEAM NL In-Use (Netherlands)
BREEAM ES Residential (Spain)
BREEAM ES New Construction (Spain)
BREEAM ES In-Use (Spain)
BREEAM NOR New Construction (Norway)
BREEAM SE New Construction (Sweden)
BREEAM DE In-Use (Germany)
BREEAM AT In-Use (Austria)

INTERNATIONAL
(country-specific)

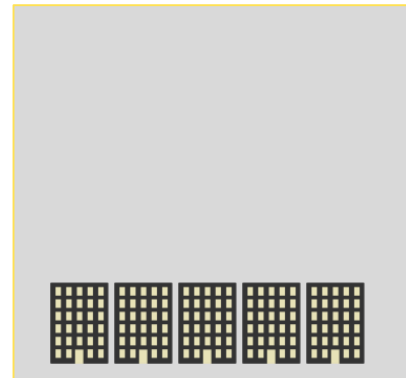
BREEAM International Protocols



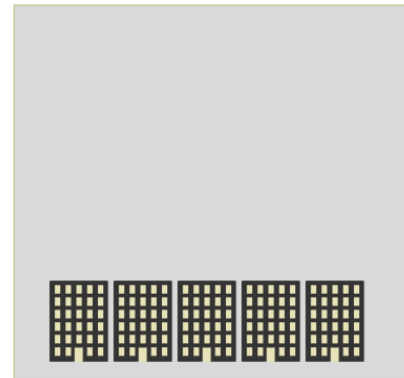
Number of LEED certified projects (does not include LEED for Homes projects)

