

## Environmental Transparency

### EPDs Clearing the Way for Environmental Transparency

*by Laura Briggs*

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A sustainability movement established largely on assumed environmental benefit has exposed a need for transparency to minimize confusion and remove doubt about claims made by materials manufacturers. Evaluation of the environmental costs of building materials must be based on universal and transparent criteria that compare actual performance. Determining the true cost of materials requires the evaluation of overall product lifecycle costs. The long-term impact is potentially enormous.

Architects and designers specify hundreds of thousands of materials in the projects they design. They consider numerous claims of environmental performance as part of the process. Unfortunately, very few of those assertions are backed by independent verification, and even if they are, the lack of standardization of methodology makes a true comparison difficult.

### Transparency Should Come Standard

Rigorous, scientific analysis of carbon footprint introduces credibility and transparency to claims of environmental performance. Heightening the levels of verification and disclosure equips architects with a meaningful way to reduce dramatically greenhouse gas emissions.

Full environmental disclosure becomes integrated as the standard by which architects evaluate manufacturer claims during the materials selection

process, understand the likely environmental performance of a building, and promote low-carbon building materials for projects. Specifying materials that have undergone a true and rigorous vetting process is the key to making significant environmental impact as a design professional.

Environmental transparency has gained momentum in recent months. It has been a hot topic since Greenbuild, an annual industry gathering dedicated to green building and the emphasis of industry and governmental initiatives. The discussion is focused on the need to move beyond the “greenwashing” stage of the sustainability movement and how to do it most effectively.

Accepting unchecked environmental claims as fact served an early purpose in raising widespread awareness of the green movement, but the usefulness of that practice has long passed. The time has come to take the next step, a move into evaluation and decision-making backed by scientific evidence, the results of which are presented in a user-friendly, easy-to-compare format.

#### Standardized, Third Party Evaluation

Several drivers are influencing the need for comprehensive and comparable disclosure. The U.S. Green Building Council’s pilot credit program provides a transparency incentive for materials use and represents another move in encouraging a formalized process. The U.S. Forest Service recently advocated for green building codes and standards that include adequate provisions to recognize the benefits of lifecycle environmental analysis (LCA) to guide building materials selection.

Policies, mandates, and regulations will only be as credible and effective as the information upon which they are based. Achieving the full intended environmental impact requires uniformity in process and third-party evaluation of scientific evidence.

Many European nations are already closing in on requiring Environmental Product Declarations (EPD), a universal system based on third-party comparison of data across pre-established categories, as a means of standardizing the materials evaluation process. Enactment of such a requirement would have a dramatic impact that could extend globally through materials suppliers in other countries that sell products in those nations, perhaps the clearest indication that reliance on EPDs in the U.S. is about to take off.

Emerging code requirements are already forcing specifiers in the U.S. to consider and use materials that have undergone third-party environmental scrutiny. Those requirements, once limited to a few progressive cities, are extending rapidly to markets around the country. The requirement is good progress; what is missing is proof that the environmental performance of the materials actually measures up to what is represented.

#### EPD Emerging as Standard

A small handful of North American materials manufacturers have emerged as early environmental transparency leaders, producing peer-reviewed EPDs. The Western Red Cedar Lumber Association, which has completed peer-reviewed EPDs for decking and siding, is one example.

EPDs are based on a holistic approach that considers lifecycle analysis and product category rules that establish criteria for evaluation. LCA, the not-so-long-ago emerging standard in environmental performance evaluation, is integral to the EPD process, which carefully examines the complex and often difficult to understand data and produces a measurement report that has been compared in its simplicity to a food nutrition label.

Essentially, the EPD delivers a standardized, cradle-to-grave evaluation of environmental performance that fills in the gaps in the

environmental story and becomes a reliable resource for both manufacturers and purchasers. The uniform process and comparison of scientifically based data establish the necessary credibility for specifiers to make an informed decision.

Evaluating the overall costs of a product lifecycle is the only way to determine the true environmental costs of materials. The comprehensiveness of the EPD establishes a universal basis for independent comparison of environmental product attributes, minimizes confusion about technical data, and removes doubt about product sustainability.

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