

# ENVIRONMENTAL FOOTPRINT COMPARISON TOOL

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



SOLID WASTE

## EFFECTS OF RECYCLED FIBER USE ON SOLID WASTE

### Life Cycle Results for One Major U.S. Study

The Paper Task Force report (Paper Task Force 2002) contains life-cycle study results characterizing all of the solid wastes landfilled along the value chain for virgin and recycled paper, including solid waste resulting from the generation of purchased electricity (which, due to coal burning at utilities, contributes a significant amount to the life cycle solid waste loads). The results, shown in the following table, suggest that recycling reduces life-cycle solid waste generation for all grades. The smallest differences between virgin and recycled production are for grades like office paper (copy paper) where the recycling process involves the deinking of recovered paper consisting largely of chemical pulp fibers, often containing significant quantities of inorganic filler or coating.

The Paper Task Force results are for average U.S. waste management methods and do not differentiate between landfilling and beneficial use of mill and utility solid wastes. The impacts of removing beneficially used industrial solid waste from the analysis are uncertain, but because so much of the benefit from recycling derives from impacts on municipal solid waste (MSW), a revised analysis accounting for beneficially used industrial waste would likely continue to indicate solid waste benefits for recycling. The results could be different, however, in situations where the alternative to recycling is burning for energy.

Table R19.

Product	kg Solid Waste per Tonne of Paper Disposed/Recycled		
	Virgin Production Plus U.S. Average Waste Management	Recycled Production Plus Recycling	Difference
Newsprint	1,239	570	669
Corrugated	970	269	701
Office paper	1,142	578	564
Recycled folding carton paperboard vs. coated virgin unbleached kraft)	949	290	659
Recycled folding carbon paperboard vs. virgin bleached kraft board	1,121	290	831

Source: Paper Task Force 2002.

## References

Paper Task Force. 2002. *Paper Task Force recommendations for purchasing and using environmentally preferable paper.*

<http://epa.gov/epawaste/conservation/tools/warm/pdfs/EnvironmentalDefenseFund.pdf>