Lighting Advocacy Letter

Toolkit V2

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About the Lighting Advocacy Letter

The Lighting Advocacy Letter is an initiative by lighting specifiers to accelerate the sustainability of lighting products. Inspired by the AIA Materials Pledge, the letter is intended to inspire a collective dialogue with the lighting manufacturing community about how to align intent and action around a common framework for sustainability. If you are a lighting designer or specifier, signing this letter is your opportunity to publicly commit to making more informed material choices and specification changes and supporting an ongoing dialogue with manufacturers to reduce the impacts of the built environment. This letter is hosted on mindful Materials.

Thank you to everyone who signed on to the Lighting Advocacy Letter. Please share this letter with colleagues, reps and manufactures. Let everyone know that you are committed to specifying holistically sustainable lighting products.

This toolkit will provide you with ideas on how to put this commitment into practice on your designs.

Dear Lighting Manufacturer,

As members of the lighting specifier community, we are working to accelerate a transformation in the manufacturing industry. Inspired by the 2019 AIA Materials Pledge, we are united across disciplines in a common goal: ensuring that healthy, high performing luminaires become the industry standard. We all want our projects to positively impact human health, the climate, the environment, and society.

As designers and specifiers, we are committed to the five areas of concern in the 2019 AIA Materials Pledge:

Human Health - Preferring products which support and foster life throughout their life cycles and seek to eliminate the use of substances that are hazardous to humans.

Climate Health - Selecting/giving preference to products with lower embodied carbon.

Ecosystem Health - Preferring products which sustain and regenerate the natural air, water, and biological cycles of life through thoughtful supply chain management and restorative company practices.

Social Health and Equity - Preferring products from manufacturers who secure human rights in their operations and supply chains, and which provide positive impacts for their workers and the communities where they operate.

Circular Economy - Preferring products that are designed for long life, with end-of-life solutions in mind and enabling a closed-loop manufacturing cycle.

To address these concerns and meet our goal of transforming the industry, we commit to continuously updating our specifications and sharing best practices, tools, and education to require transparency on material content and optimized luminaires. We further commit to giving priority in our specifications to those products and manufactures that:

Provide publicly available material ingredient disclosure information

Provide publicly available environmental impact disclosure information

Do not stop at material transparency, but strive for optimization

To achieve this goal, we must work together as designers, specifiers, building owners, developers, manufacturers, and contractors to build awareness, share knowledge, drive demand, and deliver solutions. We ask you as responsible manufacturers for your commitment to working towards luminaire industry transformation. To accelerate this mission and to leverage cross-industry insight and expertise, we seek your partnership in advancing this conversation at upcoming industry conferences and tradeshows.

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 lighting industry together.

If you have not already signed on, please visit https://www.mindfulmaterials.com/lighting-advocacy-letter

Thank you to all the Lighting Advocacy Letter Signatories!





























































Kirala Figurer

















































































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Documentation, Standards and Framework

There are a number of different types of documentation, standards and frameworks to consider to support your sustainability goals, and will be specific to your project. The following chart contains examples of standards that might be relevant to lighting.

		Human Health	Climate Health	Ecosystem Health	Social Health & Equity	Circular Economy
	Declare	✓				✓
Product Labels, Verifications, + Reports	Living Product Challenge	✓	✓	✓	✓	✓
	Cradle to Cradle	✓	1	1	1	✓
	RoHS	✓				
	Lighting For Good	✓	✓	1		✓
	Green Screen Certified	✓				
	Health Product Declaration	✓				✓
	Environmental Product Declaration		1	1		✓
Building Standards	LEED	/	✓	1		✓
	Living Building Challenge	✓	✓	1	1	✓
	WELL	✓	/	1	1	✓
	Passive House		✓			
Organizational Standards	JUST				1	
	B Corp		✓	1	✓	
	2030 Challenge		✓			
	Public Commitments and Reporting	✓	✓	1	1	✓
	WMBE				✓	
Frameworks	TM 66					✓
	TM 65		1			
	Product Category Rules		1			
	Life Cycle Assessment		✓	1		✓

Description of Common Documentation

There are a number of labels to consider when looking at lighting products. The following labels are a few that you might commonly encounter.

