



SUSTAINABILITY REVIEW
MARS DRINKS Towards 2020



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Introduction

A Message from Xavier Unkovic, President, MARS DRINKS

At MARS DRINKS, we're committed to supporting businesses that want to create great working environments for their people. We're 100% dedicated to the workplace, creating solutions that help people at work to meet their business goals.

As part of MARS Incorporated we're guided by the Five Principles—Quality, Responsibility, Mutuality, Efficiency and Freedom—and we're committed to MARS Incorporated's objective of being the most mutual company in the world. This means striving to be a business that delivers positive impact for people and the planet.

Today's workforce often expects their workplace to act in a socially and environmentally responsible way. Increasingly, people at work want to know they have chosen a sustainable workplace drinks solution. It is our aim to make MARS DRINKS the solution of choice for sustainability-minded businesses.

I am proud of the progress MARS DRINKS has made throughout our 2010-2015 sustainability journey. Our achievements include:

- 100% of our owned brand coffee and black tea products are sourced from third-party certified farms
- Since 2009, we've been offering our North American customers a solution for recycling Freshpacks
- Reducing energy and water use on our factory sites by more than 60% since 2007
- Our factory sites send zero waste to landfill and are certified to ISO 14001 environmental management standards

Additionally, in 2015 our global headquarters in West Chester, Pennsylvania, achieved LEED Gold Certification.

I am delighted about how far we've come, but I also know that we can do more. Our 2016-2020 sustainability strategy will enable us to take another bold step, ensuring we continue to progress towards our goal of offering the most sustainable workplace drinks solution.

Our single most important sustainability priority over the next five years will be to solve the waste challenge for workplaces who choose MARS DRINKS. We will achieve this through innovation and by working with our customers to keep plastic waste from our single-serve packaging and KLIX® cups from landfill. While we know this won't be easy, we are committed to finding the solution.

By 2020 we will:

- Provide 100% of our customers in the USA, UK and Germany with a sustainable end of life solution for all MARS DRINKS technologies, KLIX cups and single-serve Freshpack waste
- Use sustainable design to reduce the carbon footprint of our single-serve Freshpacks and KLIX cups by 25%

In addition to working to solve the waste challenge, our 2020 sustainability strategy focuses on two other key areas: Sustainable Agriculture and Sustainable Operations.

At MARS DRINKS we create moments of connection. Through these moments we inspire people to think differently about what work and the workplace can be. Today I invite you to think differently about the role your workplace drinks solution can play in inspiring new and innovative ways to bring people together to achieve great results, in a sustainable way.

Yours,

Xavier Unkovic

Global President, MARS DRINKS

Samantha Veide, Global Director, Corporate Sustainable Solutions, MARS DRINKS

While we are clear that our single most important priority for the next five years is to solve the waste challenge for our customers, we also recognize that we have a responsibility to ensure we are making positive changes in our own supply chain by sourcing agricultural materials and manufacturing our products more sustainably.

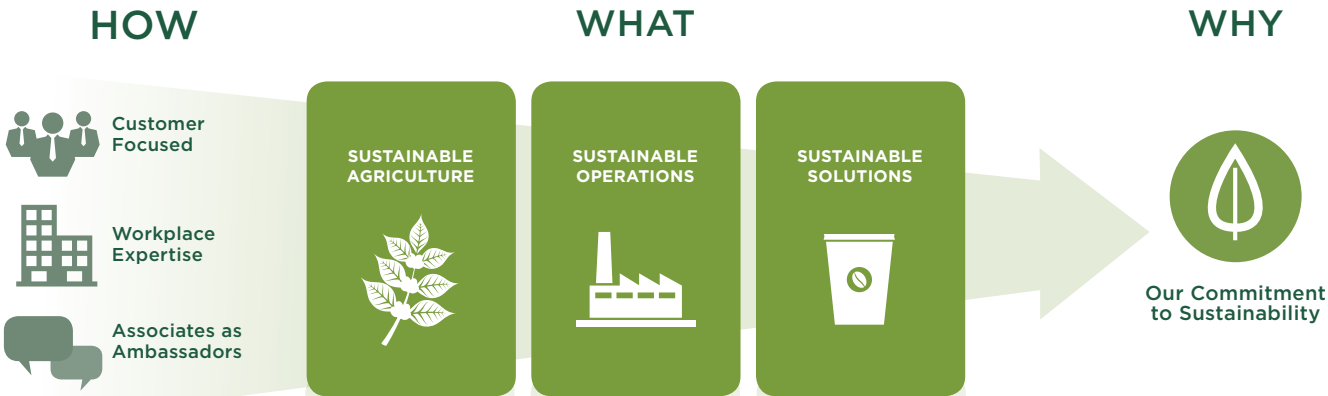
Coffee and tea communities face complex challenges, including poor productivity, low farmer incomes and the impacts of a changing climate: pests, droughts and plant diseases. If left unchecked, these impacts could result in significant losses for coffee-producing regions from climate change.¹ Our goal is to improve farmers' lives and buy priority raw materials from traceable and sustainable sources.

