The Carbon Impact of Wood Processing

Adam Taylor
Associate Professor
Center for Renewable Carbon
The University of Tennessee

Environmental impact is becoming a more important component of the evaluation of products and processes. Life cycle assessment (LCA) is the standard method for evaluating these impacts. In LCA-based analyses, 'carbon impact' is a category that is frequently emphasized, whether it is called global warming potential, fossil fuel usage or carbon footprint. Wood products generally have favorable environmental profiles compared with alternative materials; however, the majority of wood's environmental burdens – and carbon impact in particular – is associated with the processing stages of the life cycle. Processes that require few non-wood inputs, less raw material modification, and use biomass energy sources have less carbon impact, even though they may be 'less efficient' in other respects.