

Life-cycle assessment of various garbage bags.

DEISS

At first glance, garbage bags are a curious product. Right from the moment of their application they themselves become garbage, and in fact create further garbage whenever the intention is to collect garbage. And yet they are essential; indeed, in many cases, the hygienic disposal of the waste we generate would be unthinkable without a collection system based on garbage bags. Reusable systems using litter bins and containers are often unable to achieve the same functional equivalence as

a disposable garbage bag, their use frequently restricted to the collection of non-wetting, non-odorous waste, or such that poses no risk to human health. Disposable garbage bags cover a noticeably broader scope of application.

In the interests of sustainability, however, it is essential, from the ecological viewpoint, to optimise these disposable products in such a way that any negative environmental impact caused by their application will be largely minimised.

COMPARISON OF RESULTS IN THE SCENARIO NON-RECYCLABLE WASTE

100 % equates to the highest environmental footprint

	Garbage bag made from industrial regranulate	Garbage bag made from post-consumer regranulate	Garbage bag made from ecovio®	Garbage bag made from waste paper
Climate change	56 %	89 %	100 %	82 %
Acidification	18 %	29 %	75 %	100 %
Photochemical oxidant creation	20 %	39 %	100 %	86 %
Stratospheric ozone depletion	1 %	1 %	100 %	5 %
Terrestrial eutrophication	12 %	23 %	100 %	70 %
Aquatic eutrophication	23 %	40 %	14 %	100 %
Particulate matter	20 %	34 %	90 %	100 %
CED (cumulative energy demand) total	26 %	45 %	40 %	100 %
CED non-renewable	58 %	100 %	81 %	95 %

Relative comparison of net results (the highest value equates to 100 %) / according to Ifeu study conducted on behalf of Sund Holding 2019

COMPARISON OF RESULTS IN THE SCENARIO RECYCLABLE-WASTE COLLECTION

100 % equates to the highest environmental footprint

	Garbage bag made from industrial regranulate	Garbage bag made from post-consumer regranulate	Garbage bag made from ecovio®	Garbage bag made from waste paper
Climate change	44 %	72 %	100 %	95 %
Acidification	14 %	22 %	89 %	100 %
Photochemical oxidant creation	16 %	32 %	100 %	77 %
Stratospheric ozone depletion	1 %	2 %	100 %	6 %
Terrestrial eutrophication	10 %	19 %	100 %	63 %
Aquatic eutrophication	31 %	53 %	19 %	100 %
Particulate matter	15 %	28 %	100 %	95 %
CED (cumulative energy demand) total	23 %	41 %	53 %	100 %
CED non-renewable	37 %	67 %	80 %	100 %

Relative comparison of net results (the highest value equates to 100 %) / according to Ifeu study conducted on behalf of Sund Holding 2019

CONCLUSION

With PREMIUM PLUS you cut up to 30% of CO₂ compared to other garbage bags on the market.