In our own operations we will continue to set ambitious goals to reduce energy, water and waste in our factories, but will go beyond this to benefit our customers and other supply chain partners. We will create opportunities for MARS DRINKS and other businesses like ours, to share best practices on how to make workplaces across the globe more sustainable.

Introducing MARS DRINKS' 2016-2020 Sustainability Strategy

Our progress against our 2010–2015 sustainability targets provide a solid foundation for us to build on. Our 2016–2020 Sustainability Strategy is rooted in our 100% dedication to the workplace and recognizes that a commitment to sustainability is an important part of meeting workplace needs. Our aim is to be the most sustainable workplace drinks solutions.

The next phase of our strategy is a five year plan, 2016 to the end of 2020. Our approach is unique to our business—it is informed by our customers' needs and workplace expertise and positions our Associates (MARS DRINKS' employees) as ambassadors to amplify our sustainability efforts. We will undertake actions that help us live our commitment to sustainability at every stage of our value chain, from the raw materials we purchase (Sustainable Agriculture), to our factories where we produce our products (Sustainable Operations), to the consumables and technologies we deliver to the world's workplaces (Sustainable Solutions).



Bringing our 2016-2020 Sustainability Strategy to Life

CUSTOMER FOCUS

“Central to our commitment to be 100% dedicated to the workplace is a responsibility to deeply understand the needs of workplaces across the globe. Through this insight we create innovative solutions that better meet the needs of the businesses we support. We recognize that people at work increasingly want to feel good about the decisions their employers are making and that employers want to have access to solutions that meet their needs in a sustainable way. Finding a solution to the waste challenge is a priority for many of the workplaces we support and that is why this is our top sustainability priority.”

— Rebecca Gautrey, Global Director, Customer Experience, MARS DRINKS

WORKPLACE EXPERTISE

“Our world has evolved to become more global and connected. And workplaces are evolving to respond to these changes. When you think about it, drinks are central to any workplace—from the break room to the board room. At MARS DRINKS we inspire people to think about the workday differently. Drinks bring people together to fuel their days. Through our solutions, we have a unique opportunity to support customers in transforming their workplace. Although drinks solutions are only one part of a company’s sustainability program we can support our customers by providing the most sustainable workplace drinks solution.”

— Tracy Brower, Global Vice President of Workplace Vitality, MARS DRINKS

ASSOCIATES AS AMBASSADORS

“At MARS DRINKS we believe that one of the best ways to ensure we bring our sustainability strategy to life is to make our Associates ambassadors of our work. The Mars Ambassador Program (MAP) is central to this goal. As part of MAP, Associates spend time on the ground in coffee and tea producing communities. MAP projects give our Associates a once in a lifetime opportunity to travel to coffee and tea communities around the globe. The program works like a spark that brings sustainability to life for these Associates—and the future Associates they touch.”

— Richard Bond, Global Supply Chain Program Manager, MARS DRINKS

Sustainable Agriculture

OUR APPROACH

Every day, coffee, tea and other beverages fuel millions of workplaces around the world. These beverages play an essential role in the workplace, and our research has shown they can drive wellbeing, productivity, engagement and collaboration.

Whether its espresso, coffee, black and green teas or hot chocolate, MARS DRINKS' solutions brew the perfect drink every time. The coffee, black tea and cocoa we source are often grown by smallholder farmers in low-income communities. Many struggle with low productivity, reduced income, and increasingly, risks from climate change impacts, which in turn can impact the supply of these raw materials.

