



Mars, Incorporated

Virginia, USA

Food waste inventory for 1st January 2019 – 31st December 2019

MARS



About Mars Incorporated

Operating in 80+ countries, Mars has a diverse global business focused on petcare, confectionery and food. Our portfolio of brands offers quality and value to consumers around the world.

We believe the world we want tomorrow starts with how we do business today. Mars has been proudly family owned for over 100 years. It's this independence that gives us the gift of freedom to think in generations, not quarters, so we can invest in the long-term future of our business, our people and the planet — all guided by our enduring Principles.

The world we want tomorrow starts with how we do business today
MARS



125,000+ Associates

are united and guided by The Five Principles of Mars which span geographies, languages, cultures and generations



1911

Frank C. Mars made the first Mars candies in his Tacoma, Wash., kitchen

80+

countries in operation



454

SITES
2,500+
VETERINARY HOSPITALS

FORTUNE

Great Place To Work
World's Best Workplaces



Global HQ in McLean, Va.



Private, family-owned company



\$35B+

 NET SALES

Billion Dollar Brands



In line with our Efficiency, Responsibility and Mutuality principles, Mars has long aimed to reduce and better dispose of waste. From 2007 to 2015, we hit our commitment to avoid landfill as a waste destination – instead sending food losses to animal feed, composting or energy recovery. We're maintaining that achievement and are further committed to halving food waste from our own operations by 2030.

Under our Sustainable in a Generation plan, Mars is committed to reducing our value chain impacts with what science says is necessary to keep the planet healthy. More at: mars.com/sustainability-plan

Mars committed in 2018 to reduce food waste in our own operations by 50% by 2030.



Sustainable in a Generation Plan **MARS**

What we are doing to tackle food waste

With global operations in 80+ countries, hitting our zero landfill goals was a big achievement for Mars. But- knowing that around one third of the food produced in the world for human consumption every year—approximately 1.3 billion tons—gets lost or wasted, we're not stopping there. We know there is more to be done to reduce food waste globally, both in manufacturing and in other stages of the value chain.

This year, Mars' factories across the globe are continuing to eliminate sources of waste in manufacturing. For example:



The Mars Wrigley factory in Bangalore, India, undertook a number of behaviour & small equipment changes which reduced waste significantly. The site team set up regular meetings to identify food leakage points. Once loss points were identified, the engineering team was able to rectify the issues, often through simple fixes. For example, by modifying a filling chute to be rotatable for easier access, jammed product could be easily cleared & recovered. That small tweak eliminated 6kg of gum waste daily, reducing it down to 2.4 kg per day!

On the other side of the globe, the Mars Wrigley Filled Bar (chocolate) factory in Ontario, Canada, was having difficulty meeting internal efficiency targets due to high production scrap levels. Through a systematic review of potential causes, three key equipment issues were identified. By rectifying those issues, the site cut the average weight of coated waste by over half vs. the prior year, and saved over \$130k CAD in 2019.



Mars also takes food waste seriously in other parts of our supply chain. The Mars Global Food Safety Center (GFSC) is helping to reduce food waste by accelerating the discovery and adoption of new techniques that will enhance food safety globally. This year, the Mars GFSC has made further progress toward tackling mycotoxins, toxic fungi which have a devastating effect on human health and are known to contaminate around 25% of the world's crops and contributing to food waste.

Through our partnership with The Feed the Future Innovation Lab for the Reduction of Post-Harvest Loss, and Kansas State University, we have helped facilitate a state-of-the-art mycotoxin laboratory in Nepal. The facility provides a unique opportunity to determine the source of aflatoxin contamination in the Nepali food supply chain, helping scientists and food producers develop better detection and early intervention mechanisms. For more information on our food safety work, please visit: <https://gfsc.mars.com/home>.

Total food handled*
2,872,230
 tonnes

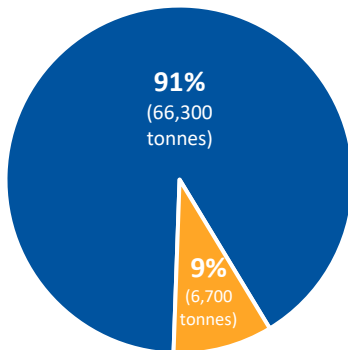
Waste as a % of food handled*

2.5%

Overall food waste

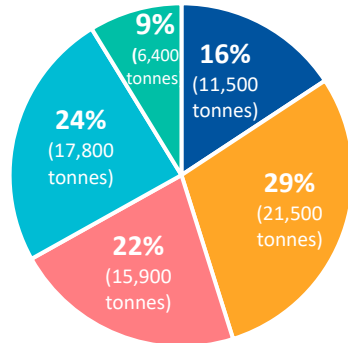
73,040 tonnes

Waste by business unit



■ Mars Wrigley ■ Mars Food

Waste by destination



■ Anaerobic/co-digestion
 ■ Composting/Aerobic processes
 ■ Incineration/Controlled Combustion
 ■ Land Application
 ■ Waste water treatment

Food waste data commentary

- Data represents Mars' global operations, Jan-Dec 2019.
- Food waste from operations is commonly a result of losses due to machinery & processing transitions, changeover requirements (reaching steady-state of new product) or non-saleable product. Our factories are working hard to reduce these losses, generating less waste from the start.
- Mars aims to send product losses to the highest value destinations on the waste hierarchy. If losses cannot be diverted to animal feed we aim to "recycle" them via compost or seek direct conversion to renewable thermal energy via Anaerobic digestion.
- In 2019 our total food handled was 2,872,230 tonnes, including 73,040 tonnes of food waste. The majority of waste (91%) is from Mars Wrigley, with a small amount (9%) generated by Mars Food.
- Our food waste as a percentage of food handled was 2.5% in 2019. That is an 11% reduction relative to our 2017 food waste percentage of 2.9% (note, our 2017 food waste percentage has been restated this year due to a change in methodology*). 2019 is also a 26.5% reduction relative to our 2007 base year food waste percentage which was 3.5%.
- Food waste to wastewater treatment was estimated from site data (reported periodically) and average % dry solids (reported annually).
- Note: In 2019, we maintained our zero waste to landfill commitment, except for a small amount of factory waste (less than a fraction of a percent of our total volume).

*Note: to be consistent with industry best practice and the UK's [Food Waste Reduction Roadmap](#), we've updated our methodology for calculating total food and ingredient handled this year to include food waste and surplus together with (as previously) food product sold as intended. This is also reflected in our calculation of waste as a % of food handled.