



Mars, Incorporated

Virginia, USA

Food waste inventory for 1st January 2017 – 31st December 2017

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 is committed to reducing 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 almost 80 countries, hitting our zero landfill goals was a big achievement for Mars. But we're not stopping there -- we're engaging our factories across the globe to continually improve our data on waste and recycling -- since only what gets measured can be effectively managed. We're also looking at other steps in our supply chain (warehouses, etc.) to find our biggest waste-reduction opportunities.

Of course, the best action is to eliminate the sources of waste - something our factories strive to do daily on a daily basis. For example:

- The Mars Food factory in Wyong, Australia produces Dolmio sauces, Uncle Ben's Rice and other products, for domestic and international markets. Driven by two passionate Associates, the Operations and R&D looked for opportunities to live our Efficiency Principle, and reduce food waste beyond zero waste to landfill. In their manufacturing processes, they found opportunities to work on waste leakage points- like leaking pouch seals. This led to a massive waste reduction initiative at the site, resulting in a 2% increase in "right first time" production -- from 96% to over 98%! This translates to saving 1,000 tonnes of food per year which otherwise would likely have gone to waste.
- Some of the most impactful changes undertaken were mind-set and behaviour shifts. According to Jenny Higgins, Quality Assurance Manager at the site, "The focus on right-first-time has brought about a quality mindset change across our Associate base, fostering a culture of decisive action to make decisions on products to escalate at the right time. Now we stop and fix rather than running and placing the product on hold."
- Similarly, the Mars Wrigley factory in Asquith, Australia, made small equipment improvements - like new chutes to prevent product from spilling onto the floor during conveying. This eliminated 70 tonnes per year of Skittles waste -- equivalent to 1-2 weeks of production.



When we do have losses across our "human food" business segments, the majority of our non-useable factory loss is diverted to Animal Feed. In 2017, 93,000 metric tonnes of non-saleable food losses were sent to animal feed instead of a lower value destination - larger than our entire food waste footprint.

Mars is also a pet food business -- and pets don't like food waste either! Our operations in North America donate about 3 million pounds of pet food to local animal shelters annually. Our Petfood factory in Australia also diverted \$7M worth of product to donation. These donations help create "a Better World for Pets", but also for people too.

Total food produced - 2017

2,762,000
tonnes

Waste as a % of production

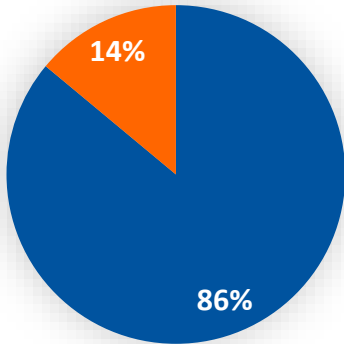
3.1%



Overall food waste

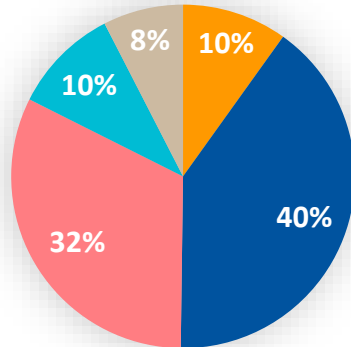
84,350 tonnes

Waste by business unit



■ Mars Wrigley ■ Mars Food

Waste by destination



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

Food waste data commentary

- Data represents Mars' global operations, Jan-Dec 2017.
- 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.
- Food waste to waste water treatment was estimated from site data (reported periodically) and average % dry solids (reported annually).

In 2017, 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). This was due to a vendor unexpectedly going out of business. We've learned from the experience and have identified new waste vendors along with back-ups to mitigate this issue.