To ensure we deliver quality products that deliver on taste and choice we must secure the future of the people in our supply chain. We want to improve farmers' lives, encourage the use of environmentally friendly farming practices, and buy raw materials from traceable and sustainable sources. We recognize that the farmer is just one individual in a community, which is why we aim to build programs that consider farmers, their families and farming communities.

SOURCING FROM CERTIFIED FARMS

In 2010, we set out our commitment to buy coffee, black tea and cocoa for our owned brand products from sustainable sources. The primary way we accomplished this was by purchasing these raw materials from third-party certified farms. Currently, we support the Rainforest Alliance and UTZ Certified. Although third-party certification has its limitations, it is an important first step in our journey to a sustainable supply chain.

Certifiers like the Rainforest Alliance and UTZ Certified align with our own market-driven approach to tackle supply chain challenges. They help to ensure sustainable livelihoods by enabling farmers to harness better farming methods, improve working conditions and take care of the environment. Improved farming practices can produce better quality products, which in turn can result in higher prices and improved standards of living for farmers and their families.

We buy most of our ingredients from processors, not directly from producers, and require that these suppliers source coffee and black tea from third party certified farms. In 2014, we achieved our goal to source 100% certified coffee for our ALTEERRA® range, and in 2015 100% of the black tea for THE BRIGHT TEA CO.™ range was from 100% certified sources.

We did not achieve our target to source 100% certified cocoa by 2015. At the close of 2015, 23% of the total cocoa volumes, which includes cocoa powder, cocoa butter and cocoa liquor, in our DOVE® and GALAXY® branded hot chocolates came from certified sources. We expect to transition to certified sources for all of these elements in 2016. This means 100% of our total cocoa volumes for our DOVE and 92% of our total cocoa volumes for our GALAXY branded drinks will come from third-party certified sources by the end of 2016. We will work with MARS Chocolate to purchase any remaining cocoa elements (primarily real chocolate pieces) in our GALAXY hot chocolates from certified sources as soon as they are available. In light of these plans, we have extended the target for 100% certified cocoa in GALAXY drinks to 2020. By the close of 2020, 100% of the cocoa in our DOVE and GALAXY branded hot chocolates will be sourced from third party certified farms.

In addition to certification, we require all our suppliers to understand and comply with the policies and standards outlined in our Responsible Sourcing program. MARS Incorporated's **Supplier Code of Conduct** was developed as part of the program and implemented in 2011. It includes workplace standards that meet or exceed International Labour Organization guidelines. All MARS, Incorporated suppliers are expected to align with, and are encouraged to exceed, the standards included in our Code. We only work with suppliers that demonstrate a commitment to meet our standards, and audit our supply chain to ensure alignment with the Code. Read more about MARS' Responsible Sourcing program on [page 10](#).

We also work with membership bodies and support research into improving the livelihoods of growers around the world to ensure a good supply of quality coffee and black tea. Read more about our partners on [page 11](#).

“Over the past few years, MARS DRINKS has taken steps to tackle some of the most fundamental sustainability concerns in the supply chains of our key agricultural commodities—coffee and tea. We support robust certification organizations that work closely with farmers and processors to tackle social and environmental tensions at origin. But we aim to go further than this. By mapping our supply chain, we want to understand the remaining issues with more depth and proximity, and ensure we become a catalyst for positive social and economic progress for the people involved in our value chain.”

— Juliana Saretta, Global Vice President of Supply and Commercial, MARS DRINKS

PROGRESS AGAINST 2015 TARGETS

Sourcing More Sustainably

100% of our coffee beans are purchased from certified sources for our ALTERRA® branded coffees	Achieved
100% of our black teas are purchased from certified sources for THE BRIGHT TEA CO.™ teas	Achieved
100% of cocoa for our DOVE®/GALAXY® hot chocolate is purchased from certified sources	Work in progress; 23% of cocoa purchased from sustainable sources
Partner with well-loved brands to offer third-party certified products in our KLIX® machines	Achieved

Towards 2020: Improving Traceability

While certification is an important first step, we want greater visibility into our supply chain and the complex and diverse environmental and social impacts within. Over the next five years, we will focus on improving our product traceability, while maintaining third-party certification.

As part of a MARS-wide initiative, we've undergone a rigorous, scientific process to identify the five environmental and social impacts most relevant to our company:

- Land
- Greenhouse Gas Emissions
- Income
- Water
- Human Rights

In 2013, MARS Incorporated partnered with outside advisors to evaluate priority raw materials across the company. Black tea and coffee were identified as the two priority raw materials for MARS DRINKS.

