

European paper sacks reduce carbon footprint by 9% between 2021 and 2024

Paris/Karlstad, 16 April 2026. European paper sacks have become significantly more climate-efficient: their carbon footprint per sack decreased by 9% between 2021 and 2024. This is the outcome of a recent study conducted by RISE on behalf of the European Paper Sack Research Group (ESG), a collaboration between EUROSAC and CEPI Eurokraft. Over the same period, the fossil carbon footprint per tonne of sack kraft paper was reduced by 5%. Increased use of renewable energy in sack kraft paper and paper sack production was a key driver behind these improvements. The results underline the industry's ongoing commitment to decarbonisation.

The cradle-to-gate assessment confirms a reduction in the fossil carbon footprint of average European sack kraft paper and paper sacks over a three-year period. Between 2021 and 2024, emissions per paper sack decreased by 9%, from 106.7 g CO₂e to 97.3 g CO₂e. The production of purchased sack kraft paper accounts for around 60% of the cradle-to-gate fossil carbon footprint of paper sacks and therefore represents the dominant emissions contributor. Emissions from sack kraft paper production were reduced by 5% per tonne over the same period, from 484 kg CO₂e in 2021 to 462 kg CO₂e in 2024. "These results demonstrate how our industry is driving decarbonisation through joint efforts," explains Catherine Plitzko, General Delegate of EUROSAC. "The findings of this study will help us to further refine our net zero pathway and identify where we can achieve the greatest impact."



Renewable energy drives emissions reductions

A shift in the electricity mix used by paper mills and converting plants played a decisive role in the emissions reductions. Sack kraft paper production already relies primarily on renewable energy. An increasing number of mills have expanded their procurement of low-carbon electricity, including electricity backed by Guarantees of Origin. In 2024, 54% of the electricity consumed by sack kraft paper mills originated from renewable or low-carbon sources – an increase of 25 percentage points compared to 29% in 2021. In addition, biofuels account for 85% of all on-site fuels, with internal biofuels alone representing 77% of total on-site energy consumption. The mills generate 58% of their own electricity demand. Sack converters also increased their use of renewable electricity. Emissions from purchased grid electricity at



converting plants decreased by 44% between 2021 and 2024. In 2024, 41% of the electricity consumed in converting operations came from renewable or low-carbon sources.

Low-carbon solution with a clear pathway

The European paper sack and sack kraft paper industry has been collecting environmental performance data since 2007 to continuously improve climate performance across the value chain and provide customers with reliable data to support their Scope 3 emissions reporting. “Our study confirms that paper sacks are a low-carbon packaging solution with a steadily declining fossil carbon footprint,” says Catherine Plitzko. “We are building on this progress and the insights gained from the study by translating our net-zero pathway into concrete action areas and expanding circular initiatives. Paper sacks are widely recyclable, and projects such as ‘Paper Sacks Go Circular’ which has now been scaled up to the Association ‘Construction Goes Circular’ aim at increasing collection and recycling after use, thereby strengthening their contribution to a circular economy.”

Further information

The latest assessment is based on updated and refined methodological criteria to ensure alignment with current scientific standards. Due to these methodological updates, direct comparisons with earlier assessments are not possible. A detailed **fact sheet** provides background information on the methodology and data, while a concise **information booklet** summarises the key findings of the study.

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Note to editors:

EUROSAC is the European Federation of Multiwall Paper Sack Manufacturers. The federation represents over 80% of European paper sack manufacturers. Its members operate in 20 different countries. They produce some 5 billion paper sacks per year, representing 630,000 tonnes of paper converted in 55 plants. Sack manufacturers from all continents and bag manufacturers also contribute to the federation as corresponding members, and more than 30 suppliers (paper, film, machine or glue manufacturers) are registered as associate members. www.eurosac.org

CEPI Eurokraft is the European Association for Producers of Sack Kraft Paper for the Paper Sack Industry and Kraft Paper for the Packaging Industry. It has ten member companies representing a volume of 3 million tonnes of paper produced in eleven countries. www.cepi-eurokraft.org

