EFFECTS OF RECYCLED FIBER USE ON ENERGY USE

Transportation Energy

Transportation distances related to fiber procurement and product delivery vary enormously. Wood, pulp, and recovered paper are now routinely shipped half way around the globe. Therefore, to understand whether increased recycling causes significant increases in transportation energy consumption, it is necessary to understand the relative distances and modes of transport involved in bringing additional recovered fiber to specific mills. If the transportation distances for virgin fiber and additional recovered fiber are greatly different, the impact of transportation-related energy can be significant to the overall energy implications of increased recycling. Put another way, the assumption of "typical" transportation distances can yield misleading results in judging the effects of specific efforts to increase recycling.

One study that attempted to use typical transportation distances in the U.S. found that the energy required for collecting and transporting virgin fiber (1.2 to 1.9 MMBtu/ton paper produced) was not significantly different from the energy required to collect, process and transport wastepaper (1.5 MMBtu/ton paper produced) (Paper Task Force 2002). These energy requirements are small compared to those for manufacturing (10 to 40 MMBtu/ton) discussed in the Energy Use in Manufacturing section. It is important to repeat, however, that these "typical" results can mask site-specific circumstances where transportation-related energy requirements might be much more significant. Those wanting to understand the energy implications of specific recycling initiatives will need information that allows them to judge the potential significance of transportation energy. In specific, it will be necessary to know the likely distances involved in bringing additional recovered fiber to mills.

References

Paper Task Force. 2002. *Paper Task Force recommendations for purchasing and using environmentally preferable paper.* http://epa.gov/epawaste/conserve/tools/warm/pdfs/EnvironmentalDefenseFund.pdf