As a first step, we will begin mapping the supply chains of our owned brand coffee and black tea products. Mapping allows us to trace our raw material sources all the way back to the processing plants. Once we complete mapping, we will consider the five impacts (see list above) for coffee and black tea, to determine which impacts to prioritize. We will develop interventions that reduce these impacts and ensure they are specifically tailored to the farming communities we rely on. We will focus our work on our owned brand products—ALTEIRA coffee and THE BRIGHT TEA CO. tea—where we have the potential to create the most positive change.

In addition to our owned brand products, our product portfolio includes many licensed brands. We will establish sustainable sourcing guidelines for all our licensed brands by 2020. In our KLIX product portfolio, we currently buy black leaf tea and soluble black tea from branded partners such as Unilever, whose Lipton® and PG Tips® leaf black teas are 100% Rainforest Alliance Certified.

The issues facing our supply chain are complex and cross industry collaboration is one of the keys to addressing them. We will continue to collaborate with industry leaders to support coffee and black tea growing communities. Building on our existing work, we will prioritize engagement and investment in The Ethical Tea Partnership, World Coffee Research, and the Coffee Quality Institute. See [pages 10-11](#) for more information on initiatives with our partners.

2020 TARGETS Sustainable Agriculture	
MARS DRINKS Owned Brand Products	<ul style="list-style-type: none"> • Source, or continue to source, 100% third party certified coffee beans, cocoa and black tea leaves for our owned brand products • Complete supply chain mapping for our priority raw materials (coffee and black tea) and establish traceability for these supply chains • Complete impact analysis of our coffee and tea supply chains
Licensed Brands	<ul style="list-style-type: none"> • Establish sustainable sourcing guidelines for 100% of licensed brands for coffee, black tea and cocoa in the MARS DRINKS product portfolio • Support a sustainable sourcing program with at least one licensed brand each year
Industry Engagement	<ul style="list-style-type: none"> • Engage in collaborative partnerships within our industry to support healthy and thriving coffee and tea communities • Support at least one sustainable sourcing intervention a year via partnerships
Customer Focused	<ul style="list-style-type: none"> • Inform 100% of customers about MARS DRINKS' efforts to support sustainable agriculture.

CASE STUDY: Securing The Future Of Coffee Beans

The coffee industry today faces broad challenges, from small farmers living in poverty to the harmful effects of climate change on coffee quality and production.

At MARS DRINKS, we believe that research is critical to developing solutions and securing the supply of good quality coffee for our business and coffee-growers globally. In 2011, we were excited to have the opportunity to become a founding partner of World Coffee Research (WCR), a non-profit organization that works with industry professionals, scientists and researchers to improve the world's supply of high-quality arabica coffees.

WCR studies the best techniques for growing, protecting, and enhancing supplies of quality coffee, while securing the livelihoods of the families who produce it. As well as funding key research programs at WCR, MARS DRINKS sits on the WCR Board to provide strategic oversight and guidance.

WCR's research program currently focuses on four areas: biodiversity, cup quality, climate change, and extension services, which includes research on coffee varieties, genetics, and reducing constraints on the supply of high quality coffee. WCR is also exploring ways to make the coffee supply chain more resilient to climate change and is creating new origins in countries like the Democratic Republic of Congo and Yemen.

We are working with WCR in El Salvador on a three-year pilot program to make plants more disease resistant and produce higher yields through coffee plant evolution. Our funding is helping WCR set up a demonstration coffee farm to test their research.

MARS DRINKS is also one of the key players behind WCR's research to develop a standardized coffee tasting lexicon. Until now, the lack of a definitive lexicon prevented the industry from characterizing the sensory attributes of coffee in an accurate, scientific, repeatable way. The new system, which will be publically available, ensures a standardized method of measuring coffee quality. This will allow researchers and breeders to articulate and include specific qualities of coffee in breeding programs to help farmers create the highest quality coffee.

"MARS is one of only a handful of food and beverage companies that understand in their DNA that research and development are cornerstones to the growth of a responsible and successful business," says Executive Director of WCR, Timothy Schilling. *"Working with us, MARS DRINKS is helping craft an ambitious and essential research agenda that will ensure a sustainable future for coffee. MARS DRINKS is also the foundational investor in the WCR Research Farm in El Salvador, where key research is being conducted to breed new climate-resilient, high yielding and high quality coffee varieties for farmers."*

Read more about WCR at worldcoffeeresearch.org.