 Number of BREEAM certified projects

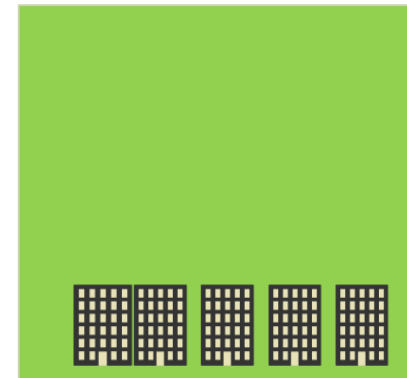
GREEN BUILDING TOOLS



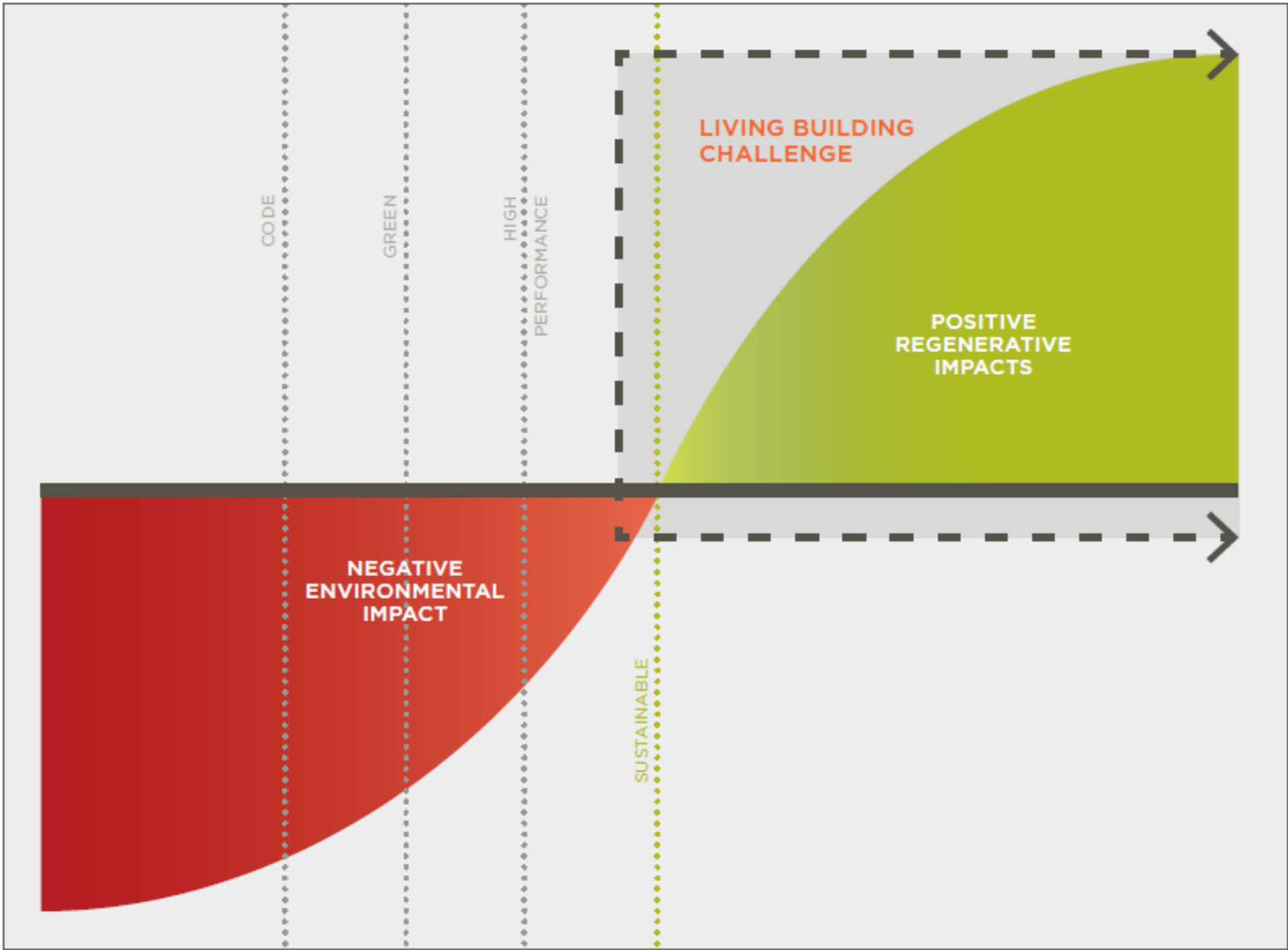
Typical
building
practices



Green building
market leaders



Green building
innovators



CODE

GREEN

HIGH
PERFORMANCE

LIVING BUILDING
CHALLENGE

POSITIVE
REGENERATIVE
IMPACTS

NEGATIVE
ENVIRONMENTAL
IMPACT

SUSTAINABLE



INTERNATIONAL
LIVING FUTURE
INSTITUTESM

<https://living-future.org/>



<https://living-future.org/living-future-institute-europe/>



BUILDINGS

LIVING BUILDING CHALLENGE

You can create buildings that generate more energy than they use, capture and treat all water on site, and are made using healthy materials. The Living Building Challenge framework will help you to create spaces that reconnect occupants with nature.

