Environmental Product Declarations: Market Adaptation to the New Reality

Environmental Product Declarations (EPDs) are standardized reports of environmental impacts linked to a product or service. In ISO terminology an EPD is a Type III environmental label. EPDs and their applicability to the wood products industry have been extensively discussed in the *Forest Products Journal*[1] and elsewhere in recent years.[2]

The US forest products industry in 2013 published industry-wide Environmental Product Declarations (EPDs) for key softwood products, making it the first basic materials industry in the nation to issue transparent, third-party verified environmental labeling of products. Now, all building materials manufacturers are facing pressure to develop EPDs. Some are dragging their feet, choosing to focus on perceived weaknesses in wood products industry environmental performance rather than forthrightly developing their own reports. In addition, Life Cycle Assessment (LCA), that forms the foundation for EPDs, is under attack from some quarters, primarily because it does not include assessment of landscape impacts. EPDs, as a result, do not report landscape impacts.

The August 2015 issue of *Environmental Building News* (EBN) was largely dedicated to examination of EPDs, with introduction to the topic summarized in a lead-off article ''EPDs Are the Future of the Building Industry, Whether You Like it or Not.'' [3] This article and the rest of the issue is well worth reading as it reports on recent developments, highlights several issues with respect to implementation, and reveals a fundamental misunderstanding of the purpose and application of EPDs. Those in or associated with the wood products industry need to understand the issues related to EPDs and their utility in order to address questions and concerns that may be on the minds of customers.

Misunderstood in some quarters is the role of LCA-based information in environmental reporting. An LCA yields information about environmental impacts linked to a particular product (for example softwood lumber) produced in a particular region in which practices are similar and inputs to energy production are common. Assessment encompasses product production, use, and disposal (or a subset of product life). LCA impact measures are developed from data obtained through measurement of inputs and outputs associated with a product or process, with the best available science then applied in determining the environmental significance of resource flows and emissions. Data collected are more or less precisely measurable and gathered and analyzed following a set of international protocols, resulting in analyses that can be reproduced and verified. An assessment may be industry wide (i.e., industry averages based on study of a number of individual manufacturers) or specific to a particular company or group of companies.

The measurable, reproducible aspects of LCA are key to its usefulness in environmental reporting, as it ensures that assessment is systematic, science-based, and free of unsubstantiated claims. For this reason, aspects of evaluation that are heavily value laden, or impact measures that are likely to differ significantly from site to site even within a given region, such as on mining or harvesting sites, are not evaluated or included in an LCA.

Certification provides third-party, producer and site-specific oversight of environmental and social impacts linked to basic raw materials procurement. As it is not uncommon for manufacturers to have dozens or even hundreds of widely scattered suppliers of raw material, including foreign suppliers, impacts can vary considerably and are highly site specific. And, assessment is often subjective.

Used together, LCA and LCA-based EPDs, and product certification, provide extensive information about the impacts linked to a specific shipment of a specific product. As explained by Trusty (2012),[4] LCA is but one of a number of tools available for evaluation of environmental impacts, noting that just as you should not grab a screwdriver when you want to drive a nail, or reach for a hammer in order to tighten the nut on a bolt, you should go to the toolkit and pick the right tool for the job at hand. He explains that ''the same logic applies to proper use of Life Cycle Assessment (LCA). The reality is that LCA is one essential tool, in fact one of the oldest, in a toolkit stocked with complementary tools that aid in evaluation of the potential environmental impacts of a product system throughout its life cycle.'' The same analogy applies to LCA-based EPDs.

Several articles within the recent EBN issue provide classic examples of misunderstanding of the role of LCA and EPDs in environmental assessment. One article, authored by Jason Grant, complains that EPDs ignore the worst impacts of wood and vinyl and then lists for wood a number of potential impacts that are addressed in forest certification programs. In point of fact, landscape impacts, for reasons discussed previously, will also not be found in EPDs for steel, plastics, cement, or any

[1] Bergman, R. and A. Taylor. 2011. EPD - Environmental Product Declarations for wood products—An application of life cycle information about forest products. *Forest Prod. J*. 61(3):192–201. http://www.fpl.fs.fed.us/documnts/pdf2011/fpl_2011_bergman001.pdf.

[2] Bowyer, J., J. Howe, K. Fernholz, S. Bratkovich, and S. Stai. 2011. Environmental Product Declarations (EPDs) Are Coming—Is Your Business Ready? Dovetail Partners, Inc. January 15. http://www.dovetailinc.org/report_pdfs/2011/dovetailepd0111.pdf.
Trusty, W. 2012. Environmental Product Declarations: Why, What, How? Dovetail Partners, Inc. October 30. http://www.dovetailinc.org/report_pdfs/2012/dovetailepd1012.pdf.

[3] Melton, P. 2015. EPDs are the future of the building industry, whether you like it or not. *Environmental Building News* 24(8):1–2.

[4] Trusty, W. 2012. The Toolkit Approach to Sustainability. Dovetail Partners, Inc. July 13. http://www.dovetailinc.org/report_pdfs/2012/dovetailtoolkit0712.pdf.

other basic material. Another author, Brent Ehrlich, also criticized EPDs for a lack of information regarding land-use impacts and then quoted University of Washington professor Kate Simonen who outlined extensive regional and site-specific variation of impacts that might result from logging in specific regions and on specific landscapes and sites. Undoubtedly, similar variation would be found in comparison of mining sites in various regions and specific locations. In any event, Simonen's commentary provides a clear rationale for separately assessing and reporting site-specific impacts.

Part of the problem that Grant and Ehrlich describe is related to the fact that transparent assessment and reporting of site-specific impacts has been embraced by only one basic raw materials industry—the wood products industry. It is also, as noted earlier, the only industry to have developed industry-wide EPDs for a wide array of building products. Consequently, wood is the only material available today for which detailed information gathered by third parties is available regarding operation under management plans that ensure appropriate protection of flora, fauna, water quality, soil productivity, historic areas, old trees, and more; maintenance of high conservation value forests; attention to indigenous people's rights and to tenure and use rights and responsibilities; attention to rights of workers and to the well-being of local communities; attention to who receives benefits from the forest, and so on.

Today, despite the fact that a Mining Stewardship Council was established in the same year as the Forest Stewardship Council, and despite the fact that substantial environmental and social impacts are associated with production of materials such as steel, aluminum, cement, concrete, plastic, and glass, there is no operable program for systematic oversight and reporting of environmental and social impacts linked to raw materials extraction, site restoration, and long-term site impacts. There are also no requirements or incentives or even ongoing discussion within the leadership of green building programs, product distributors, or others to bring about such reporting.[5]

Instead of anguishing over perceived shortcomings of LCA and EPDs, those who have concerns about lack of information on site impacts linked to raw materials extraction should perhaps direct their energies toward either bringing about certification, or transparency of sourcing supply chains, for the wide range of basic materials for which oversight of materials extraction and landscape management is currently wholly unavailable. To call out wood product EPDs as coming up short while turning a blind eye to sectors with no reporting at all just does not make sense.

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[5] For a more extensive discussion of this problem, see http://www.dovetailinc.org/report_pdfs/2009/dovetailcertmat0209.pdf.