Case Study: Partnering For More Resilient Coffee Communities

The Food and Agriculture Organization (FAO) estimates that if female farmers had access to the same training and inputs (fertilizer and seeds) as male farmers, yields would increase by as much as 30% per household. Empowering women also leads to social benefits like improved education and family nutrition.

Excited about the opportunity to participate in an initiative that could improve supply chain resilience and the well-being of coffee-growing communities through gender equity, MARS DRINKS joined the Coffee Quality Institute's (CQI) Partnership for Gender Equity initiative in 2015.

The Partnership seeks to better understand the effects of gender inequality in the coffee sector and develop ways to support gender integration in the coffee supply chain.

Extensive research was conducted through workshops, focus groups and interviews with more than 200 people across the value chain in countries including Indonesia and Colombia. The key findings of this collaborative research showed that women:

- Contribute a substantial amount of work in coffee farming (though are often not recognized as “farmers”)
- Do not have equal access to, and control over, resources and assets as men
- Are less likely to be represented in the leadership of cooperative and producer groups

MARS DRINKS supported this work by providing funding as a founding partner for Stage 1 of the Partnership and will continue to support the work by providing key strategic insight as a member of the CQI Board of Trustees.

“The Partnership for Gender Equity wouldn’t be where it is today without the vision, leadership, and contributions of our Advisory Council members like MARS DRINKS,” says Kimberly Easson, CQI’s Vice President of Strategic Partnerships. *“As a member of the Council, MARS DRINKS provided consistent strategic guidance, wisdom and financial support, and has played a key role in promoting the initiative throughout the coffee industry.”*

Read more about the [Coffee Quality Institute’s Partnership for Gender Equity at coffeeminstitute.org](http://coffeeminstitute.org).

Sustainable Operations

OUR APPROACH

The global impacts of climate change affect individuals, governments and the business community. Our parent company, MARS Incorporated, has committed to eliminating greenhouse gas (GHG) emissions from the company's operations by 2040 (our Sustainable in a Generation Program). MARS Incorporated is also advocating for broader action on climate change through collaborations with the Climate Group, the World Economic Forum's Global Action Group of Forestry, and the Business for Innovative Climate and Energy Policy (BICEP) Climate Declaration.

We are inspired by the actions of our parent company and driven by the expectations of the people in the modern workplace, who increasingly expect us to operate sustainably. Over the last five years, we have reduced our energy and water use and waste through the MARS-wide Sustainable in a Generation (SiG) program. We've created efficiencies, used innovative technologies and increased our use of renewable energy. As a next step, we will work to further engage our Associates, who are critical to helping us deliver our key sustainability goals in this area. We will also share our learnings with customers to help them adapt these techniques for their own workplaces.

BECOMING SUSTAINABLE IN A GENERATION

Across MARS DRINKS' factory locations, we've reduced energy use by 65%, greenhouse gas (GHG) emissions by 70%, and water use by 63% since 2007. We have also met our target to send zero waste to landfill from our factories in the UK and the US. We separate all our recyclable waste internally, and send it to local municipalities. Other non-recyclable materials like coffee grounds and tea leaves are sent to compost or to generate energy.

To reduce our reliance on fossil fuels and eliminate GHG emissions, MARS Incorporated has invested in a wind farm in Texas. The 118 wind turbines at Mesquite Creek windfarm generate an annual output of 800,000 megawatt-hours—equivalent to the amount of energy required to power all of MARS Incorporated's operations in the US, including our MARS DRINKS global Headquarters and Campus. According to the Environmental Protection Agency, MARS Incorporated's investment in the windfarm makes us the eleventh biggest green power user in the US. Learn more at mars.com.

A proud moment for MARS DRINKS came in 2015 when we achieved the Leadership in Energy and Environmental Design (LEED) Gold certification for our West Chester, Pennsylvania campus in 2015. LEED is the nationally accepted benchmark in the US for designing, constructing and operating green buildings. See case study on [page 15](#).

Our sites in West Chester, Pennsylvania and Basingstoke, UK are certified to the ISO 14001 environmental management standard. These rigorous standards are developed by the [International Organization for Standardization](#) (ISO) to provide a framework for companies like ours to improve environmental management and performance.