<https://living-future.org/lbc/>



PRODUCTS

LIVING PRODUCT CHALLENGE

<https://living-future.org/lpc/>



COMMUNITIES

LIVING COMMUNITY CHALLENGE

<https://living-future.org/lcc>



PETALS



LIVING
BUILDING
CHALLENGESM



PLACE



WATER



ENERGY



HEALTH &
HAPPINESS



MATERIALS



EQUITY



BEAUTY



NETZERO

ENERGY BUILDING
CERTIFICATIONSM

PROVEN PERFORMANCE • INDEPENDENT AUDITS • TRANSPARENT RESULTS

WWW.LIVING-FUTURE.ORG/NETZERO

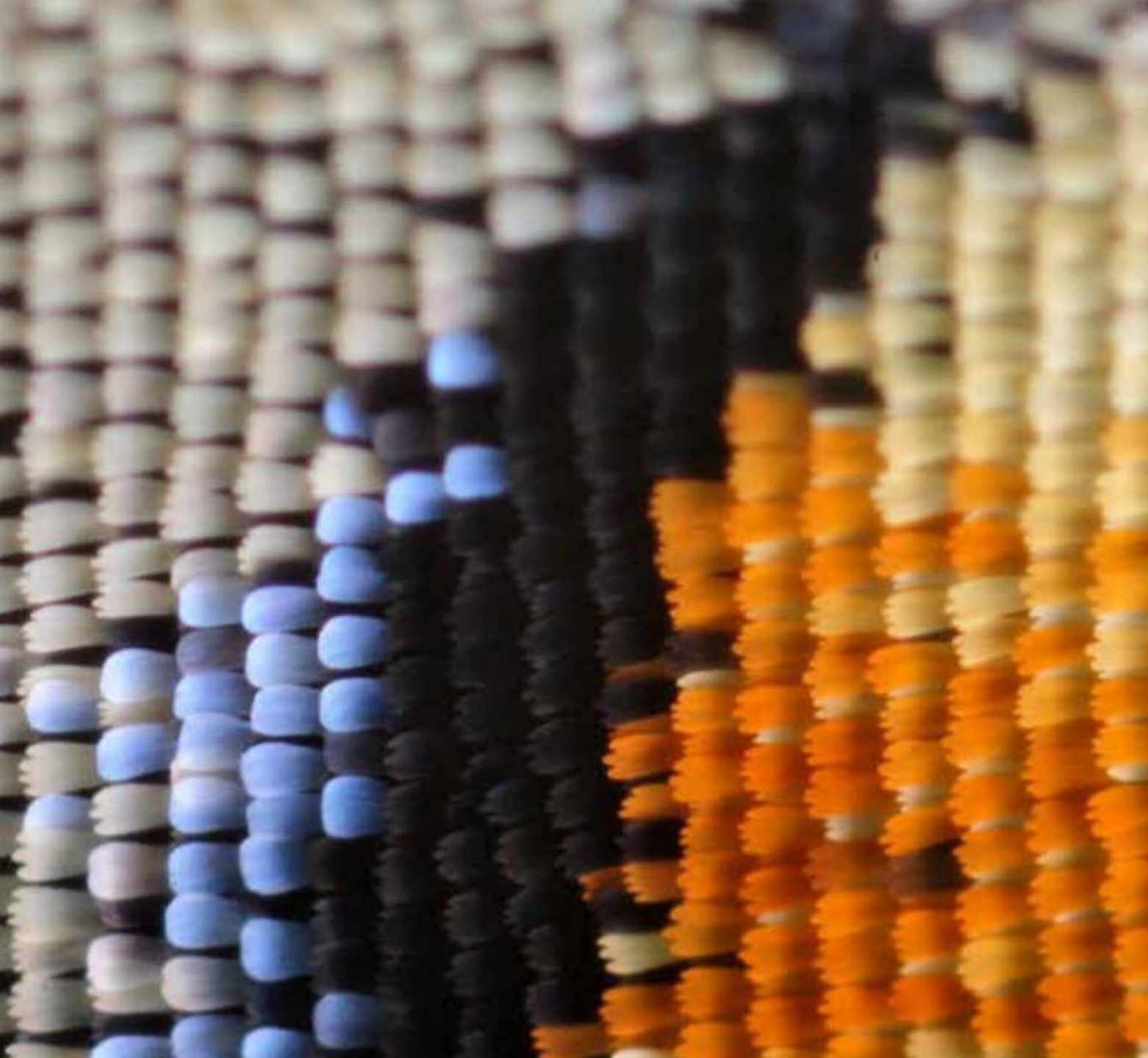


LIVING COMMUNITY CHALLENGESM 1.2

