

# Green Building Market Navigation for Product Manufacturers

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October 27, 2020



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LEED Green Associate, ISSP-SA, CSM  
USGBC Staff MR TAG Lead 2017-2018  
MR TAG Member 2014-2019



# BuildingGreen has been looking into products for a long time...

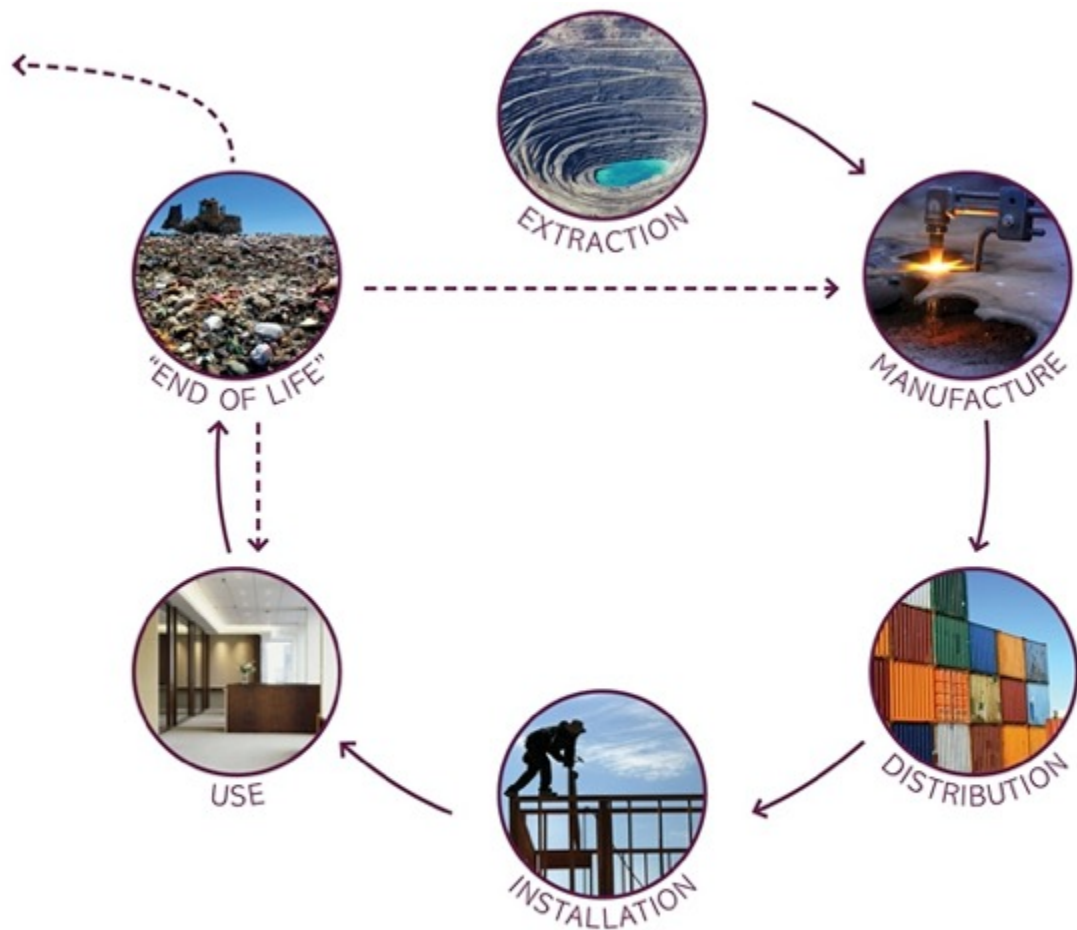
- Began publishing *Environmental Building News* in 1992
- Publishing curated lists of preferred products since 1996
- In 2012 partnered with Healthy Building Network to launch HPD



