

Communicating the Environmental Performance of Wood Products

Tarmo Rätty¹, Daniel Lindqvist², Tuula Nuutinen¹, Anders Q. Nyrud⁴, Sini Perttula³, Maria Riala¹, Anders Roos², Lars G. F. Tellnes⁴, Anne Toppinen³ and Lei Wang³

¹Metla, ²Swedish University of Agricultural Sciences (SLU), ³University of Helsinki, ⁴Norwegian Institute of Wood Technology (Tretknisk)

Correspondence: Tarmo Rätty, Metla Eastern Finland Regional Unit, PO BOX 68, FIN-80101 Joensuu. E-mail: tarmo.raty@metla.fi

Summary

Introduction

The objective of this study is to provide a basis for improving the market communication of the environmental performance of wood products in Nordic countries. The focus is on business-to-business relations. The research questions consider different aspects of environmental performance measures (EPMs) and their role in business communication, such as what EPMs are currently in use, how can the industry make efficient use of EPMs to promote wood products, what are the vital hotspots where environmental concerns are the most influential and where are the gaps between producer and customer/stakeholder perceptions on EPMs.

A broad approach was adopted that combined an extensive assessment of the relevant literature with an assessment of the views and opinions of Nordic woodworking industry stakeholders. The literature study links EPMs with companies' economic performances and defines the main classification principles for EPMs. The interviews with 37 sample companies highlight the current situation and perceptions on EPMs. The results of this study are drawn as a synthesis of the literature review and the interviews.

Literature study

Business and environmental performance

A core question for the efficient use of EPMs is whether such measures yield sustained economic gains. Giving a theoretical background to classify EPMs, the Natural Resource-Based View (Hart, 1995) considers that pollution prevention, product stewardship and sustainable development yield competitive advantage. Pollution prevention also refers to the management of internal processes.

The literature generally supports the positive relation between environmental and economic performance in business. However, one must of course pay attention to both the environmental and the economic measures used. According to the corporate communication literature, the industry should take account of a wider landscape of environmental communication than simply green marketing, influencing and aggressive strategies.

EPMs in woodworking industries

The ISO 14000 Environmental Management standards set generic criteria on how environmental management is assessed, requirements for environmental labelling and declarations as well as carbon footprint calculations and life cycle assessment (LCA). The standards from the CEN Technical Committee CEN/TC 350 "Sustainability of construction works" will play a focal role in the environmental evaluation of the buildings and materials used. The PAS 2050 standard is a publicly available specification for assessing product life cycle GHG emissions and carbon footprint. An important implementation of LCA is the environmental product declaration (EPD). Standardised EPDs are also used when the conformity of construction products is assessed. Carbon footprint calculations are based on the same principles as the EPDs.

The key process measures are ISO 14001 and the more rigorous Eco-Management and Audit Scheme. These measures aim to improve organisational capabilities as well as the managerial cognition and framing of environmental issues.

Product stewardship targets product differentiating. The measures here range from product-specific eco-labels (forest certification) to the rating systems of buildings (green building). Consumer eco-labels can also be material-based or take account of a wider set of sustainability criteria. In addition to forest certification,

both FSC and PEFC offer chain-of-custody certification for wood products. However, forest certificates are often found to be problematic, as consumers generally cannot identify sustainability criteria in forestry and labels do not compare with non-wood products. The Nordic Ecolabel and EU-Ecolabel initiatives apply to multiple product categories. The Nordic Ecolabel is limited to Nordic countries, but it can be used for a large number of wooden product categories. However, the possibilities of using EU-Ecolabel in wood products are currently limited. BREEAM and LEED are the most frequently used international green building certificates. Rating tools vary in their scope, and new tools are currently being developed to better take account of the actual environmental impacts of development.

Results of the Interview Study

Sustainable Forest Management (SFM) certificates, environmental management systems (EMSs) and Nordic Ecolabel are generally well known among the firms participating in the study. SFM measures are considered to be mandatory for market entry or to maintain the markets, especially in exports and B2B trade. The availability of chain-of-custody-certified wood products is still low. EMS certification is also important for export markets. Green building certificates are used by large constructors, but their perceived usefulness seems to be low. LCA measures, including EPDs, are not widely used, but interviewees considered their role to be a promising one.

The sustainable origin of wood and the ability to document the trustworthiness of company operations seemed to be the most important characteristics of EPMs. Certificates are considered to be a part of regular managerial practices, but some problems with multiple certifications were mentioned.

The environmental awareness of customers is believed to be rather low, but higher among industrial and public sector customers. Companies do not consider customer benefits to be a driving force of using EPMs. Owners or investors' interest in documentation is limited, however. Environmental communication is targeted to customers and utilises EPMs or promotes other environmental aspects, such as recyclability. The greatest potential for green marketing was seen in timber construction.

Quite commonly companies have a written environmental policy statement. Work practices and the follow-up of the policy rarely reach further than what is mandatory for the implementation of EMSs. The competitive or operational advantages of EMSs were not always identified.

Discussion and Conclusions

The use of EPMs is efficient if grounded on, or resulting in, sustained competitive advantages at a firm or product level. For wood products, this usually necessitates the substitution of wood for materials with inferior environmental credentials. While forest certification is unique to forest products, generic eco-labels, such as green building certificates and EPDs, make it possible to compare the environmental performance of wood with other materials.

Generic eco-labels such as Nordic Ecolabel and EU-Ecolabel make a claim for relatively better than average environmental performance. However, neither one is a genuine international or pan-European consumer label. In particular, EU-Ecolabel lacks specifications for wood products. Green building certification offers the best opportunities for wood, but these plans could be further developed to take better account of imputed environmental impacts. EPDs communicate environmental information efficiently, but they are not yet widely used. The introduction of the CE mark for construction products and green building certification will probably increase the motivation to adopt these systems.

The responsible and sustainable sourcing of wood is important product information that should be attached to wooden products throughout the value chain. Therefore, the industry should promote chain-of-custody certification. Companies that put their stakes on PEFC/FSC and ISO 14001 certificates alone should be aware that these measures may become the minimum requirement in the market in the future. A company that wants to stand out in terms of environmental friendliness has to do even more.