A Visionary Path to a
Regenerative Future

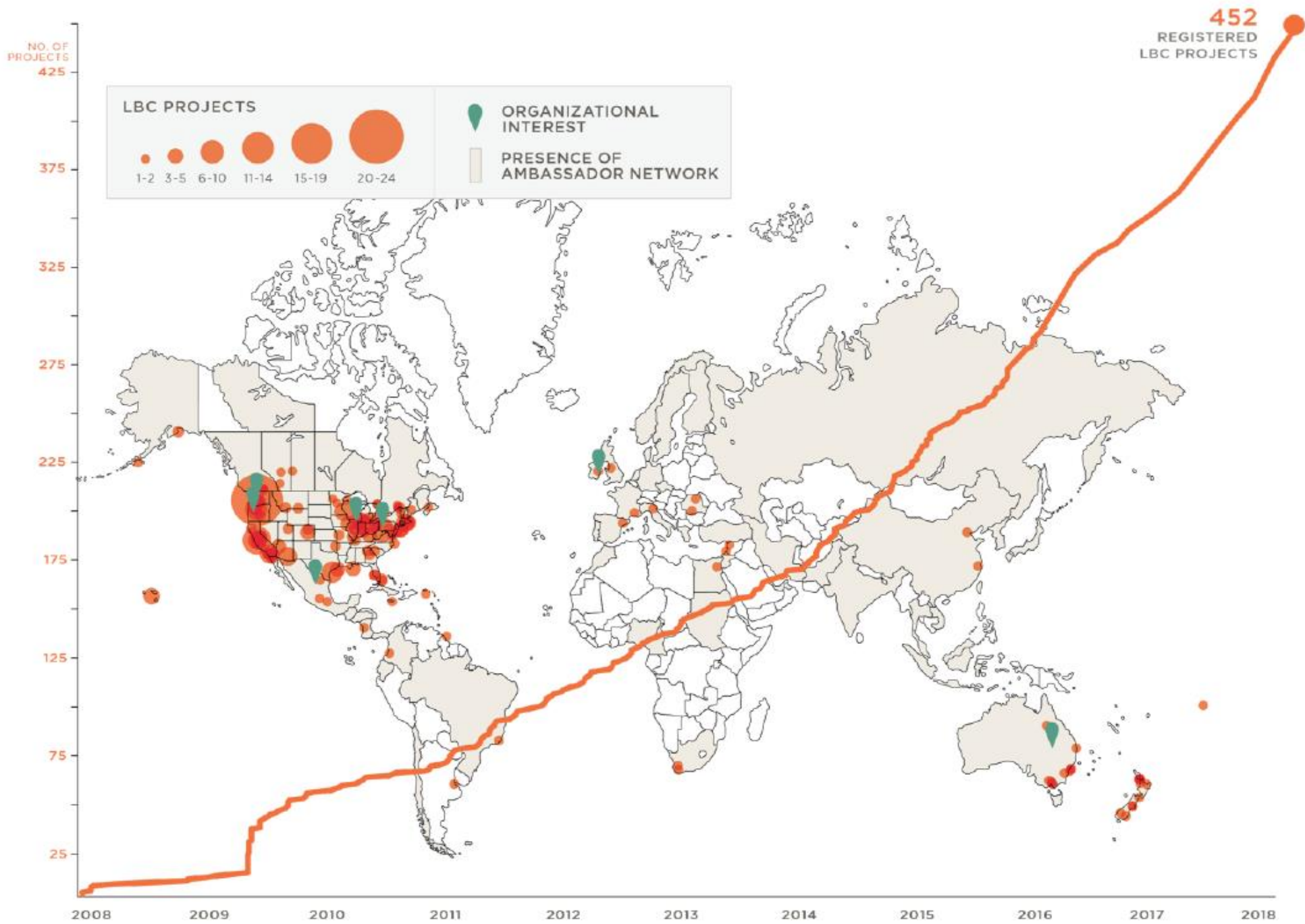


INTERNATIONAL
LIVING FUTURE
INSTITUTESM



**LIVING
PRODUCT
CHALLENGESM
1.1**

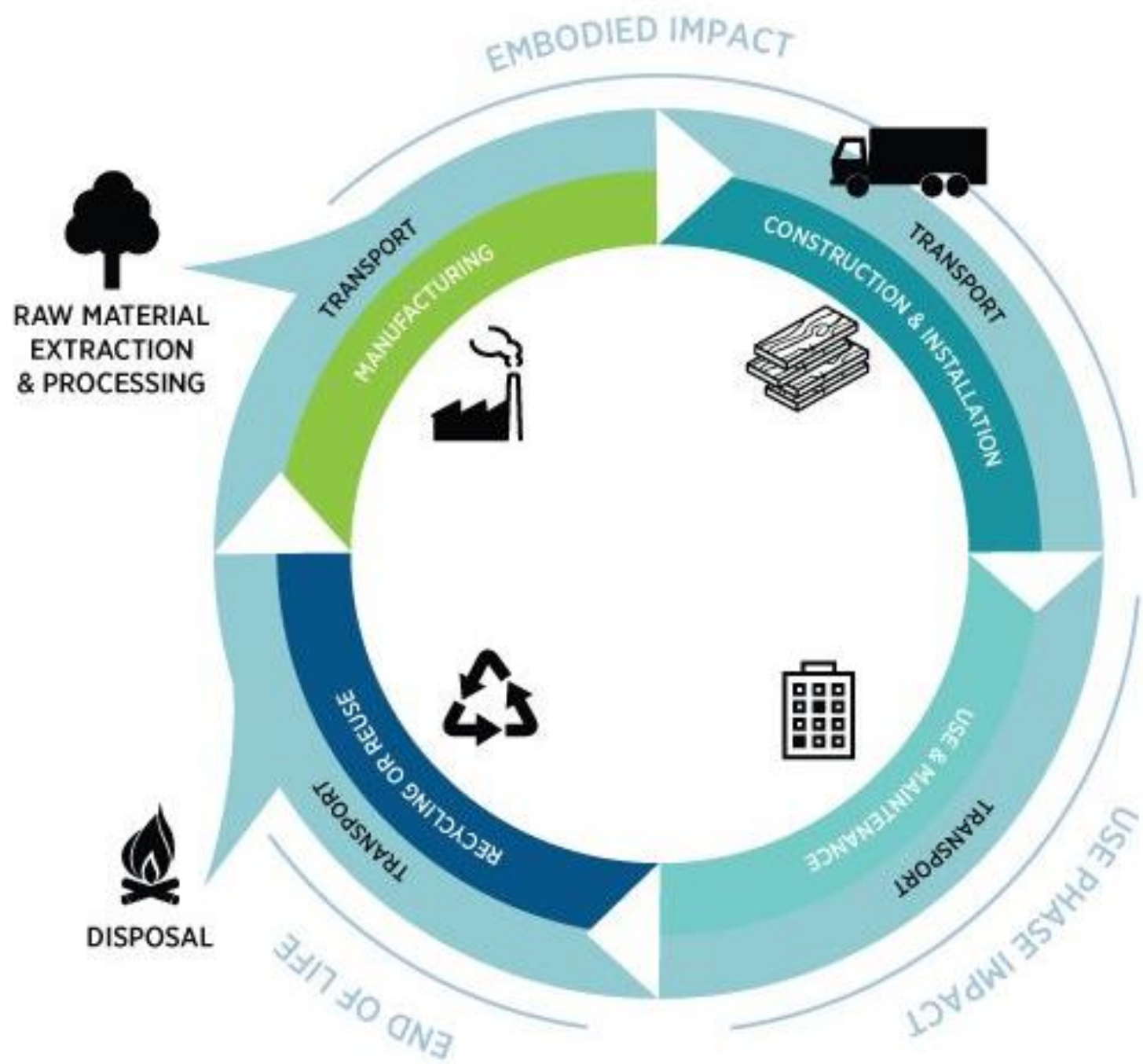
A Visionary Path to a
Regenerative Future