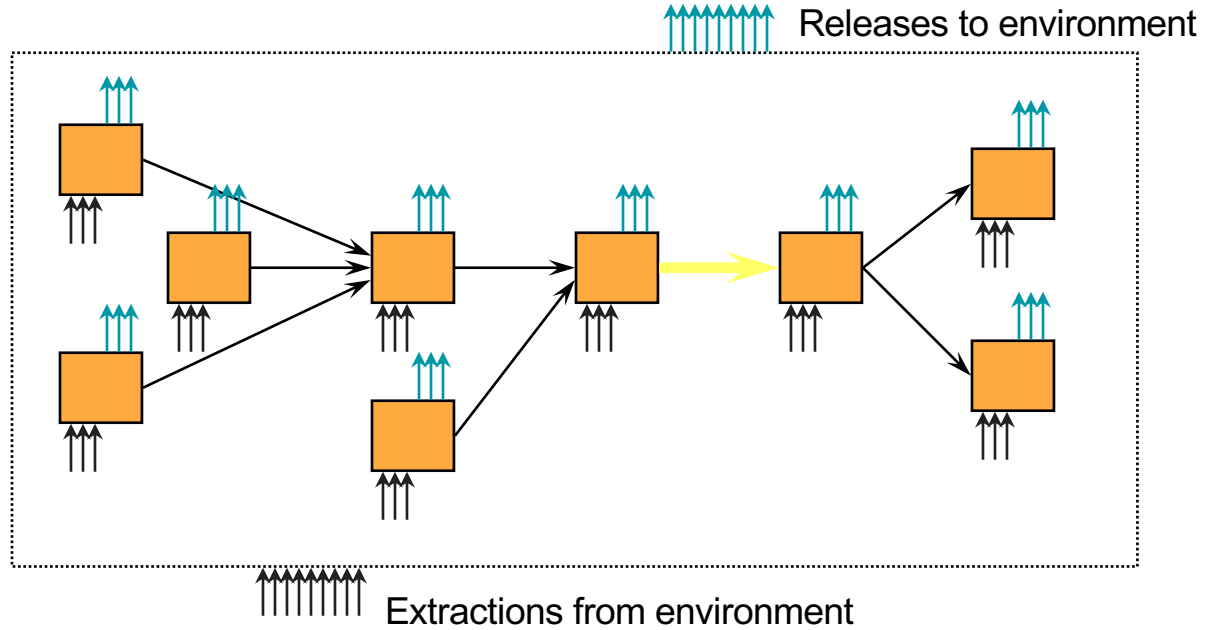


1992





# Life Cycle Assessment



# Health Impacts from Materials

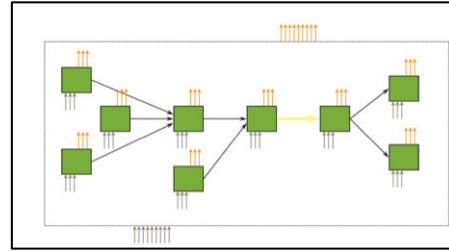


ERIC KAYNE /  
EARTHJUSTICE

# Life Cycle Assessment in Context

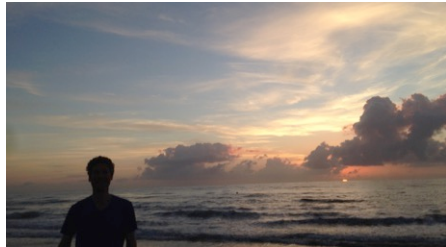


Habitat / Biodiversity



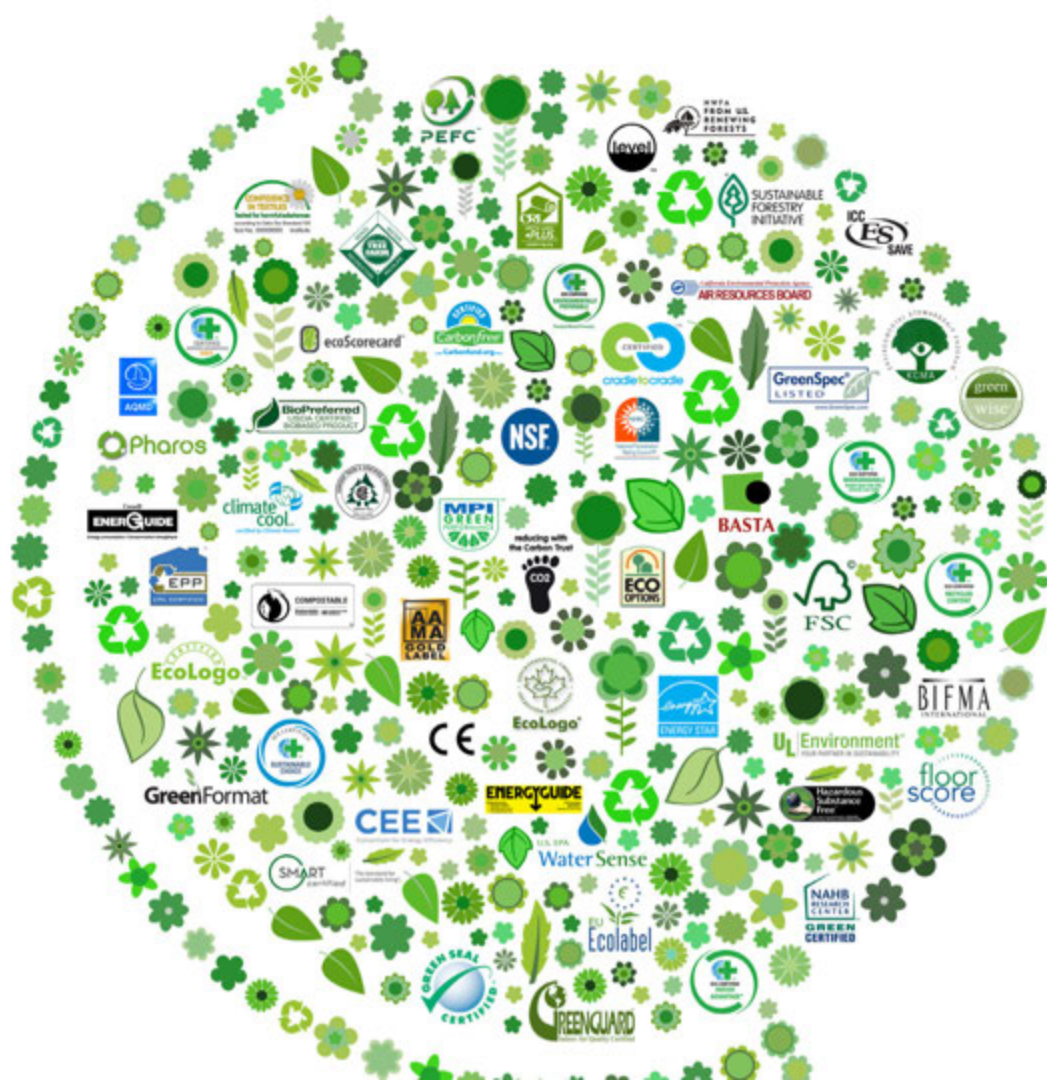
Life Cycle Assessment

Health



Social Equity





PEFC

Level

WETA FROM US RENEWING FORESTS

GreenSource  
Sustainable  
Solutions for the Built Environment

GreenSource  
Sustainable  
Solutions for the Built Environment

SUSTAINABLE  
FORESTRY  
INITIATIVE

ICC  
ES  
SAVE

WELL  
BUILT  
BY  
WELL

California Environmental Protection Agency  
AIR RESOURCES BOARD

AGAP

ecoScorecard

CarbonFree  
CarbonFootprint.com

cradle to cradle

GreenSpec  
LISTED

green  
wise

Pharos

EcoPreferred  
Sustainable  
Solutions

NSF

ENERGY STAR

GreenSource  
Sustainable  
Solutions for the Built Environment

ENERGYGUIDE

climate cool

MPI  
GREEN  
FAIR

reducing with  
the Carbon Trust

BASTA

EPP

COMPOSTABLE  
BIODEGRADABLE

AAMA  
GOLD  
LABEL

ECO  
OPTIONS

FSC

EcoLogo

EcoLogo

BIFMA  
GREEN  
MARKET

GreenFormat

CEE

ENERGYGUIDE

UL Environment  
FOR PARTIAL & SUBSTITUTES

floor  
score

SMART  
SOLUTIONS

Water Sense

Non-toxic  
Substance  
Free

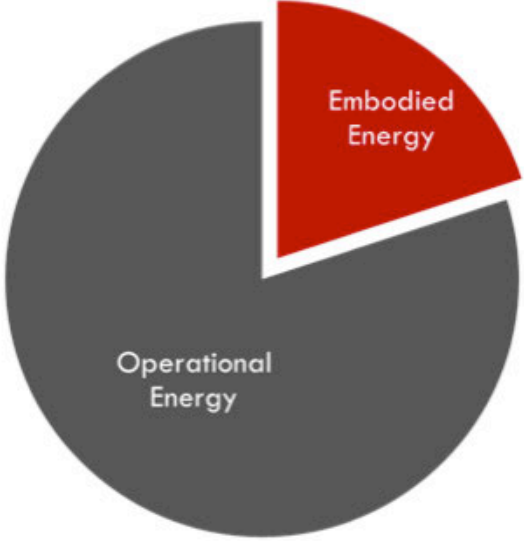
GREEN SEAL  
CERTIFIED

Ecolabel

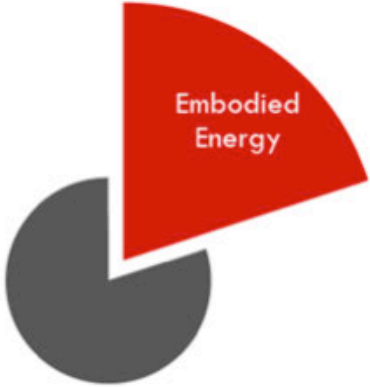
NAHB  
GREEN  
CERTIFIED

GREENGUARD

# Impacts from Operations vs. Materials

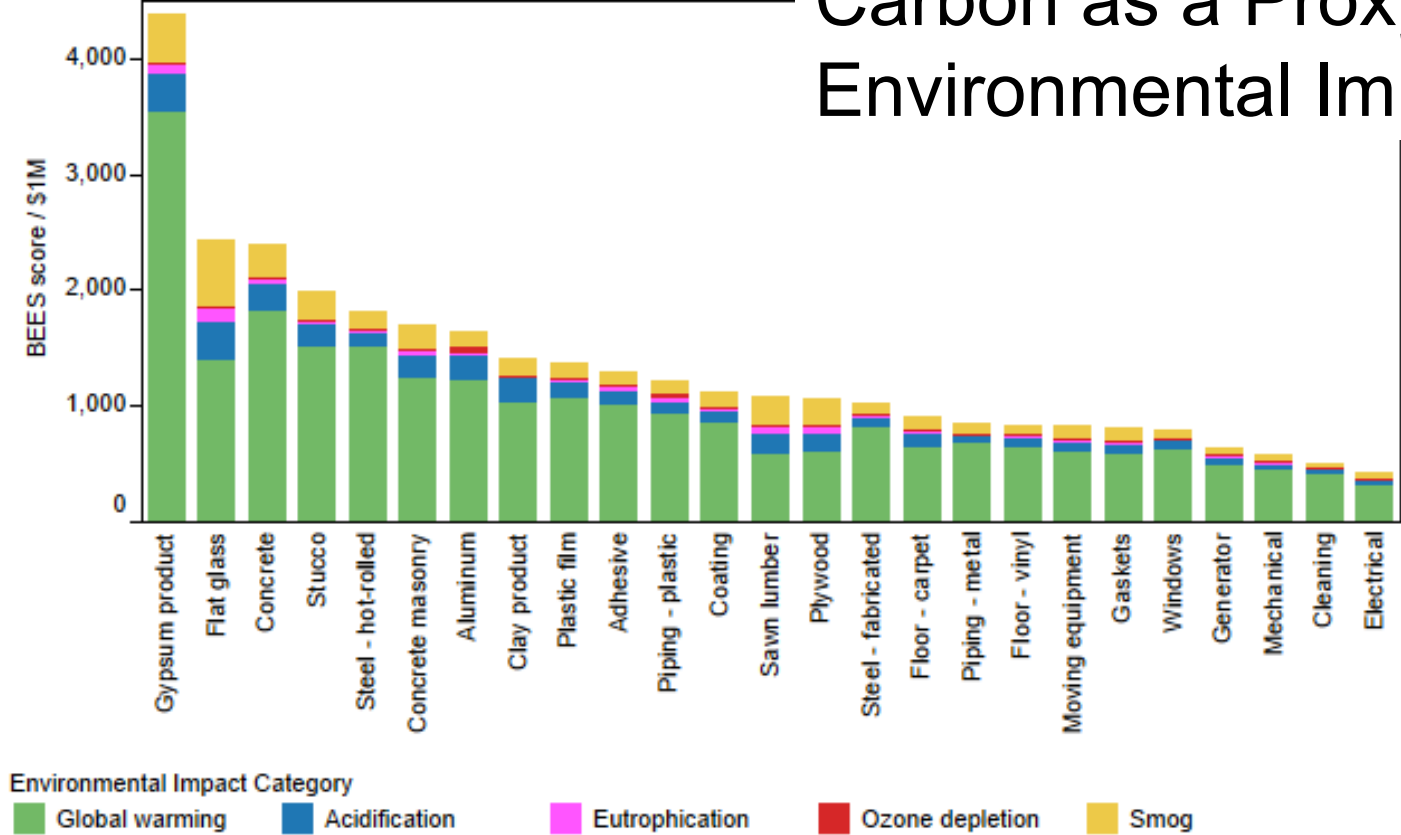


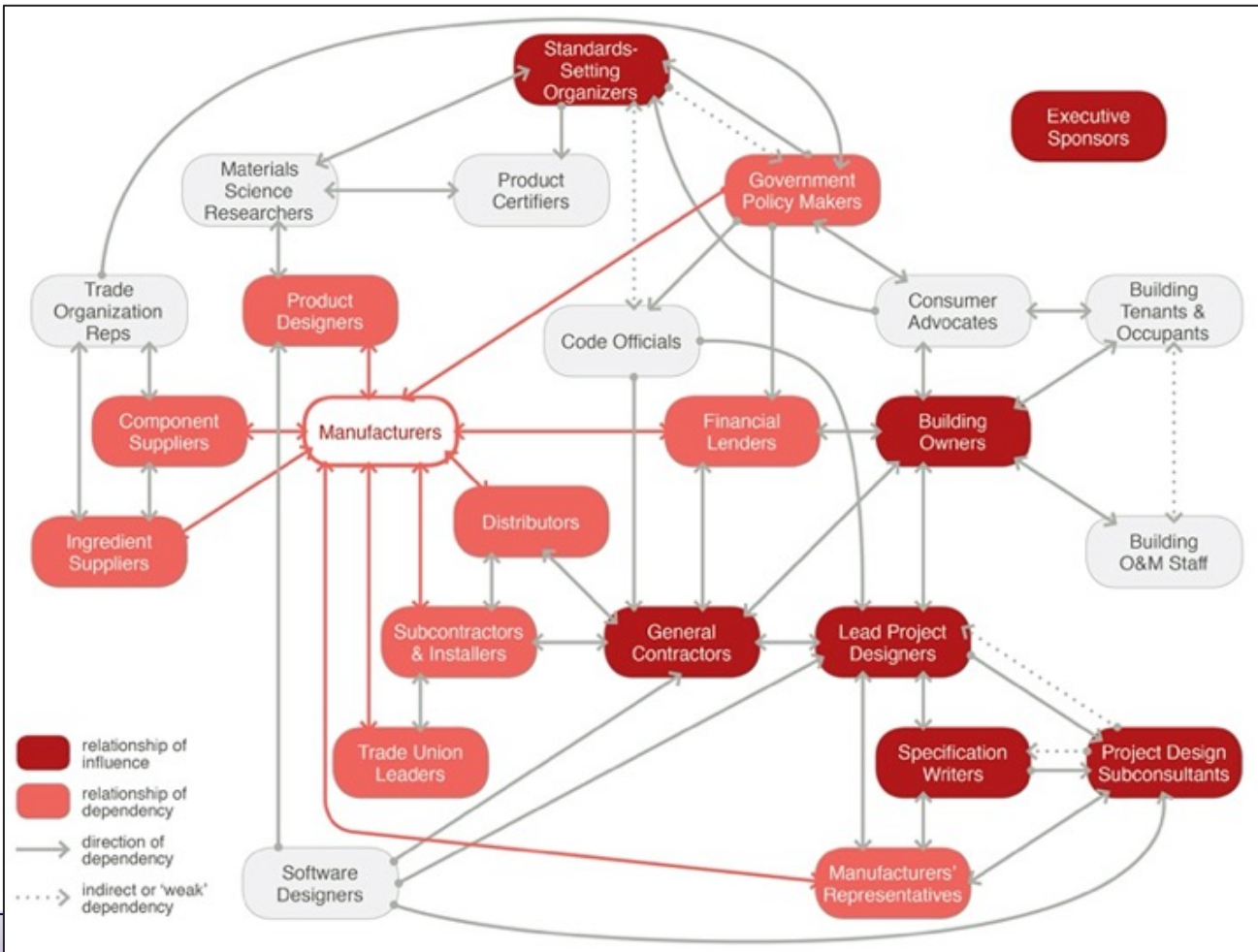
Typical Distribution



Distribution as Operational Energy Efficiency Increases

# Carbon as a Proxy for Other Environmental Impacts





It takes an ecosystem



