

# ENVIRONMENTAL FOOTPRINT COMPARISON TOOL

*A tool for understanding environmental decisions related to the pulp and paper industry*



## EFFECTS OF DECREASED GREENHOUSE GAS EMISSIONS ON ENERGY USE

### Emissions from End of Life of Forest Products

The most likely way to reduce the end-of-life emissions associated with forest products is by reducing methane emissions associated with their degradation in landfills. There are several ways to accomplish this, however, and the implications for energy consumption vary among them.

Methane emissions can be reduced by increasing the use of landfill capping systems that capture and burn methane before it is released to the atmosphere. The energy-related impacts of this are small unless the methane that is captured is used for energy, in which case the value chain can be credited with this “energy production” activity.

Methane emissions can also be reduced by keeping degradable materials out of landfills. The energy impacts of diverting paper from landfills depend on how the diverted paper is used. If the paper is recycled into more paper, the overall effect may be to reduce total energy use because it often takes less total energy to produce paper from recovered fiber than from virgin fiber (although the impacts are highly grade-specific and the impacts on non-renewable energy consumption may be the exact opposite). More information on the energy-related impacts of recycling is available in the section on [Effects of Recycled Fiber Use on Energy Use](#).

If paper that was destined for landfills is diverted and burned for energy, there is a co-benefit with having supplied biomass-based energy.

Like for paper, methane emissions can be reduced by keeping degradable wood products out of landfills. Demolition debris from structures containing wood can be segregated as combustible wood materials, saving landfill space and reducing methane emissions. Programs to collect and burn “urban wood,” which includes demolition debris and woody debris from other urban sources (e.g., tree limbs from power line clearance), are increasing with the demand for biomass.