On sustainability performance, our West Chester campus ranks first across all 140 MARS Incorporated factories, while Basingstoke comes in tenth place, demonstrating our success at reducing energy, water and waste. At our Basingstoke factory, Associates have led several projects to advance progress in these areas, including:

- Replacing inefficient air conditioning units with new units that use 53% less energy
- Replacing high-intensity discharge lamps with induction lamps, resulting in 68% in power savings over a year
- Conducting a detailed analysis of every waste stream to identify where waste can be reduced, segregated and recycled, resulting in reaching zero waste to landfill five years ahead of schedule
- Installing a rainwater harvesting system, and reducing water consumption from the grid by over 40%

PROGRESS AGAINST 2015 TARGETS

Reducing Operational Impacts

Reduce water use by 25% (from 2007 levels)	Achieved; 63% reduction
Reduce fossil fuel energy use by 25% (from 2007 levels)	Achieved; 65%
Reduce greenhouse gas emissions by 25% (from 2007 levels)	Achieved; 70%
Zero waste to landfill	Achieved

Towards 2020: Reducing Our Impacts

Over the next five years, we will continue to meet, and where we can, exceed our environmental targets. We will share best practice and learnings with our customers and partners to help them on their own sustainability journey. We recognize the importance of sustainability in both offices and factories, though the potential for us to have the greatest impact on our own sites lies within our factories and so our work will focus in this area. We will also partner with suppliers to improve their sustainability performance and extend the positive impacts of the MARS-wide Sustainable in a Generation (SIG) program into our supply chain.

Over the next five years we will continue to reduce greenhouse gas emissions and water consumption at our own sites. We will maintain ISO 14001 certification at our factory sites, as well as LEED Gold certification for our West Chester, Pennsylvania location. We will also provide third party verification that assures the zero waste to landfill status at our factory locations.

Our people are the most critical part of our operations. We want to engage and inspire them to make sustainability-minded choices in all that they do, be ambassadors of our sustainability goals, and lead the way in meeting our 2020 targets.

2020 TARGETS Sustainable Operations	
Our Operations	<ul style="list-style-type: none"> • Maintain LEED Gold Certification at our West Chester, Pennsylvania site and ISO 14001 at both our Basingstoke, UK and West Chester, Pennsylvania sites • 80% reduction in greenhouse gas emissions (from 2007 baseline) • 15% reduction in water intensity (from 2015 baseline) • 15% reduction in energy intensity (from 2015 baseline) • Maintain Zero Waste to Landfill at our West Chester, Pennsylvania and Basingstoke, UK sites
Workplace Expertise	<ul style="list-style-type: none"> • Share best practices with our customers and other supply chain partners to help them reduce their impacts
Customer Focused	<ul style="list-style-type: none"> • 100% of customers rate their regular MARS DRINKS contact as knowledgeable about MARS DRINKS' sustainability efforts
Associates as Ambassadors	<ul style="list-style-type: none"> • 100% of Associates are knowledgeable about MARS DRINKS' sustainability efforts • 100% of Associates understand the connection between sustainability and our brand • 100% of key Associates become Sustainability Ambassadors in the field (by demonstrating advanced level of knowledge on our sustainability efforts)

CASE STUDY: Achieving LEED Gold Certification For Our Headquarters

Sustainability was a key priority when we embarked on the redesign of our 196,000 square-foot West Chester, Pennsylvania campus in 2014. As part of this, we challenged ourselves to achieve LEED Gold certification, which is developed by the US Green Building Council. This prestigious certification is hard to attain, particularly through retrofitting an existing building—but we did it!

LEED Gold recognizes our work to ensure the building and construction methods used meet high environmental standards and use resources efficiently. To ensure a sustainable construction process, we set and met an 80% recycling target, and used local, certified and recyclable construction materials to further reduce our footprint.

When designing the building, we installed resource efficient technologies, including:

- Rainwater harvesting systems and automatic-flush toilets that save water that would otherwise be lost
- Large windows that reduce the need for artificial light, and are fitted with electronically tinted glass with light sensors that tint the glass based on ambient light levels
- Highly-insulated roofing made from recycled materials that reduce the amount of energy needed to heat and cool the building

Through these features, we've:

- Reduced our water use by 40%
- Optimized energy performance by 16%
- Increased renewable energy use to 35%

As part of the renovation, we also installed coffee roasting equipment to allow us to roast our 100% certified coffee on-site. Roasting our own coffee has allowed us to take even more control of our supply chain. MARS DRINKS is the second roaster in the US to become LEED gold certified.



