



◆ THE FERRERO ROCHER REDESIGNED BOX



Assessing the carbon footprint and plastic use of the Ferrero Rocher redesigned polypropylene box vs. the previous box made from polystyrene.

Ferrero Rocher is on a journey to make its packaging more sustainable. Our **redesigned boxes** are made from **polypropylene**, a widely used and **easier-to-recycle material**¹, carefully **designed to reduce our plastic use and impact on the climate** while maintaining our boxes' iconic transparency and ensuring the same quality product our consumers know and love.

◆ MEASURING THE IMPACT

We commissioned **two life cycle assessment (LCA) studies** comparing our redesigned polypropylene (PP)² box solution with the previous box made of polystyrene (PS)³ to effectively measure the carbon emissions savings. As part of this initiative, we also calculated the amount of plastic reduced as a result of the new box design in PP.

The first study focused on the 16-, 24- and 30-piece formats⁴. A second study assessed additional iconic box sizes, the 42- and 48-piece gift boxes, as part of our ongoing packaging improvement efforts.^{5, 6}

The environmental impact results and equivalence metrics presented in this document reflect data, methodological approaches and assumptions consistent with the context of the SKUs' launch year, which corresponds to the year the respective LCA study was conducted.

The life cycle stages of the Ferrero Rocher PP and PS boxes assessed in the studies



WHAT'S A LIFE CYCLE ASSESSMENT?

Life cycle assessment (LCA) is a metrics-based methodology used to evaluate and compare environmental impacts occurring over the life cycle of products or services.

This LCA used a cradle-to-grave approach, meaning that it considered the life cycle of the various plastic boxes studied, from the extraction of the raw materials used to produce them through to their end of life.

The scope of the study supports Ferrero Group's commitment to reducing its carbon footprint.

¹ Compared to previous boxes

² Polypropylene is indicated by the number 5 (or 05) on plastic packaging.

³ Polystyrene is indicated by the number 6 (or 06) on plastic packaging.

⁴ The 16, 24- and 30-piece life cycle assessment was conducted in 2020/Q1 2021 and then refined in Q1 2022. The 42- and 48-piece study was conducted in 2025. All studies were conducted by a third party.

⁵ The modelling framework and assumptions for both studies are based on ISO 14067:2018 and the Product Environmental Footprint (PEF) methodology. The PEF methodology, an initiative of the European Commission, aims to standardise measurement of the environmental performance of a good throughout its life cycle. The functional unit was "containing and protecting Ferrero Rocher pieces, in different box formats".

⁶ Availability of box formats may differ by market. As Ferrero Rocher redesigned boxes are introduced in different markets at different times, some previous boxes might still be found on store shelves.

⁷ The 2022 LCA on 16-, 24- and 30-piece boxes excluded upstream and downstream transportation due to the uncertainty of the final transportation route. However, this is consistent with a conservative approach since most of the time transportation is volume-limited given the low density of the Ferrero Rocher products. And, in the case of mass-limited transportation, the PP box is lighter. The 2025 LCA study included upstream transportation, enabled by availability of final transportation routes.

WHAT THE STUDY FOUND (16- 24- AND 30-PIECE BOXES)

The results of the study show that the Ferrero Rocher redesigned boxes have a **lower carbon footprint** and **use less plastic** compared to their respective previous version. The lower carbon footprint is driven by the change in plastic from PS to PP, which allows for a lighter box that has a **lower climate impact** during its production and is **easier to recycle**.



Carbon footprint

Compared to the previous version, these Ferrero Rocher redesigned boxes have at least a **30% lower carbon footprint**. Additionally, when a box is recycled, it has an even lower climate impact – reaching a 70% lower carbon footprint versus the previous box.⁸

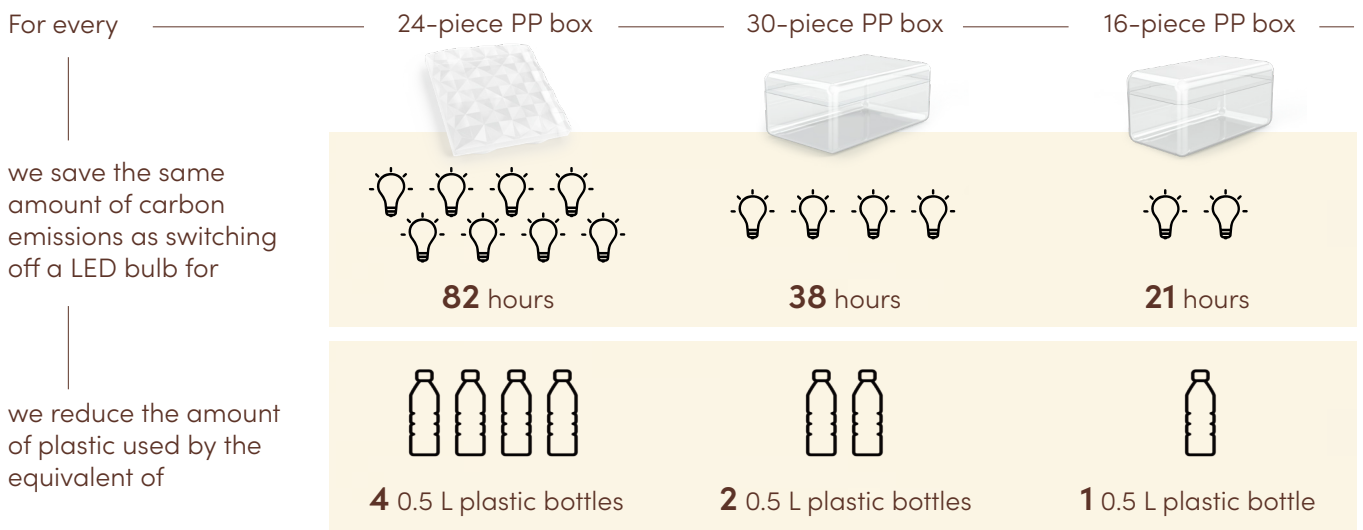
WHAT'S A CARBON FOOTPRINT?