# SUSTAINABILITY MANAGEMENT & STRATEGY COLLABORATIVE



# SMSC

## Three Pillars of Success



**Navigate:** the sustainability landscape and generate a strategic roadmap to enable smart sustainability investment specific to your business



**Implement:** implement various sustainability initiatives in alignment with the developed strategic roadmap



**Leverage:** the impact of your sustainability strategy by measuring the direct and indirect return on investment

# SMSC

## Methods of Engagement



**Brand Representation:** sustainability staffing and full-service management contracts



**Coaching:** supporting your team to be the most successful it can be from the inside-out



**A la Carte:** specific sustainability projects to support your sustainability success

Sustainability in the Marketplace

# Market Drivers & Trends



# Direct and Indirect Value of Sustainability

## Improves

- Customer Loyalty
- Employee Relations
- Innovation
- Media Coverage
- Operational Efficiency
- Risk Management
- Sales & Marketing
- Supplier Relations
- Stakeholder Engagement

## Drives

- Greater Profitability
- Higher Corporate Valuation
- Lower Cost of Capital

## Delivers

- Short and Long-Term Value Creation for Shareholders and Society

# Business Case for Sustainability

“Between 2006 and 2010, the top 100 **sustainable global companies** experienced significantly higher **mean sales growth**, return on assets, profit before taxation, and cash flows from operations in some sectors compared to control companies”


“**During the 2008 recession**, companies committed to **sustainability practices** achieved **“above average” performance** in the financial markets, translating into an average of \$650 million in incremental market capitalization per company.”