**THINK
ABOUT IT**

**How do you know
you are *choosing*
*the best materials?***



disclosure

(noun)

transparency of product supply chains, ingredients, and life cycle impacts

optimization

(verb)

reward for products meeting thresholds or benchmarks for performance

Two Ways Suppliers Can Go Transparent

Tell all with a self-declaration



Pay consultants to research and certify that the product is safe



1 GENERAL INFORMATION

Product Identification Information Manufacturer: Ajax Manufacturing Product ID: Tuff Stuff X42, product SKU SB4353 CSI MasterFormat(s): 09 96 00 Manufacturer URL: www.ajaxmfr.com Product URL: www.ajaxmfr.com/HPCs	Product Description High performance coating designed for painting bath stall walls and other wet surfaces.	Manufacturer Contact Information Contact Name: John Doe, Director of Product Quality Phone: 800-777-1111 Email: Info@AjaxMfr.com Postal Address: Product Quality Department, Ajax Manufacturing 100 Smith Street, Somewhere, TX 19999
--	---	---

2 CONTENTS DISCLOSURE

Certification Type*: 1st 2nd 3rd n/a
* First: Manufacturer's self-declaration; Second: Verification by trade association or other interested party; Third: Verification by independent certifier (ideal).

Disclosure level of intentionally added content (100% is ideal): **94 %**

All known residuals disclosed to: 100 ppm

The manufacturer affirms that all known material content were screened for chemicals of concern and health warning listings using:
Pharos Chemical and Material Library from the Healthy Building Network

All ingredients to be screened against chemicals listed on any of the Health Product Declaration Priority lists at www.hpdownworkinggroup.org/prioritylists

All ingredients are assessed against the HPD Priority Lists (check at least one):

- High Hazards List
- Precautionary Lists
- Building Certification Lists
- Other: _____

Total Volatile Organic Compound Content

Material: 30 g/l
 Regulatory: 50 g/l
 Total incl. EPA exempt: 60 g/l
 Zero VOC tints: Yes No

3 CONTENTS IN ORDER OF QUANTITY (Complete list continues onto next page)

Name	Identifier	%	Health Hazard Warnings and Certification Lists	PC* %	PI* %	yes	no	Role
1 Bisphenol A diglycidyl ether (BADGE)	1675-54-3	55	Category 2 - Some evidence of biological activity related to endocrine disruption (EU ED)	-	-	<input type="radio"/>	<input checked="" type="radio"/>	Resin
2 Phenyl Glycidyl Ether	122-60-1	16	Cancer and Male reproductive toxicity (Prop 65) R37 Irritating to respiratory system, R53 May cause long-term adverse effects in the aquatic environment and H341 Suspected of causing genetic defects (EU R-Phrases)	-	-	<input type="radio"/>	<input checked="" type="radio"/>	Diluent
3 Alkyl (C12, C14) Glycidyl Ether	68609-97-2	10	No warnings found Green Screen Benchmark 3. [1]	-	-	<input type="radio"/>	<input checked="" type="radio"/>	Viscosity Reducer
4 Polyethylene	9002-88-4	9	No warnings found	60	30	<input type="radio"/>	<input checked="" type="radio"/>	Anti-Corrosive
5 Not disclosed [2]	Not disclosed	3	Category 1 Evidence of endocrine disruption activity (EU ED) Very toxic to aquatic organisms and possible risk of impaired fertility (EU R-Phrases)	-	-	<input type="radio"/>	<input checked="" type="radio"/>	Flame Retardant

COMPLETE LISTING OF ALL 10 INGREDIENTS CONTINUES ON PAGE 2

* RC = Recycled Content; PC = Post Consumer; PI = Post Industrial (Pre-consumer) / Nano = comprised of nanoscale particles or nanotechnology



VERSION 2.0

<https://www.hpdcollaborative.org/>

Declare.