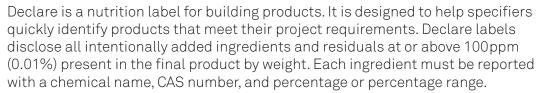
Cradle to Cradle

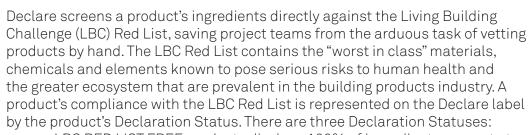
Cradle to Cradle Certified® is the global standard for products that are safe, circular, and responsibly made. Cradle to Cradle Certified assesses the safety, circularity and responsibility of materials and products across five categories of sustainability performance: Material Health, Product Circularity, Clean Air & Climate Protection, Water & Soil Stewardship, Social Fairness.



https://www.c2ccertified.org

Declare





- LBC RED LIST FREE products disclose 100% of ingredients present at or above 100 ppm (0.01%) in the final product and do not contain any Red List chemicals.
- LBC RED LIST APPROVED products disclose a minimum of 99% of ingredients present in the final product and meet the LBC Red List Imperative requirements through one or more approved exceptions.
- DECLARED products disclose 100% of ingredients present in the final product but contain one or more Red List chemicals that are not covered by an approved exception.

https://living-future.org/declare/basics/



Description of Common Documentation

Environmental Product Declaration

Architects and designers increasingly specify products with transparent LCA-based environmental impact reports. An Environmental Product Declaration (EPD) is a transparent, objective report that communicates what a product is made of and how it impacts the environment across its entire life cycle. A verified EPD can earn your products credits for LEED v4 and other green building rating systems. EPDs satisfy all of the requirements of Product Category Rules (PCR) and follow international standards, including ISO 14044, ISO 14025, and ISO 21930.

https://www.scsglobalservices.com/services/environmental-product-declarations

GreenScreen

GreenScreen® for Safer Chemicals is a method of comparative Chemical Hazard Assessment (CHA) that can be used for identifying chemicals of high concern and safer alternatives. GreenScreen was developed by and is a project of Clean Production Action.

https://www.greenscreenchemicals.org/about/gs-about-us

Health Product Declarations

Health Product Declarations (HPDs) provide a full disclosure of the potential hazards associated to product contents by screening these against a set of priority "hazard" lists, GreenScreen® Scores, and additional lists from other government agencies.



https://www.hpd-collaborative.org

Lighting For Good

Rethink. Redesign. Reuse. To develop, interpret, integrate, and transfer the knowledge and tools to implement life cycle thinking towards sustainable development, with a focus on responsible production, consumption, and governance.

https://lightingforgood.org/about/

Description of Common Documentation

Living Product Challenge

The Living Product Challenge is the world's most advanced product sustainability standard. The framework encourages manufacturers to create products that are healthy, inspiring and give more than they take across their life cycles.