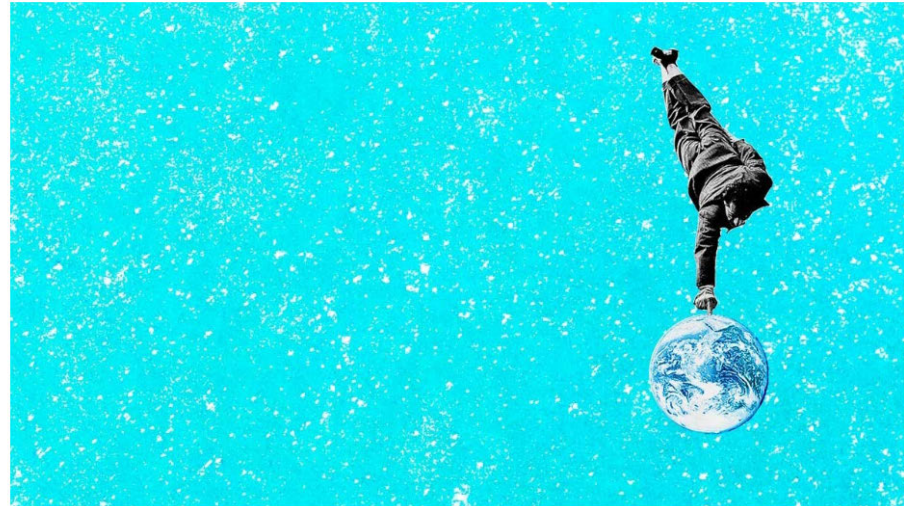
SUSTAINABILITY

## The Comprehensive Business Case for Sustainability

by Tensie Whelan and Carly Fink

October 21, 2016

 Save  Share  Comment  Print [\\$8.95 Buy Copies](#)



# COVID-19 + Sustainability

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- This is a chance to return to a “better” normal
- Renewed focus and energy around creating healthier spaces for people and fighting climate change
  - Ventilation + COVID
  - Human health and environmental impacts are inextricably linked
- Companies that invested in sustainability pre-recession fared better

# Why Green Building?

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Client  
Demand  
(35%)

Global Green  
Building  
Market  
\$960 Billion  
By 2023

Increased  
Productivity  
and Worker  
Satisfaction

Market  
Demand  
(31%)

Attracts  
Tenants; lease  
rates up 20%

Reduced rates  
of asthma;  
allergies, and  
other ailments

Global Green  
Building Market  
\$260 Billion  
(2013)

19.9% ROI on  
average for  
building  
owners

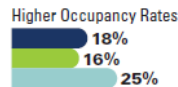
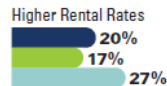
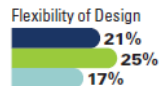
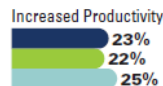
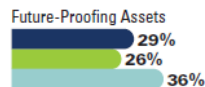
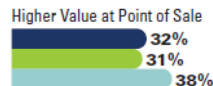
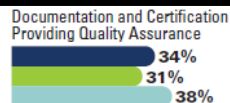
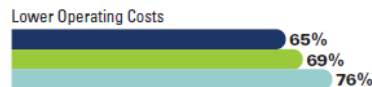
Increased Rental  
Rates and Lower  
Operating Costs

# World Green Building Trends Report-2018

## Most Important Benefits of Green Building (Respondents Who Selected Each Benefit as One of the Most Important in Their Market)

Dodge Data & Analytics, 2018

■ 2018 ■ 2015 ■ 2012

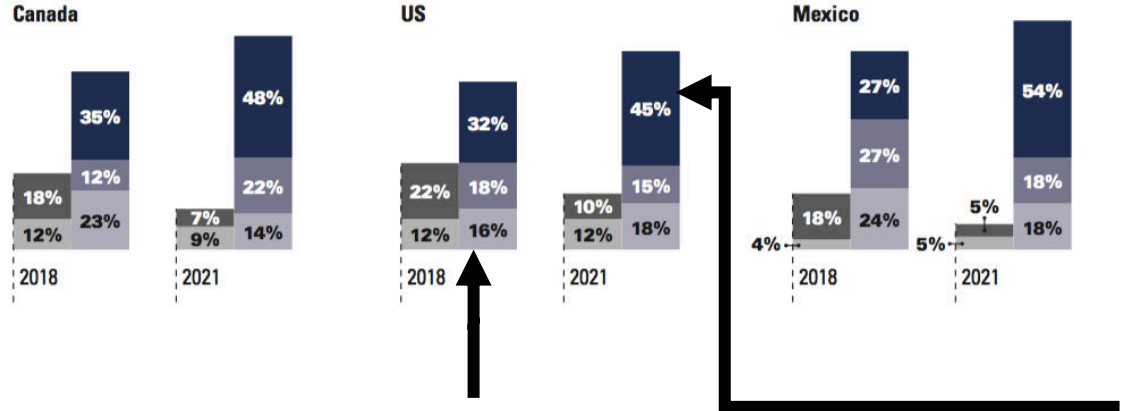


In 2018, for the first time ever, Occupant Health and Well-Being was ranked as one of the most important benefits of green building

# World Green Building Trends Report-2018

## Levels of Green Building Activity for Respondents in North America (2018 and 2021 Expected)

Dodge Data & Analytics, 2018



32% of all firms in the US have over 60% of their projects built to a green standard

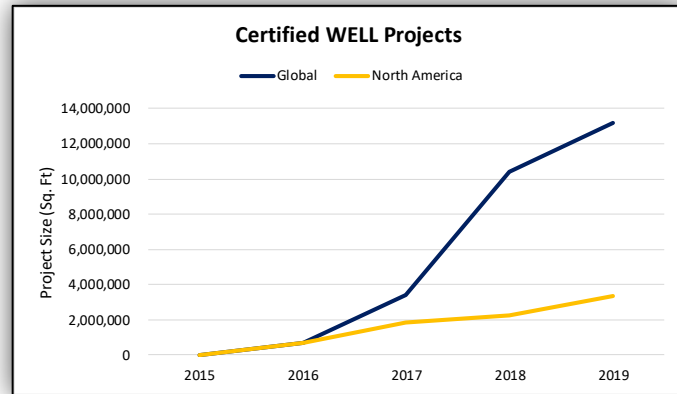
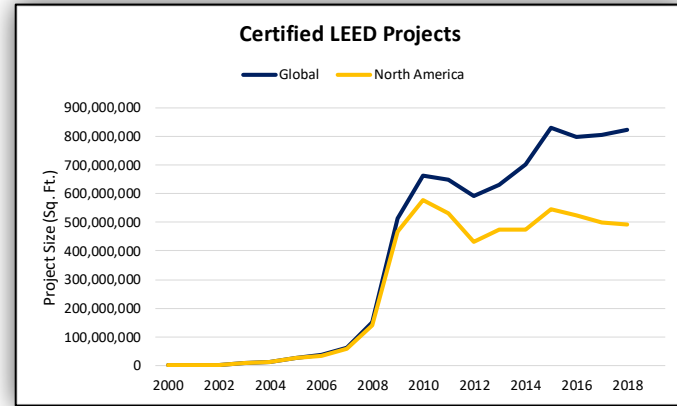
By 2021 this is projected to be over 45% of firms that have over 60% of projects built to a green standard

