



IFC's Environmental Edge

Measuring the Carbon Footprint of Forest Products Companies

IFC has partnered with National Council for Air and Stream Improvement, NCASI, to develop a leading-edge, user-friendly tool, called FICAT—Forest Industries Carbon Assessment Tool—to measure the carbon footprints of forest products firms. The free, downloadable application offers a standardized and verifiable approach to carbon and greenhouse gas assessment, adding to the growing knowledge base about how and where greenhouse gases are produced. Active pilots of the application are contributing to a continuous cycle of improvements. Successful test runs have been completed with IFC client Botnia, plus NCASI members Rayonier and Weyerhaeuser. The pilots helped firms identify sources of greenhouse gasses, positive effects of plantation sequestration and returns on investment for various plant improvements.



About the FICAT Model

- Based on default settings determined by the Nobel Prize-winning Intergovernmental Panel on Climate Change, the GHG Protocol of the World Resources Institute and World Business Council for Sustainable Development
- Addresses the specified forest products life cycle to identify key areas contributing to greenhouse emissions and energy inefficiencies
- Identifies potential improvements that would contribute most to minimizing carbon footprints and maximizing carbon sink, possibly leading to additional bottom-line benefits.

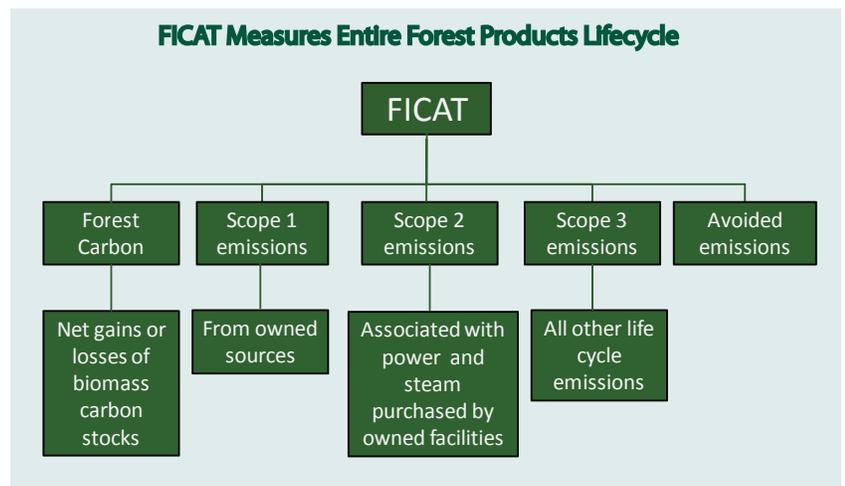
What FICAT Measures

The unique model looks at impacts spanning the entire life cycle, from forest beginnings through product end-of-life. Firms can use the tool to calculate these impacts for each of their operational sites. The assessment measures emissions and estimates avoided emissions associated with ten separate elements of operations.

- Land-based carbon
- Carbon in products
- Manufacturing-related emissions
- Emissions from forestry operations
- Emissions from non-fiber raw materials and fossil fuels
- Emissions from purchased electricity and steam
- Transportation-related emissions
- Emissions from product use
- Emissions from end-of-life
- Avoided emissions

Select Features of the Tool

- Microsoft SQL Express database application
- Built-in emissions calculator
- Results show amount of carbon by product and by where carbon is stored
- Estimates amount of emissions in manufacturing by combustion unit or by facility
- Estimates of avoided emissions through recycling of paper and paperboard; burning bio-mass energy products or wastes; exports of low-GHG-intensity electricity or steam
- Can be customized by companies to incorporate site-specific information in any of the IPCC areas



How FICAT Helps Forest Products Companies

"We strongly support the building of a standard for carbon footprint calculation"-- Raili Koponen, Botnia

While experts are still in the early stages of understanding carbon-related issues, it's clear that the tool will add to the growing knowledge base. IFC will continue to refine the model as more information becomes available in this emerging field of study.



Environmental Benefits

- Identifies energy inefficiencies and options to reduce GHG emissions.
- Leads to waste minimization and process improvements. Supports independent verification of GHG reduction claims and accuracy in product labeling.

Bottom-line Benefits

- **Increased efficiency and lower operating costs:** FICAT provides a consistent framework for internal benchmarking of energy consumption and waste generation. This is fundamental to competitiveness in global forest products markets.
- **Potential for reduced financing costs, based on the potential for reduced perception of risk:** Even if your company operates with the highest environmental standards, there is a perception in the marketplace that forest products firms operate within a higher risk environment. The ability to demonstrate a clear commitment and provide objective data can help reduce this perception of risk, and possibly contribute to lower financing costs.
- **Potential for increased financing options:** All IFC real sector projects are required to report greenhouse gas emissions, for instance. And banks that have signed on to the Equator Principles commitment to sustainable lending practices would likely welcome the validation that such an assessment would bring.
- **Improved image, community and NGO relations and brand enhancements:** It's no secret that the environmental image of the global forest products industry needs some repair, in part due to past mistakes by some forest products firms, and in part due to a degree of public mischaracterization about the industry. Defining firms' carbon footprints and sharing the results of FICAT assessments demonstrate transparency, openness, and a commitment to working with all stakeholders. This can go a long way toward improving relations.
- **Identifying future carbon credit cap-and-trade opportunities:** Although the model can't be used in applying for current carbon credits, it can highlight aspects of operations with potential so that companies can maximize their carbon credit opportunities. FICAT is of limited use in direct pursuit of such credits because the accounting rules for carbon credits are quite prescriptive and highly program-specific.

Help us learn more

- Share your feedback: The more commentary from users, the better the model becomes.
- Share your data: Providing summary data to NCASI will help establish benchmarks for each step, allowing companies to compare results.

Download the tool at www.ficatmodel.org

For more information about Forest Industries Carbon Assessment Tools (FICAT), please contact:
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