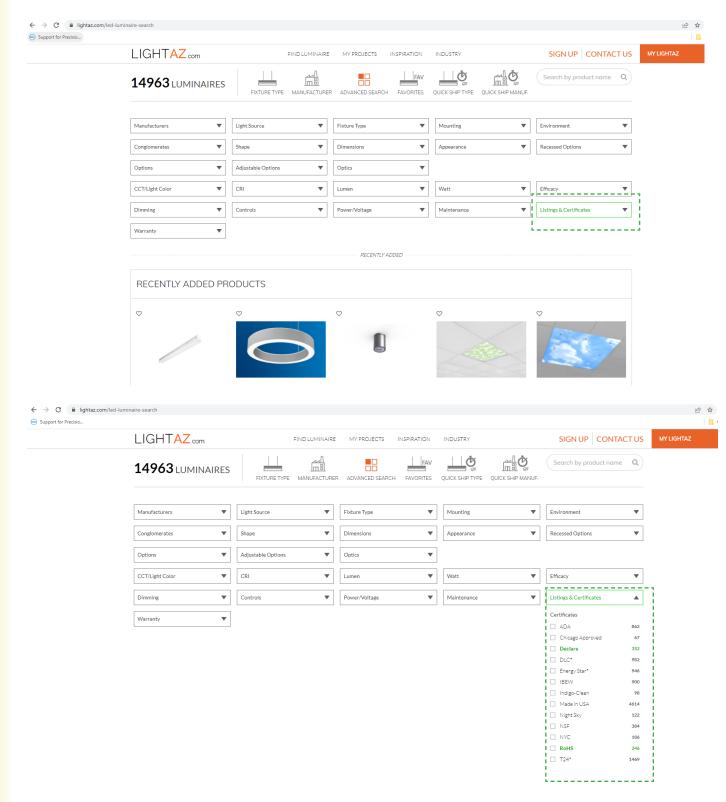
https://living-future.org/lpc/

RoHS

RoHS stands for Restriction of Hazardous Substances and impacts the entire electronics industry and many electrical products as well. The original RoHS, also known as Directive 2002/95/EC, originated in the European Union in 2002 and restricts the use of six hazardous materials found in electrical and electronic products. All applicable products in the EU market since July 1, 2006, must pass RoHS compliance. Directive 2011/65/EU was published in 2011 by the EU, which is known as RoHS-Recast or RoHS 2. RoHS 2 includes a CE-marking directive, with RoHS compliance now being

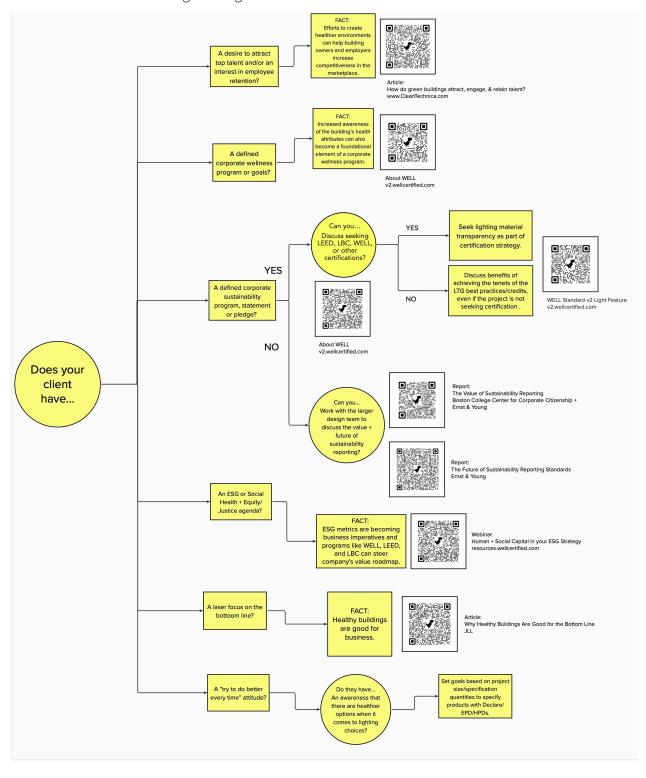
Search Tools

There are a number of different search tools available. It is important to select a search tool that allow the user to filter by sustainability criteria. LightAZ is one example of this type of search tool. It should be noted that LightAZ is a paid platform on the manufacturers end, so there might be products with sustainability attributes that are not included in this database.



Starting with Why?

Client buy-in is a key driver for success, but getting them on board doesn't have to be a herculean lift. Often their values, mission statements, corporate commitments, and policies already point towards their support of holistically sustainable and resilient practices, and bringing new options to the table can help them achieve their larger goals. Below is a flowchart of ideas to begin conversations with the larger design team and client.



Project Timeline and Action Steps

During each phase of a project, steps can be taken to ensure success. It's never too late to begin asking about options, but the earlier a conversation about material transparency begins, the better!



Schematic Design

- Build client + team awareness
- Develop goals
- Research on materials transparency for large quantity product types
- Initiate budget conversations
- Include Narrative language outlining requirements



Design Development

- -Have conversations with reps and manufacturers
- Hold preliminary pricing meeting
- Choose material transparency documentation or equivalent commitment on large quantity products
- Include documentation language in Luminaire Schedule



Construction Documents

- Ensure specification language is included in final documentation set
- Hold pre-bid meeting to review and clarify expectations with client and build team



Bidding and Construction Administration

- Have 1st round submittal review meeting with GC/EC/Distribution team
- Review required documentation for compliance

Lighting Narrative For Schematic Design

Sustainability:

1.1 Material Transparency Label

Declare /HPD Label: A minimum of (3) or more, if possible, interior fixture types of high quantity on the project will be chosen based on manufacturers having Declare labeled certification or providing a Health Product Declaration (HPD). Typically lighting fixture specifications provide 3 equals for all high quantity architectural fixtures per project. If a manufacturer of listed equals is not able to provide a Declare/HPD label, they may choose to provide documentation disclosing all materials to at least 1000ppm for the given product.