# Major Green Building Standards in North American Market



# Green Building Rating Systems

- **LEED Certified Projects**
  - November 2019: achieved **over 100,000** commercial LEED projects globally
- **WELL Certified Projects**
  - **91** projects in USA
  - **13** projects in Canada
  - **180** pre-certified projects
- **ILFI Living Future Projects**
  - **800+** LBC and/or Petal Registered Projects
  - **1,000+** Active Declare Labels
  - **50+** LPC Certifications



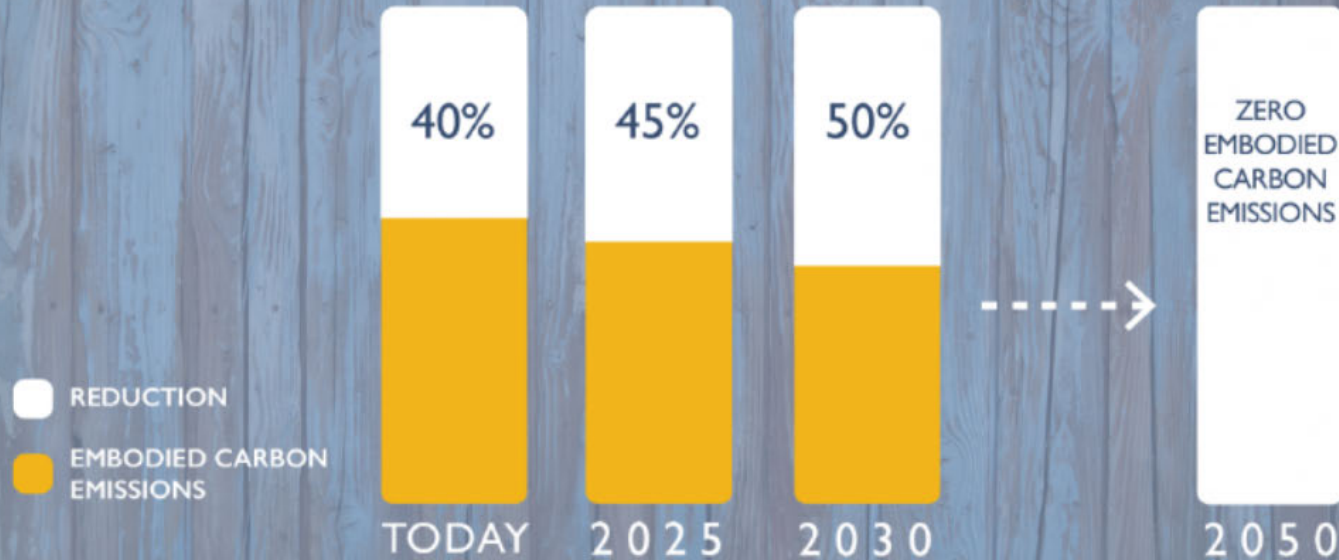
Sustainability in the Marketplace

# Pledges & Actions



# The 2030 Challenge for Embodied Carbon (Architecture 2030)

## THE 2030 CHALLENGE FOR EMBODIED CARBON Buildings, Infrastructure, and Materials



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- **Scope:** buildings, infrastructure and materials
- **Focus:** embodied energy (GWP)
- **Signatories:** global architecture and building community



# The 2030 Challenge for Products (Architecture 2030)

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Increase awareness for  
building products:

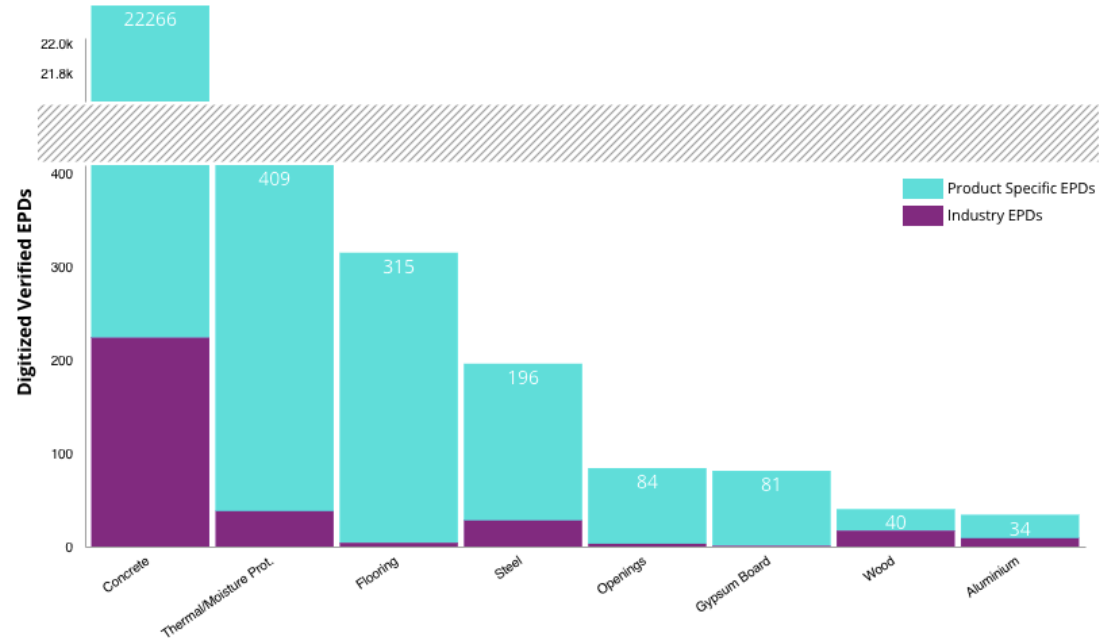
- Embodied carbon
- Developing Life Cycle Assessments (LCAs)
- Environmental Product Declarations (EPDs)



KEN KLOS, Architect  
Certified Passive House Consultant



# EC3-Embodied Carbon in Construction Calculator



# 35+ A&D LETTERS SENT 2012 & 2013

HKS

December 11, 2012

RE: HKS's Building Material Disclosure Initiatives

Dear Product Manufacturer:

HKS is dedicated to making environmentally informed decisions regarding architectural building products used in our designs. When selecting these products, it is key to have access to transparent data regarding chemical content and health considerations. Product specification and selection is a complex process, and we occasionally find it advisable to research the chemical content, life cycle, performance and maintenance issues, as well as costs. Therefore, one of HKS's initiatives is to evaluate the chemical content of architectural products, furnishings and equipment. We look to you for your assistance in our efforts.

