Deliverable D4.2.2
Report on Review of Existing Tools

Author
Building Research Establishment (BRE), United Kingdom
Contact: Katie Livesey, Senior Consultant

Executive Summary

This Report is Deliverable D4.2.2 of the EFORWOOD Project. It's main objectives are to:

· Review the existing tools for the assessment of different sustainability criteria
· Gather tools from different regions and sources to facilitate a better understanding of Sustainable Development assessment.

This report outlines existing sustainability assessment tools relevant to the Forestry Wood Chain (FWC) manufacturing stages. These tools are based on, Ecological Footprint Analysis (EFA), Life Cycle Analysis (LCA), Multi Criteria Analysis (MCA), Cost Effective Analysis (CEA), Cost Benefit Analysis (CBA) or Whole Life Costing (WLC).

This deliverable draws on previous work undertaken within EFORWOOD project (especially in Module 4) in particular work on criteria and indicators.

This report reviews FWC's sustainability appraisal tools and methodologies for all three tiers of sustainability, economic, social and environmental. All tools and methodologies have strengths and weaknesses depending on the objectives, timeline, and other criteria. What seems to be the most appropriate approach is to set objectives for each assessment and get information and results in various levels of detail. Therefore, it is advisable to employ more than one tool or methodology for more detailed analysis.

This work has shown national differences in the need for sustainability assessment linked to national requirements of relevant legislation and regulations. Individual companies often seek sustainability assessment for a particular reason and their requirements and objectives will call for a bespoke, tailored approach regardless which tool is being used.

For the FWC's sustainability, assessment is traditionally closely associated with the forestry side of business. Economic performance indicators were most frequently used in early sustainability assessments and have

the longest history of being relevant to manufacturing. They are strongly correlated with inputs to woodlands, forestry and mill operations as well as the sustainable development of resources.

Environmental issues are establishing themselves more and more for the manufacturing stage of the FWC most frequently as Life Cycle Assessment (LCA).

BRE has undertaken a focused research into the tools for assessing sustainability but was not able to identify any tools/methodologies that are being in-use in Europe for social tier in FWC relevant to manufacturing stages, which is the focus of Module 4.

The FWC has been scrutinised by various stakeholders to address social issues in the forestry phase. Sustainable Forest Management (SFM) provides a system of assessment (for both environmental and social elements of sustainability). SFM certification includes a wide range of social issues; it is applicable only to forestry even though it includes a number of indicators that are applicable to primary processing within FWC. SFM and CoC certification streamlines and supports the development of supply chain communication.

The major problem with social indicators or CSR indicators is that they are in their nature qualitative. They include how companies perform in relation to stakeholders including the community, to training, and equality in employment. It is possible to quantify some indicators, such as, health and safety (e.g. number of incidents), and availability of training. Manufacturing, not only in the FWC, is lagging behind in development and implementation of comprehensive social issues assessment tools or methodologies. If social criteria are measurable and reported, they are typically linked to H&S executives in each country or industry respectively. The FWC as well as other industries would benefit from more assistance in understanding what sector-relevant social issues are appropriate in the international context.