Note: Declare has been approved as a compliance pathway for the LEED v4 and v4.1 Building Product Disclosure & Optimization Credit as well. HPD documentation can contribute towards LEED credit v4/v4.1 MRc: Building Product Disclosure and Optimization: Material Ingredients.

1.2 Preference of RoHS Directive on Luminaire

RoHS: The goal is to have all light fixtures to comply with the RoHS Directive. Lighting Fixture specifications will prioritize fixtures with RoHS compliance when equally available.

Lighting Schedule Language

Strategies to fold material transparency into your lighting schedule:

- Target large quantity fixture types for material ingredient reporting (typically requires multi-name for competitive pricing).
- Prefer products with material transparency label, declarations, or certifications.
- If you struggle to find 3 equals for a luminaire that has a material ingredient reporting label, have a conversation with the manufacturers of the luminaires you would like to list as equals and see if they can provide material ingredient reporting to be listed on the schedule.
- The label shall be provided from the manufacturer at the time of submittals.
- If a manufacture is obtaining a label for the project, ask them to provide documentation of the label in development as proof of equivalency, as the labeling process can take some time to complete.

PROJECT NAME LIGHTING FIXTURE SCHEDULE Created: 20XX-XX-XX DESIGN PHASE CITY, STATE

TYPE	MANUFACTURER	PART#	LAMP	DRIVER TYPE	DIMMING REQUIRE D	REMARKS
LP1	LIGHTING MANUFACTURER A	PART # XWY	X W/LF LED 3500K 90 CRI	0-10V	Υ	4" WIDE LINEAR PENDANT FOR OPEN OFFICE; DECLARE LABEL
LP1 EQ1	LIGHTING MANUFACTURER B	PART # XWY MATERIAL INGREDIENT REPORT REQUIRED	X W/LF LED 3500K 90 CRI	0-10V	Υ	EQ1

Questions to ask your product rep?

- What is your stance on material health?
- Do you offer any products with material transparency documentation such as Declare, HPDs, EPDs, etc.?
- Do you have any planned offerings for products with these criteria?
- Do you offer PVC-free wire casing for your products as a standard offering or possible modification?
- Do you offer any take-back programs for your products or information on end-of-life suggestions for the product?
- Is the product easily serviceable for replacement parts on site? Example: LED boards & driver replacement
- Can you have the product listed in the Mindful Materials database?
- Are there parts of your process you could improve (ex: packaging?)

Example Goals

There are opportunities on every project to incorporate sustainability goals. The following suggestions are goals that are achievable now. Transparency documentation is increasing rapidly, as well as considering what is available now it is worthwhile to think about stretch goals that might be possible in the near future.

All on projects it can be helpful to start by taking the following steps:

- Identify the most commonly used products on the project
- Focus on obtaining transparency documentation for the **most** common products.
- Ask for:
 - EPD
 - Declare, HPD, RoHS
- Ask for PVC free products
- Convey to reps and manufacturers the importance of documentation
- Formalize requirements in the specifications and fixture schedule

Goals by Project Size

	SQ FT	Target # of Fixture Types with Material Transparency Documentation
Small Project	<70,000	1 Top Quantity Fixture Type
Medium Project	70,000 - 200,00	3 Top Quantity Fixture Type
Large Project	>200,00	5 Top Quantity Fixture Type

VE Talking Points

Strategy 1: It's the Right Thing to Do

- **Talking Point 1:** The negative impacts of the construction industry disproportionately affect communities of color. It's up to all of us in this industry to design spaces that are healthy in order to create an equitable world.
- **Talking Point 2:** Employees who work in "green buildings" are healthier, happier, and more productive.

Strategy 2: Tap into FOMO (Fear of Missing Out)

- Talking Point 1: According to McKinsey, sustainability is one of nine major shifts in the construction industry and they say that, "Companies that can adjust their business models stand to benefit handsomely, while others may struggle to survive."
- **Talking Point 2:** More than 200 private sector companies have signed the Climate Pledge, and over 10 US states have signed onto the Paris Agreement.

