

## FILLERS AND THE CARBON FOOTPRINT OF PAPERMAKING

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### Abstract

Carbon footprint reduction is a global concern. For the papermaking industry, strategically effective measures of carbon footprint reduction can include many aspects such as energy efficiency improvement, use of renewable carbon-neutral energy, practicing of sustainable forestry, and development of an integrated forest products biorefinery. Filler addition in papermaking can save substantial amounts of pulp fibers, and reduce energy consumption, which can surely contribute to reduction in paper's carbon footprint. However, the negative effect of filler addition on paper recycling, and the energy consumption associated with the production, processing, and treatment of fillers, will contribute to the carbon footprint. On balance, it can be considered that filler addition in reasonable amounts is likely to lower the paper's carbon footprint. Certain research work is still needed to better understand the relationship between filler addition and the carbon footprint of papermaking.

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