One tool HKS uses to gather knowledge about the chemical content of building materials is the Pharos Project. Your company already may participate in the Pharos Project. If not, we encourage you to engage in this initiative so that, as partners in the building industry, together we can deliver healthier buildings to owners and end users. Manufacturers that provide full, transparent disclosure of their product content are the most helpful to our designers.

A second, newer industry initiative is the Health Product Declaration Collaborative™. This initiative asks building material manufacturers to adopt the Health Product Declaration (HPD) as a voluntary, open standard for reporting product content and health information so that similar products can be compared in a straightforward manner. We request that your company provide HKS with an HPD for your primary products.

As we continue to integrate the information gained from these building industry initiatives into our daily practice, we are committed to creating environments that truly enhance the human experience and preserve the health of building occupants.

Contact Nancy Hulsey (nhulsey@hksinc.com) if you have questions. We thank you in advance for taking these steps.

Sincerely,



B. Kirk Teske, AIA, LEED AP BD+C  
Principal | Chief Sustainability Officer



Dan H. Noble, FAIA, FACHA, LEED AP  
Executive Vice President | Director of Design

SMITHGROUP

January 1, 2013

RE: Transparency and Disclosure of Chemicals of Concern

Dear Product Manufacturer,

As you are aware, material selection has traditionally involved evaluating materials based on cost, performance, durability, aesthetics, and availability. As our industry advances, opportunities and requirements to evaluate the chemical content of materials has grown as well. Projects seeking certification through the Living Building Challenge require "Red List" compliance and it is our understanding that the forthcoming LEED v4 gives credit for using products that disclose chemical contents. This, coupled with growing awareness of chemicals of concerns by our clients, has led SmithGroup to expand its material research endeavors towards increased transparency.

To support this growing awareness, we have been evaluating our specifications in order to endeavor to identify and eventually eliminate a select group of chemicals that to our knowledge are known or suspected of being hazardous. In an effort to assist us in our endeavors, we are requesting manufacturers to provide additional product information on the chemical content of their primary products. This can be done by providing a completed [Health Product Declaration \(HPD\)](#), an International Living Futures Institute (ILFI) [Disclosure](#) label, or another form of third-party disclosure. We are looking for increased transparency, and manufacturers that comply with this request may be more likely to be specified on current and future projects as compared to those that do not comply.

Accordingly, we would highly encourage all manufacturers to complete a free, online [GreenWizard \(GW\)](#) profile for these primary product lines and to upload the above referenced transparency documentation along with other standard documentation to GW. GreenWizard provides SmithGroup the ability to track, manage and assign products to specific projects, and permits the quick sharing of information, expediting construction submittal reviews and LEED documentation.

Thank you in advance for your time and consideration.

Sincerely,



Russell Perry, FAIA, LEED AP BD+C



Greg Mills, AIA, LEED AP BD+C  
Co-Directors of Sustainable Design



# MANUFACTURER MATERIALS PLEDGE 2018

## CLOSING THE LOOP ON PRODUCT TRANSPARENCY

Dear Design Community Member,

We, as members of the building product manufacturing community, truly appreciate and applaud the many letters and requests for product transparency that we have received from concerned members of the Architecture and Design Community these past five years. Around 35 signatories from some of the world's biggest and most influential firms encouraged us each to continue on our sustainability journey with product transparency, accelerating a transformation in the manufacturing industry. The industry would not be where it is today without such advocacy and encouragement.

As responsible members of a community, you asked us each to tell you what was in our products and what impacts our products have in terms of human and environmental health and sustainability.

## WE RESPONDED, IN A BIG WAY

The manufacturers represented in this letter hold a total of:

**580** Material Ingredient Reports (e.g. Declare labels, C2C, MHC, HPDs)

**1320** Environmental Impact Reports (e.g. LCAs, EPDs)

**13** Certified Living Products

**Covering more than 26 product categories and 3430 product lines**

We are united in a common goal to ensure that high performing, healthy, sustainable and affordable building materials **are the rule, not the exception.**

This is where your help is crucial.





Hightower

TEKNOFLOR®  
A PROUD MEMBER OF THE HMTX FAMILY

Mohawk Group

LightArt®  
HANDMADE IN SEATTLE



ASPECTA®

A PROUD MEMBER OF THE HMTX FAMILY



ANDERSEN™  
WINDOWS & DOORS

Humanscale®

KOHLER®



Industrial Louvers, Inc.



COLDSPRING®

legrand®

Milliken.



mafi.com

Kingspan®

Tarkett

Armstrong®  
FLOORING

nora®



PROSOCO

WHOLE TREES®  
ARCHITECTURE & STRUCTURES  
www.wholetrees.com

Sustainable Northwest WOOD

LP 50  
LIVING PRODUCT 50



OregonDoor  
we build the doors that build your reputation

HermanMiller

Armstrong®  
CEILING & WALL SOLUTIONS

ROPPE HOLDING COMPANY  
ATECO ■ FLESCO ■ J&H LOGISTICS ■ ROPPE ■ SENECA MILLWORK ■ TRI-COUNTY BROADCASTING

ROCKWOOL®

GAF®

HMTX INDUSTRIES

shaw contract®

patcraft®

Mecho®  
INNOVATIVE DESIGN. TRUSTED PERFORMANCE.

METROFLOR® CORPORATION  
A PROUD MEMBER OF THE HMTX FAMILY



Furnishing Knowledge®

Collins

ASSA ABLOY  
The global leader in door opening solutions

ALPEN  
CLEAR PERFORMANCE

Steelcase®

Interface®

VERMONT NATURAL COATINGS®

KAWNEER  
AN ARCONIC COMPANY

columbia FOREST PRODUCTS  
Innovating Responsibly.®

rform

ALLEGION™

CS Construction Specialties®

MOORE & GILES

SAINT-GOBAIN

MAPEI®  
ADHESIVES - SEALANTS - CHEMICAL PRODUCTS FOR BUILDING

KNAUF INSULATION

CertainTeed  
SAINT-GOBAIN

J+J FLOORING GROUP  
A Division of Engineered FLOORS

USG Mannington COMMERCIAL

**HMC**

HEALTHY MATERIALS COLLABORATIVE

MILLER HULL

PERKINS  
+ WILL

ZGF  
ZIMMER GUNSUL FRASCA ARCHITECTS LLP

*nbbj*



Olson Kundig

MITHŪN

LMN

mahlum

MCCOOL  
CARLSON  
GREEN

MCLENNAN  
| DESIGN



Ankrom Moisan

*bassetti*  
architects

WOLLINS  
|  
CORMERMAI

integrus  
ARCHITECTURE

GGLO  
DESIGN

GRAHAM BABA ARCHITECTS

# AIA MATERIALS PLEDGE

April 15, 2019

Dear Living Product 50 Member,

Thank you for your letter to the design community in spring 2018. We want you to know that we are paying attention. We appreciate the enormous effort and progress that you've made in providing disclosure and improving your products' impacts and chemistry. **Your work allows us to deliver the optimized buildings that our communities need.**

We are using this information to select and specify products by giving preference to those that have:

- Publicly available material ingredient disclosure information.
- Publicly available environmental impact disclosure information.
- Documentation of compliance with strict VOC emissions requirements.
- Proof that they do not contain chemicals of concern identified by the Living Building Challenge Red List, the WELL Building Standard, the Healthier Hospitals Initiative's Safer Chemicals Challenge, and/or the Green Science Policy Institute's Six Classes.