CASE STUDY: Working With Tea Factories in Kenya to Become More Sustainable

We have worked hard to reduce the impacts of our operations. We want to extend this work into our supply chain by helping suppliers reduce their impact on the environment.

In January 2015, we started a new three-year origin program within our tea supply chain in Kenya, in collaboration with the Ethical Tea Partnership (ETP). ETP is a non-governmental organization (NGO) that works with tea producers and smallholder farmers to help them meet international social and environmental standards.

According to The Kenya Tea Development Agency (KTDA) energy use (both electricity and wood fuel) is estimated to account for up to 60% of the cost of tea production in Kenya, and the cost of energy is expected to rise. Our project will help five KTDA factories that are important to MARS DRINKS tea portfolio to reduce their energy costs, while supporting climate change mitigation activities. In addition, the initiative also aligns with MARS-wide sustainability goals to improve smallholder incomes, climate change and land use.

We are working with KTDA and ETP to conduct energy audits and training in these factories. The audits are being led by qualified energy auditors who track energy use during the different stages of tea production.

“Energy audits and energy efficiency training in factories has transformed the way factory staff think about energy, and their attitude to environmental conservation in the surrounding community,” said Bernard Njoroge, ETP Energy Efficiency and Climate Change Trainer.

The project has already generated positive results: over the first three months, factories reduced energy use (i.e., use of electricity and firewood) by over 10%. A reduction in energy consumption can lead to significant savings for producers and a positive impact on the bottom line. Within smallholder structures like KTDA, these savings will be passed on directly to tea farmers and their workers.

This work builds on our 2014 project to help a tea processing plant in Makomboki, Kenya, reduce its carbon emissions, delivered in partnership with ETP and the NGO, Living Earth. Here, Associates proposed replacing the factory’s current wood-burning furnace with a briquette-making machine that uses coffee and rice husks as a cost-effective and environmentally-friendly energy source. We estimated that if the machine can be used as a direct replacement for all wood fuel, it would reduce energy use by 60%, and save 40,000 trees from being felled down each year. The KTDA is currently exploring whether this can be used in other factories and the logistics of sourcing the waste raw materials required.

CASE STUDY: Generating Our Own Nitrogen to Reduce Carbon Emissions

Nitrogen is commonly used to maintain coffee freshness. When we purchase nitrogen from external suppliers for use in our single serve Freshpacks, it is generated as gas, turned into liquid for efficient transportation, then converted back to gas again before use—an energy-intensive process that can result in high carbon emissions.

In 2012, we designed and installed an on-site nitrogen generation system for our West Chester site that extracts the gas from ambient air, using less energy compared to converting liquid nitrogen. The system produces nearly 8,000 tons of nitrogen a year—enough to fill 2,440 Olympic-size swimming pools! We also worked to reduce our nitrogen consumption by eliminating leaks and controlling flow in our processes. We estimate that generating our own nitrogen allows us to reduce electricity consumption by 9% and carbon footprint by 34%.

Sustainable Solutions

OUR APPROACH

Our solutions meet the needs of workplaces around the globe. Our single-serve brewers and KLIX vending machines deliver everyday favorites, like coffee and tea, refreshments like espresso and hot chocolate as well as snacks between meals like soup. We are committed to ensuring our solutions meet the needs of people at work, while also being as sustainable as possible.

We consider sustainability at every step—by designing resource- and energy-efficient solutions, working with suppliers to use lower-impact materials and manufacturing processes, and ensuring our products have simple end of life solutions.

Our single most important sustainability priority for the next five years is to solve the waste challenge presented by drinks packaging and technology at the end of its life. We will achieve this through innovation and by working with our customers to reduce waste from our single-serve packaging and KLIX cups. While we know this won't be easy, we are committed to finding the solution.

FRESHPACKS

Designing for Sustainability

Our customers consistently tell us that they don't want their MARS DRINKS' product waste to end up in a landfill. We're committed to ensuring that workplaces, and their people, have access to appropriate end of life solutions and that Freshpacks are designed to minimize environmental impact.

