Single-Use Plastic Packaging Update (2023)

Plastic Packaging – Highlights & Data Tables

- We further decreased our usage of single-use plastic in our packaging in 2023 compared to 2022.
- In 2023, we reduced plastic packaging by 11.6% per product compared to the 2020 baseline.[1]

Plastic Packaging Materials per Unit of Production				
Packaging materials – plastic	**2020**	**2021**	**2022**	**2023**
Total plastic packaging material (in metric tons)[2]	21,819	24,853	23,378	21,977
Total product production (in number of units)[3]	722,288,300	750,474,145	830,329,807	823,005,999
Plastic packaging materials/unit (in grams/unit)[4]	30.2	33.1	27.0	26.7
Year-over-year change in plastic packaging materials/unit (in %)		+9.6%	-18.6%	-0.9%
Change in plastic packaging materials/unit from 2020 baseline (in %)		+9.6%	-10.8%	-11.6%

[1]Changes are calculated based on the plastic packaging materials intensity ratio, which is obtained by dividing the total weight of plastic packaging materials used (in metric tons) by the number of units produced in the applicable period, and where the number of units produced is the number of production units shipped by Mattel through its owned and/or operated manufacturing facilities and finished goods manufacturers.

[2] Total weight of plastic packaging materials (in metric tons) was estimated based on Mattel internal procurement data. The data reported on total weight of plastic packaging materials for the years from 2020 to 2022, inclusively, only includes approximately 5% of the packaging information for *MEGA* and *American Girl* products due to previous limitations on our ability to collect this information. As of 2023, this figure includes packaging information (estimated based on Mattel internal procurement data) for all *MEGA* and *American Girl* products.

[3] Total product production is estimated using Mattel internal data and represents the total number of production units shipped by Mattel through its owned and/or operated manufacturing facilities and finished goods manufacturers.

[4] This figure represents the plastic packaging materials intensity ratio, which is obtained by dividing the total weight of plastic packaging materials used (in metric tons) by the number of units produced in the applicable period, and where the number of units produced is the number of production units shipped by Mattel through its owned and/or operated manufacturing facilities and finished goods manufacturers.

Plastic Packaging – Recycled, Recyclable, and Bio-Based Content[5]								
	2020		2021		2022		2023	
	Weight (in MT)	Percent of total	Weight (in MT)	Percent of total	Weight (in MT)	Percent of total	Weight (in MT)	Percent of total
Virgin	13,456	62.0%	13,335	54.0%	3,862	17.0%	2,172	10.0%
Recycled content[6]	8,363	38.0%	11,518	46.0%	18,515	83.0%	19,805	90.0%
Recyclable[7]	21,387	98.0%	24,404	98.0%	21,928	98.0%	21,536	98.0%
Bio-based content	0	0%	0	0%	0	0%	0	0%
Total plastic	21,819		24,853		22,378		21,977	
Year-over-year change in total plastic used in packaging			+13.9%		-10%		-1.8%	

[5] Due to rounding, figures may not sum.

[6] For data reported for the years from 2020 to 2022, inclusively, "recycled content" was defined as plastic packaging containing at least 25% or more pre-consumer recycled materials. As of 2023, this threshold was increased from 25% to 30%.

[7] In this update, for the data that we previously reported from the years from 2020 to 2022, inclusively, on plastic packaging materials, "recyclable" was based on a "ready to recycle" definition. "Ready to recycle" is when packaging is designed for collection, sorting, and recycling, but where collection, sorting, and recycling infrastructure may not yet be in place for the packaging to actually be recycled. In 2023, we aligned our definition of "recyclable" as regards our plastic packaging materials with the definition set forth by the Association of Plastic Recyclers (APR) in its Design Guide for Plastic Recyclability. The APR's Design Guide provides a standardized approach as it integrates and measures compatibility against industry-standard recycling criteria. Data that we have included in this update on the recyclability of our plastic packaging materials for the years from 2020 to 2022, inclusively, has been restated in line with our updated definition.

Single-Use Plastic Reduction Strategies:

In 2023, we further integrated strategies aimed at plastic reduction into our regular packaging engineering processes, such as:

- Eliminating or reducing the size of windows and plastic blisters in many products
- Eliminating the use of plastic bags and plastic ties in many products
- Reducing overall packaging volume to achieve the smallest packaging size relative to product configuration

In 2023, we also developed a new packaging design toolkit outlining plastic reduction best practices.

Packaging Spotlights:

Reducing Plastic Bags in Games Packaging

Faced with the challenge of many small and varied parts that typically come in plastic polybags in games' packaging, the Mattel Games team found the following opportunities to eliminate or replace some of these bags in 2023:

- In *Pictionary* Air 2, our product and packaging design teams worked together to eliminate the need for plastic polybags for batteries by pre-assembling the batteries into the product.
- Plastic polybags were successfully replaced with paper bags across several games, including *Pictionary Sketch Squad, Pictionary Vs. AI, Magic 8 Ball, and Flippin' Pancakes*.

Reducing Plastic Use in Thomas & Friends Packaging

As a result of removing the inner blister from the 2023 *Thomas & Friends* engine pack, we estimate a savings of approximately 21.65 tons of plastic in one year of production, all without compromising the protection of the product.

Minecraft Packaging Transformation

The *Minecraft* 3.25-inch Core Assortment figures line underwent a packaging transformation in 2023 – reducing plastic packaging materials used by approximately 50% across the line compared to 2020 packaging configurations created for the line. The square shapes in *Minecraft* figures provided the opportunity for the Mattel Packaging Engineering team to trade traditional inner and outer plastic blisters for a smaller form-fit blister. The team was also able to print more information on the paper back panel of the packaging to further reduce the blister size. Given the results yielded by this redesign, the Packaging Engineering team aims to continue to refine the packaging for this line to work toward further plastic reductions, including by expanding these redesigned packaging configurations across the full line.

The packaging for the *Minecraft* Minis line also saw reductions in the amount of plastic packaging used in 2023 through strategies such as replacing plastic bags with paper bags, including all-paper insert cards, and replacing windows and blisters with closed boxes.

Sustainability and Consumer Delight with WWE

In 2023, the packaging for the *WWE* Elite assortment line of action figures was updated to reduce the window sheet size and blister size, resulting in a plastic weight reduction of 22% per unit compared to the prior year's packaging configuration. Even with the smaller window, the packaging continued to showcase the figure's details and accessories that collectors love.

Designing Disney Playset Packaging for Engagement and Reuse

The *Disney* Storybook Playset product line employed packaging as a feature of play and as storage. In these sets, packaging components are designed to become part of the play experience, featuring a double-sided backdrop and perforated pieces that kids can pop out to expand their stories with exciting scenery and props. This packaging also allows users to "repack and store" in it, which can result in a longer life for the packaging.

About this update:

Sustainability information can be subject to measurement uncertainties resulting from limitations inherent to the nature of, and the methods used for determining, such data. Figures or data contained in this update may, at times, differ from what has previously been reported to incorporate refinements and reflect ongoing improvements in our data collection and reporting process.

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