To be clear, our ultimate aspiration is to design and construct with holistically optimized materials. **We want the materials used to create our projects to positively impact human health, the climate, the environment, and society.** We cannot achieve this goal alone. We must work together as designers, building owners, developers, and contractors to build knowledge and demand. And, of course, your help is crucial.



## MATERIALS PLEDGE

### EACH OF US PLEDGE TO

- Continue asking for transparency and better products.
- Continuously improve and update our specifications and procurement processes to require transparent and optimized products.
- Collaborate and share best practices, tools, and education.
- Support **Human Health** by preferring products which support and foster life throughout their lifecycles and seek to eliminate the use of substances that are hazardous.
- Support **Climate Health** by preferring products which reduce carbon emissions and ultimately sequester more carbon than emitted.
- Support **Ecosystem Health** by preferring products which support and regenerate the natural air, water, and biological cycles of life through thoughtful supply chain management and restorative company practices.
- Support **Social Health and Equity** by preferring products from manufacturers who secure human rights in their own operations and in their supply chains, and which provide positive impacts for their workers and the communities where they operate.
- Support a **Circular Economy** by reusing buildings and materials; and by designing for material efficiency, long life, and perpetual cycling.

We understand that **none of us can do this alone**. We welcome your engagement and commit to an ongoing dialogue with the Living Product 50, as well as other manufacturers, building owners, contractors, researchers, and others who are interested in working towards building product industry transformation. To move forward more quickly, we suggest convening face-to-face forums at Greenbuild, Living Product Expo, Living Future, and other similar conferences. We value our relationship with each of you and understand that the change we seek will not be accomplished overnight. Please join us in continued dialogue and collaboration as we learn from each other and improve our industry together.

Sincerely,

### MATERIALS PLEDGE SIGNATORIES

*(Listed on the following page)*



what now?

200+ COMPANIES JOIN TOGETHER  
TO CREATE CHANGE



MATERIALS PLEDGE

ARUP



Bergmeyer

ARROWSTREET

BORA

CANNONDESIGN



DIALOG

esg

EWING COLE

GBD

GOODYCLANCY

HACKER

HR

HED

hellmuth+bicknese

Hennebery Eddy Architects

HKS

IA

LMSA

Long Green Specs

LORD AECK SARGENT

Lrs ARCHITECTS

LSW ARCHITECTS

ma architects

mahlum

Mayer/Reed

MDS

MG2

MILLER HULL

MOODY+NOLAN

Moose Architecture + Design, LLC

HARRISON HERSHFIELD

MSR mrsdesign.com

m.thraikill architect.llc



opsis

OVERLAND

PAE

PAYETTE

PERKINS + WILL

REI DESIGN

SCB

SEA

SIEGEL & STRAIN Architects



VMDO

Wight

WRNSSTUDIO

YOST GRUBE HALL ARCHITECTS

ZGF

LIVING PRODUCT 50



Mohawk Group

ASSA ABLOY

The global leader in door opening solutions



teknion



COLDSPRING



mafi.com



shaw contract



ALLEGION

Milliken



Steelcase

EF Contract

KNAUF INSULATION

nora



Mannington COMMERCIAL

CertainFeed SAINT-GOBAIN

KOHLER



patcraft

FLOORING GROUP A Division of Engineered FLOORS



WORDS CAN  
INSPIRE BUT ITS  
ACTION THAT  
CREATES CHANGE

Sustainability in the Marketplace

# Firms Specific Actions



**Gensler**

# Gensler Design

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Architecture & Design Firm



# Gensler Sustainability



## **Net Zero Energy & Impact**

Carbon Neutral Buildings  
Zero Embodied Carbon Materials  
Life Cycle Analysis



## **Material Transparency**

Declare Label – Red List Free  
LPC Certified  
HPD



## **Multi-Attribute**

Recycled Content  
Bio-Based Material



## **Partnerships**



# materialsCAN

*Carbon Action Network*



**SKANSKA**

**Interface®**

**Gensler**

**Armstrong®** Inspiring Great Spaces®  
CEILING & WALL SOLUTIONS

**CertainTeed**  
SAINT-GOBAIN

**USG**   
IT'S YOUR WORLD. BUILD IT.®

 **SUPERIOR ESSEX®**

  
**Kingspan®**

# MSR Design

## MSR Design

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Architecture & Design Firm



# MSR Design Sustainability



## Material Transparency

Declare Label  
HPD



## Non-Hazardous Materials

Banned Substances List



## Material Optimization

Red List Free  
LBC Compliant  
GreenScreen BM-1 Free

# Materials Library Entry Criteria

Having signed the AIA 2050 Materials Pledge, MSR Design has made a commitment to:

- Support **Human Health** by preferring products that foster life throughout their life cycles and seeking to eliminate the use of hazardous substances.
- Support **Climate Health** by preferring products that reduce carbon emissions and sequester more carbon than emitted.
- Support **Ecosystem Health** by preferring products that regenerate the natural air, water, and biological cycles of life through thoughtful supply chain management and restorative company practices.
- Support **Social Health and Equity** by preferring products from manufacturers that secure human rights in their own operations and in their supply chains and provide positive impacts for their workers and the communities where they operate.
- Support a **Circular Economy** by reusing buildings and materials and designing for materials efficiency, long life, and perpetual cycling.
- Continue asking for **Transparency** and better products.
- Continuously **Improve and Update** our specifications and procurement processes to require transparent and optimized products.
- Collaborate and Share** best practices, tools, and education.

## AIA Material Pledge Commitments

### 1. WHAT WE REQUIRE: TRANSPARENCY

All products on our shelves require transparent documentation of composition through one of the following formats:

#### [Health Product Declaration \(HPD\)](#)

An affordable option for manufacturers; includes listing in HPD Repository

#### [Declare Label](#)

Includes listing in popular designer-facing Declare Database

### 2. WHAT WE AVOID: HARMFUL INGREDIENTS

- [Antimicrobials](#)
- [Stain repellants and other PFAS](#)
- [Bisphenols and phthalates](#)
- [Flame retardants](#)
- VOCs\*
- Formaldehyde\*
- PVC\*

\*Not possible to eliminate certain chemistries yet? Talk to us.

We support manufacturers that demonstrate commitment to transforming the building product market and creating a healthier, more equitable industry for people, society, and the environment.

*If a product meets the entry criteria at left, it may qualify for an additional green or yellow sticker in our library.*

### 3. HOW WE RANK PRODUCTS

#### Green Sticker

- [Living Building Challenge Red List FREE](#) or free of [GreenScreen Benchmark 1](#)

and

- Carries either a valid, third-party verified environmental certification or [Environmental Product Declaration](#)

#### Yellow Sticker

- [LBC Compliant](#), defined as a small percentage of proprietary-but-Red List Free ingredients, according to the manufacturer's word

or

- Third-party environmental certifications unavailable; no Environmental Product Declaration

#### Not Stickered

- Meets entry criteria with no additional certifications

## Translation into MSR product requirements

Criteria are publicly available. Other firms are encouraged to use them.

