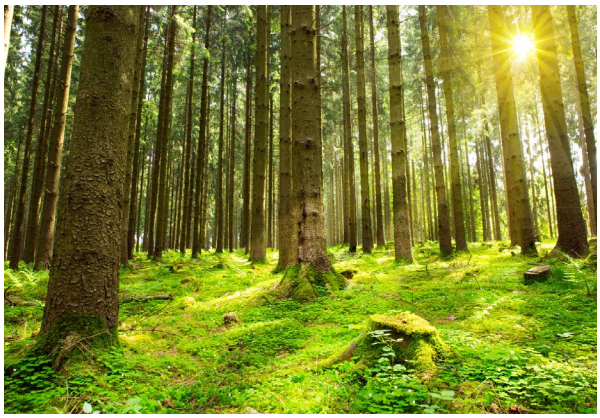
nwfa
National Wood Flooring Association

Life Cycle Analysis



Wood floors are environmentally friendly. Unlike other flooring materials, the raw materials used to make them – trees – can regrow after they are cut down, which replaces the material that is harvested.

A Life Cycle Analysis (LCA) scientifically assesses the environmental impacts associated with the life cycle of a product. For wood floors, this includes everything from when the tree sapling first sprouts from the forest floor, to growth cycle, harvest, saw mill, flooring mill, transport, distribution, installation, use, maintenance, repair, and disposal or recycling.

A life cycle inventory (LCI) is a part of LCAs. LCIs are a science-based approach to addressing environmental claims for products. In simplified terms, LCIs measure the raw material and energy inputs and outputs to manufacture a product. Because manufacturing processes are different, separate LCIs have been conducted for engineered and solid wood floors.

Engineered Wood Floors
Manufacturing prefinished engineered wood floors typically includes eight processes: log yard; bucking and debarking; block conditioning; peeling and clipping; veneer drying; layup; trimming, sawing, sanding, and moulding; and prefinishing.

The LCI revealed that prefinished engineered wood flooring has two significant advantages over non-wood substitutes; it is a carbon neutral product, and it sequesters carbon during its service life.

Solid Wood Floors
Manufacturing unfinished solid wood floors typically includes seven processes: log yard; drying; planing; ripping; trimming; moulding; and sorting.

The LCI revealed that solid unfinished wood flooring has the same significant advantages as prefinished engineered wood flooring: it is a carbon neutral product, and it sequesters carbon during its service life. In addition, wood has low greenhouse gas emissions and low environmental impacts.

More-detailed information about the environmental benefits of wood flooring is available at https://www.woodfloors.org/environmental-benefits.aspx.