



Waste:



Emissions from Waste result mostly from methane production in landfills. For paper waste, we also factor in production as it has a significant and well quantifiable impact on overall emissions.

On mixed waste:

The Ministry for the Environment of New Zealand¹ provides excellent data on the emissions from waste. We made the assumption that all waste is land filled without gas recovery, as this is prevailing practice of waste management in most countries. If your municipal waste is burned in a combined heat and power generating plant, do not account for the emissions from waste as this technology lowers the emissions from waste to almost zero.

¹ Ministry for the Environment of New Zealand, 2007, <http://www.mfe.govt.nz>

On paper:

Depending on type of paper, country of production and method of calculation the values for production vary between 0.5 and 2 tCO₂e/t Paper. We assume an average of 1t CO₂e/t Paper. Additional Emissions come from paper disposal: We estimate 1 tCO₂e/t Paper, including emissions from landfill. In Europe, about 75% of all paper goes to landfill, based on Van den Reek (1999). Using recycled paper reduces the emissions from paper production by an average of 76% while recycling paper reduces emissions from landfill by 100%.

Mainly based on:

Van den Reek (1999), Reduction of CO₂ emissions by reduction of paper use for publication applications, university of Utrecht, available at <http://www.chem.uu.nl>

with additional information from:

RWI, 1996, Band 2: Forschungsberichte der Verbaende, Verband Deutscher Papierfabrieken, CO₂-Monitoring der deutschen Industrie ökologische und ökonomische Verifikation, Untersuchungen des Rheinisch-Westfälischen Instituts für Wirtschaftsforschung; Essen, 134-150;

The State of the Paper Industry: Monitoring the Indicators of Environmental Performance - A collaborative report by the Steering Committee of the Environmental Paper Network (2007), available at <http://www.environmentalpaper.com>

Vasara, P., Impact on global warming and carbon sequestration projects on the pulp industry, Seventh global conference on paper & the environment, 31 May – 1 June, 1999.

Bradley (1999) J., A life cycle assessment of graphic paper and print products, Seventh global conference on paper & the environment, 31 May – 1 June, 1999;