# HKS

# HKS

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Architecture & Design Firm



# HKS Sustainability

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## Specialties include:

Healthy materials analysis and transparency

Design for well-being

Energy analysis

Carbon accounting

Project sustainability assessment (such as LEED, BREAM, WELL)



## mindful MATERIALS



## Partnership with Delos



# mindful MATERIALS



Selected Filter: CSI Division: Thermal and Moisture Protection X

Search Materials

Keyword

- General Material Category
- CSI Division
  - 03 00 00 Concrete
  - 04 00 00 Masonry
  - 05 00 00 Metals
  - 06 00 00 Wood, Plastics, and Composites
  - 08 00 00 Openings
  - 09 00 00 Finishes
  - 12 00 00 Furnishings
  - 13 00 00 Special Construction
  - 31 00 00 Earthwork
- Manufacturer / Brand
- Green Building & Sourcing Protocols
- VOCs
- Certifications & Standards
- Reporting Body
- Regional Availability & Support

BASIC INFORMATION		MATERIAL INGREDIENTS		
Brand	Material	Report ?	Improve ?	Remove ?
Page 1				
Owens Corning	EcoTouch® PINK® Fiberglas™ Batt & Roll Insulation - Unfaced	Multiple	Multiple	ILFI Red L...
EverGuard	EverGuard Extreme TPO 50-80 mil	Multiple	Multiple	Multiple
Teknion	Optos	Declare - ...	Declare - ...	PVC-Free
ROCKWOOL stone wool i...	ROXUL SAFE™	Multiple	Multiple	PVC-Free
ROCKWOOL stone wool i...	CURTAINROCK®	Multiple	Multiple	PVC-Free
Thermafiber	Thermafiber® FireSpan® FF 90 & FireSpan® FF 40 Formaldehyd	Multiple	Multiple	C2C MH...*
ROCKWOOL stone wool i...	COMFORTBOARD™ 110	Multiple	Multiple	PVC-Free
ROCKWOOL stone wool i...	CAVITYROCK®	Multiple	Multiple	PVC-Free
Thermafiber	Thermafiber® RainBarrier® 45 & HD Mineral Wool Insulation	Multiple	Multiple	
GAF	EnergyGuard™ NH Polyiso	Multiple	Multiple	Multiple
Page 2				
GAF	Timberline Cool Series	HPD v2.0		
ROCKWOOL stone wool i...	COMFORTBOARD™ 80	Multiple	Multiple	PVC-Free
Thermafiber	Thermafiber® FireSpan® FF 90 & FireSpan® FF 40 Formaldehyd	Multiple	Multiple	
Thermafiber	Thermafiber® UltraBatt™ FF Formaldehyde-Free Mineral Wool In	Multiple	Multiple	C2C MH...*
Thermafiber	Thermafiber® Fire & Sound Guard™ FF Formaldehyde-Free Mine	Multiple	Multiple	C2C MH...*
Thermafiber	Thermafiber® UltraBatt™ FF Formaldehyde-Free Mineral Wool In	Multiple	Multiple	
Owens Corning	FOAMULAR® 250 Extruded Polystyrene (XPS) Rigid Foam Insulat	HPD v2.1.1		

- 5,000+ individuals from the A&D and manufacturing industries
- 200+ published manufacturers
- 20,000+ product listings

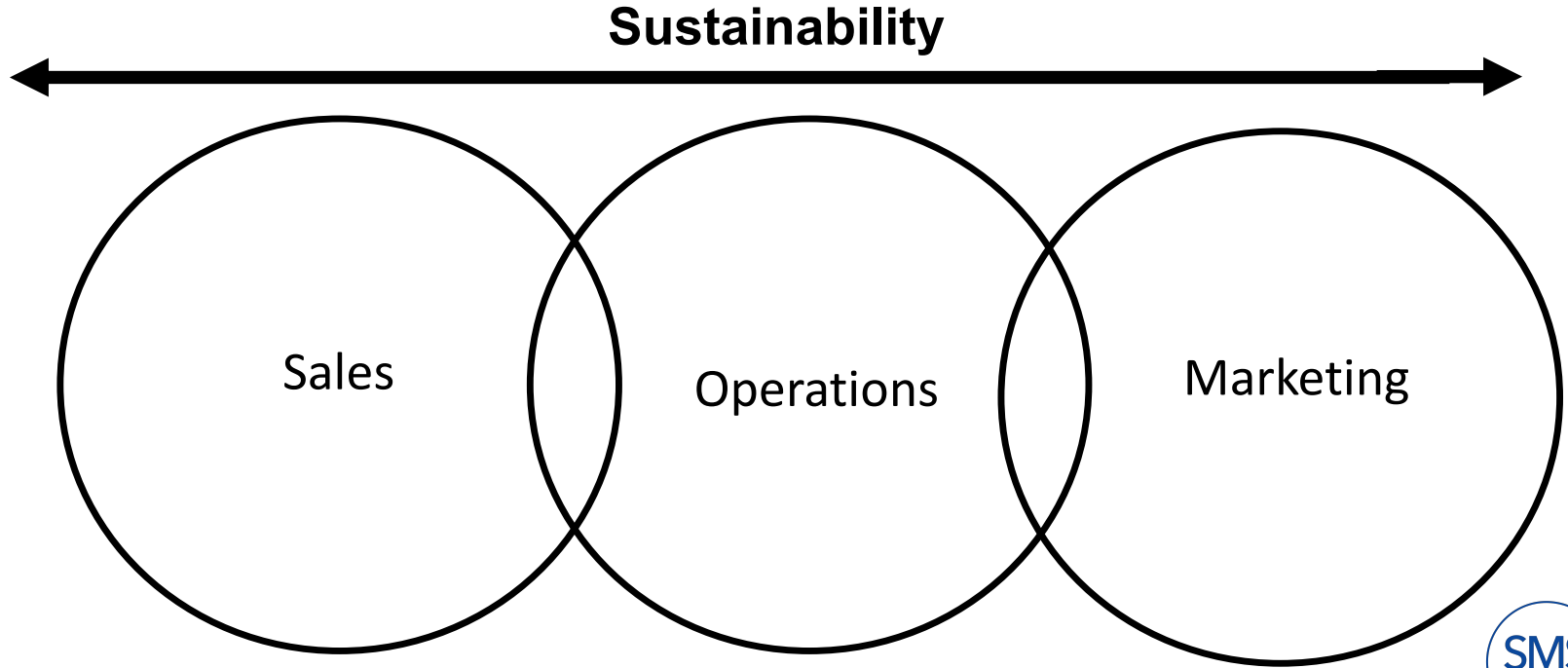


# 7 Things a Manufacturer Can Do

<https://www.buildinggreen.com/op-ed/manufacturer-s-guide-successful-sustainability-platform>

1. Understand your Life Cycle Impacts (LCA) and your compositional chemistry (supply chain)!
2. Publish HPDs, EPDs, Declare Labels, and get certified! (C2C Certifications, etc!)
3. Implement these documents into Material Libraries (like mindful MATERIALS)
4. Train your Sales & Marketing Teams on how to communicate Sustainability
5. Create products that support the AIA Materials Pledge Buckets
6. Track spending data with customers to show the market signal/demand for healthier materials is translating into revenue!
7. Optimize! Show how you've reduced your overall environmental and human health impacts.

# Comprehensive Program

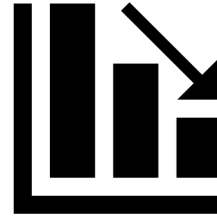


# Sustainability Investments & ROI

Initial Investment



ROI & Impact Reduction



Success



# Questions?

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# Thank you!

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Annie Bevan

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