Product Name
Manufacturer Name

Final Assembly: City, State, Country
Life Expectancy: 000 YEARS
End of Life Options: Recyclable (42%), Landfill

Ingredients:

Ingredient One (Location, ST), **The Second Item** (Location, ST), **NextIngredient** (Location, ST), **Living Building Challenge Red List***, **Different Part of the Product, Another Component, More Stuff, US EPA Chemical of Concern, Yet Another Item, Non-toxic Element, Pieceofthewhole, Component of Concoction, ThirdFromTheEnd, ECHA REACH Substance of Very High Concern, Last Ingredient.**

*LBC Temp Exception I11-E11 Lead and Hardware

Living Building Challenge Criteria:

XXX-0000

LBC ZONE 0

Declaration Status

EXP. 12/2010

00 00 00

LBC Red List Free

LBC Compliant

Declared

Intentionally simple in scope. By focusing on product ingredients, we hope to 'level the playing field' and create a platform for constructive conversations about the human health and ecological impacts of the decisions we make.

Options: Take back program; Salvageable or reusable; Recyclable (%); Landfill; Hazardous waste (%).

Raw Material and Final Assembly locations assist project teams in meeting the Appropriate Sourcing Imperative, intended to support the growth of regional economies rooted in sustainable practices, products and services.

All constituent parts of a product.
Items are color coded to communicate potential hazards:
Living Building Challenge Red List
US EPA Chemical of Concern Action Plan Published
ECHA REACH Substance of Very High Concern Candidate
Not referenced in any of the three programs noted above

Temporary Red List chemical exceptions applied for specific product types.

Declare identifier for company + product
Valid for 12 months, starting with the date of issue

CSI MasterFormat 2010 classification

Verification that a product complies with the Living Building Challenge Red List.

Declare.

THE NUTRITION LABEL FOR PRODUCTS

Find healthy products for your next project. Declare is a transparency platform and product database that is changing the materials marketplace

DECLARE YOUR PRODUCT

<https://living-future.org/declare/>

Declare.

Thermacork Amorim Isolamentos

Final Assembly: Silves, Portugal
Life Expectancy: Life of Structure
End of Life Options: Salvageable/Reusable in its Entirety

Ingredients:

Bark of Cork Oak Tree (Portugal)

Living Building Challenge Criteria:

SPS-3002
VOC Content: N/A
Declaration Status
 LBC Red List Free
 LBC Compliant
 Declared

MANUFACTURER RESPONSIBLE FOR LABEL ACCURACY
INTERNATIONAL LIVING FUTURE INSTITUTE® declareproducts.com

Cradle to Cradle Certified™ Level

Program Category	Basic	Bronze	Silver	Gold	Platinum
Material Health		✓			
Material Reutilization			✓		
Renewable Energy and Carbon management				✓	
Water Stewardship		✓			
Social Fairness		✓			
Certification Level		✓			



Material Health



Material Reutilization



Renewable Energy




Water Stewardship



Social Fairness

CRADLE TO CRADLE
PRODUCTS
INNOVATION
INSTITUTE

LICENSED MARKS:



Cradle to Cradle Certified™ Bronze


THE LICENSED MARKS IDENTIFIED ABOVE MAY BE LICENSED TO:
BMA Ergonomics B.V.

FOR THE BELOW LISTED CERTIFIED PRODUCTS ASSOCIATED WITH THE NAME:
Axia 2.0 Office Chairs

Budgitt Linden
Cradle to Cradle Products Innovation Institute

ISSUE DATE: 25 March 2015
 CERTIFICATION # 2347
 EXPIRATION DATE: 24 March 2017

LEAD ASSESSMENT BODY:
EPEA GmbH



Only the following products are considered Certified Product(s) within the scope of this certification and the associated Trademark License Agreement:
Axia 2.1 Office Chair, Axia 2.2 Office Chair, Axia 2.3 Office Chair, Axia 2.4 Office Chair

Certified under Version 3.0 of the Cradle to Cradle Certified™ Product Standard
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Cradle to Cradle Certified™ is a certification mark licensed by the Cradle to Cradle Products Innovation Institute



Thank you

Questions?

epauwels@greenlivingprojects.com