Strategy 3: Money, Money, Money

- **Talking Point 1:** Both consumers and shareholders expect companies to be engaged in combating climate change.
 - -It was reported that "90% of millennials are willing to pay more for products that are environmentally friendly, 80% are willing to pay more for products with a social sustainability story."
 - The market is shifting, and consumers are favoring companies that prioritize sustainable practice.
- **Talking Point 2:** Building owners and design professionals may be held legally liable if building occupants get sick because of exposure to materials in the building.
 - According to the AIA, "recent lawsuits and regulatory citations have pinned responsibility on design professionals and building owners who seemingly had nothing to do with the exposure that caused, or could cause, a crippling illness."
- Talking Point 3: Green buildings attract talent and can charge higher rent
 - Rental Income increased on average 6.3%, but could be as high as 23%
 - Occupancy Rate Increased on average 6%, or as much as 17%
 - Sales Price increased on average 14.8%, or as much as 43%

^{*}Highly Recommended read - Source Article: https://trimtab.living-future.org/blog/how-to-talk-sustainability-with-stakeholders/

Things you can do right now!

Sign the Lighting Advocacy Letter
Share that you did to encourage others to sign + learn more
Sign up for the Mindful Materials Newsletter
Stay in the loop as new tools/ideas emerge + advance
Talk about the topic often! Ask questions, share answers.
ratk about the topic often: Ask questions, share answers.
Bring up material transparency at product demos, trade shows, and factory visits to build awareness within the community
Proactively ask manufacturers and reps about their positions, processes, and strategies
Ask them to consider looking for ways to improve their practices
Target your Large quantity project items, or Master Luminaire Schedule
Map out conversations about material transparency with client + team
Ask Manufacturers to consider pursuing Declare/EPD/HPDs
Build your internal product database
Create + maintain your go-to list of "green lighted" products



2030 Challenge - https://architecture2030.org/2030_challenges/2030-challenge/

American Institute of Architects Committee on the Environment (AIA COTE) - https://network.aia.org/communities/community-home?CommunityKey=3b790506-aca5-4eff-aaf6-8a7b553dc0ef

Certified B Corporation (B Corp) - https://www.bcorporation.net/en-us/

Built Environment Plus (BE+) - https://builtenvironmentplus.org/

Carbon Leadership Forum (CLF) - https://carbonleadershipforum.org/

Declare - https://declare.living-future.org/

Ecomedes - https://www.ecomedes.com/

Environmental Product Declaration (EPD) - https://www.ul.com/resources/environmental-product-declarations-program

Green Light Alliance (GLA) - https://www.greenlight-alliance.com/

Green Screen Certified - https://www.greenscreenchemicals.org/certified

Health Product Declaration (HPD) - https://www.hpd-collaborative.org/

Illuminating Engineering Society (IES) - https://www.ies.org/

International Living Future Institute (ILFI) - https://living-future.org/

JUST - https://living-future.org/just/

Leadership in Energy and Environmental Design (LEED) - https://www.usgbc.org/leed

Light AZ - https://lightaz.com/

Lighting for Good - https://lightingforgood.org/

Living Product Challenge - https://living-future.org/lpc/

Lytei - https://www.lytei.com/

Metropolis Toolit - https://metropolismag.com/climatetoolkit/

mindful Materials - https://www.mindfulmaterials.com/

Passive House Institute US (PHIUS) - https://www.phius.org/home-page

 $\textbf{Restriction of Hazardous Substances Directive (RoHS)} - \text{https://ec.europa.eu/environment/topics/waste-and-recycling/rohs-directive_en}$

Sustainable Minds - http://www.sustainableminds.com/

 $\label{thm:continuous} \textbf{TM65 Embodied Carbon in Building Services: A Calculation Methodology} - \text{https://www.cibse.org/knowledge/knowledge-items/detail?id=a0q3Y00000IPZ0hQAP} \\$

TM66 Creating a circular economy in the lighting industry - https://www.cibse.org/news-and-policy/november-2021/tm66-creating-a-circular-economy-in-the-lighting

WELL - https://www.wellcertified.com/