The carbon footprint measures the potential greenhouse gas emissions released across the life cycle of a product, including carbon dioxide, nitrous oxide and methane. (Unit: CO₂-eq)

Plastic use

The 16- and 24-piece Ferrero Rocher redesigned boxes use **40% less plastic** than the previous box, and the **30-piece box uses 38% less**. We developed 29 different plastic resins to find the right one that would maintain our iconic box's transparency, use less plastic and guarantee the same high-quality product as always.

WHAT THE RESULTS MEAN



Comparison of the PP box to the previous box made of PS. Each LED bulb represents the avoidance of approximately 10 hours of use. Each bottle is made of PET and excludes the cap and label.

To put the reduction of carbon emissions and plastic use into perspective, **the implementation of the 16-, 24- and 30-piece redesigned boxes has already achieved⁹ a saving of 16,000 tonnes of plastic**, equivalent to

FROM START OF PROJECT TO AUGUST 2025

CARBON FOOTPRINT

switching off more than
2.4 million
LED bulbs for one year

PLASTIC USE

avoiding the use of
1 billion
0.5 L plastic bottles¹⁰

⁸ Findings are based on a comparative life cycle assessment of Ferrero Rocher's packaging (plastic box only), conducted in 2020/Q1 2021 by a third party, and refined in Q1 2022, following the methodological Guidelines of the Product Environmental Footprint (PEF) initiative and using global averages. The 30% emissions reduction considers a worst-case, non-recycled end-of-life scenario for the PP Ferrero Rocher box (incineration without energy recovery). The 70% emissions reduction considers a best-case full recycling scenario for the PP Ferrero Rocher box. The baseline considers a landfill end-of-life scenario of the previous box.

⁹ Implementation began in September 2021. Equivalencies are based on Ferrero internal data.

¹⁰ Calculated based on the bottle (PET) only, not including the cap or label.

WHAT THE STUDY FOUND

(42-PIECE AND 48-PIECE FLAT / DOUBLE LAYER BOXES)

The results of the study show that the Ferrero Rocher redesigned boxes have a **lower carbon footprint** and **use less plastic** compared to their respective previous version. The lower carbon footprint is driven by the change in plastic from PS to PP, which allows for a lighter box that has a **lower climate impact** during its production and is **easier to recycle**.

Carbon footprint ¹¹

Compared to the previous version, the **42-piece** Ferrero Rocher redesigned box has at least a **50%¹²** lower carbon footprint; the **48-piece** redesigned flat box has at least a **17%¹²** lower carbon footprint, with its double layer format reporting a **13%¹²** lower impact. Additionally, when any of these boxes are recycled, they have an even lower climate impact – **halving¹³** the carbon footprint versus the previous box.

Plastic use ¹⁴

The **42-piece** Ferrero Rocher redesigned box uses **60% less plastic** than the previous box, while the **48-piece** redesigned flat box uses **40% less plastic**, with the double-layer format using **39% less plastic**.



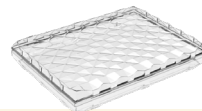
WHAT THE RESULTS MEAN

For every

we save the same amount of carbon emissions as switching off a LED bulb for

we reduce the amount of plastic used by the equivalent of

42-piece PP box

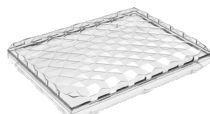


For every

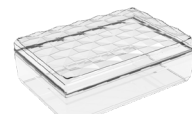
we save the same amount of carbon emissions as switching off a LED bulb for

we reduce the amount of plastic used by the equivalent of

48-piece PP box
(Flat box)



48-piece PP box
(Double Layer box)



Comparison of the PP box to the previous box made of PS. Each LED bulb represents the avoidance of approximately 10 hours of use. Each bottle is made of PET and excludes the cap and label.

¹¹ Findings are based on a comparative life cycle assessment of Ferrero Rocher's packaging (plastic box and tray), conducted in 2025 by a third party, following the methodological Guidelines of the Product Environmental Footprint (PEF) initiative and using global averages.

¹² This emissions reduction considers a worst-case, non-recycled end-of-life scenario for the PP Ferrero Rocher box and tray (incineration without energy recovery). The baseline considers a landfill end-of-life scenario of the previous box and tray.

¹³ This emissions reduction considers a best-case full recycling scenario for the PP Ferrero Rocher packaging. Tray when metallized (most cases) is considered not recyclable. The baseline considers a landfill end-of-life scenario of the previous box and tray.

¹⁴ The reduction in plastic use considers the overall weight of box and tray.

To learn more about how Ferrero Group is making progress on its sustainability goals, visit ferrerostustainability.com.