In 2012, we piloted a new 100% recyclable Freshpack for two products in THE BRIGHT TEA CO.™ range. The carbon footprint of these packs was 40% lower than the previous pack, and decreased by 44% if the pack was recycled through our "Recycle Your Freshpacks" program (see [page 19](#)).

To make these Freshpacks recyclable, we switched from using three layers of material (aluminum and two types of plastic), to one layer made from fully recyclable plastic. Because aluminum is energy- and water-intensive to extract, the recyclable Freshpack was better for the environment, even if it wasn't recycled after use.

We have also made Freshpacks more sustainable by reducing the volume of materials used. In 2014, we introduced a new design for the Freshpack nozzle that uses 16% less plastic, and we are currently rolling out the lightweight nozzle across to all our Freshpacks.

Our 2015 goal was to use recyclable Freshpacks across our single-serve drinks portfolio, and we did not achieve this. While working to implement the goal, we learned that it is challenging to replace materials with more sustainable options while keeping the same functionality. Consistently delivering products that deliver on taste and choice is a priority for MARS DRINKS and we are careful not to implement changes that may affect our ability to achieve this commitment.

We are still committed to introducing a more environmentally-friendly Freshpack across our entire portfolio by 2020, but we are reimagining what this solution will look like. Our goal is to reduce the carbon footprint of the Freshpack by 25%. We will continue to work with suppliers to explore new materials, manufacturing processes and innovations, and on improving recyclability. Read about our 2020 commitments on [page 23](#).

Recycle Your Freshpacks

While the food and beverage industry has made strides in improving the recyclability of packaging, ensuring packs actually get recycled remains a persistent problem. For example, it takes specialist recycling companies to recycle Freshpacks, because most municipalities lack the equipment and technology needed to separate the packaging layers. That means customers are not able to combine their Freshpacks with normal recycling collections. Most manufacturers and retailers face the same issue, across products and markets.

In 2011, we launched the **Recycle Your Freshpacks** (RYF) program, which enables access to a recycling program for all our North American customers. Customers who opt in to the program can send their used Freshpacks to TerraCycle®, a US business that collects waste materials typically considered non-recyclable and uses them to make new products. An online system enables customers to track how many Freshpacks have been recycled. Since 2011, we have achieved a 312% increase in recycling partner activity, surpassing our 50% target.

The RYF program is good for the environment and good for workplaces too. Putting a recycling program within easy reach enables workplaces to take steps towards their own sustainability goals. One of our main challenges is to make RYF accessible, even for workplaces who may not have the resources to prioritize sustainability. For the next phase of our strategy, we will continue to seek ways to make sustainable end of life solutions for MARS DRINKS single use plastic waste accessible to all our customers in major markets—Germany, the United States and the United Kingdom.

“There is a real buzz around the MARS DRINKS’ brewers. Even better, they supported our 2014 Earth Day campaign, where we showcased the recycling process via the Recycle Your Freshpack program. This led to more employees participating in recycling efforts across our facilities.”

— Scott Timmons, Food Service Director and Regional Director of the MasterCard Accounts at FLIK Hospitality Group, a division of Compass Group North America

KLIX CUPS

Designing for Sustainability

Since 1992, all the cups in our MARS DRINKS KLIX vending machines have been recyclable, and we continue to maintain this. But sourcing and processing raw materials and manufacturing the cups also result in environmental impacts. One way of making our cups more sustainable is to reduce the volume of materials and weight of our cups, also known as ‘lightweighting’. While this is a good first step, our priority is to maintain the functionality and quality of our products and therefore there are limits to the extent of lightweighting we will undertake.

Building on our previous work, our 2020 strategy now turns the focus to using materials with lower environmental impacts. Our cups are made from polystyrene, which has a high environmental impact and is less widely recycled than many other plastics. In 2015, we rolled out a new cup with a middle layer made from calcium carbonate—a natural, widely available substance that has a lower environmental footprint than polystyrene. The new design, which uses a tenth less plastic than regular cups, has been rolled out to nearly 90% of our KLIX cups worldwide—enabling us to reduce our annual polystyrene use by 300 tons. Over the next five years, we will assess the feasibility of using calcium carbonate in other packaging materials, like Freshpack nozzles.

Recycling Cups

While KLIX cups are recyclable in many municipalities, they don't always get recycled. We are working to make recycling as easy and cost-efficient as possible for workplaces that choose our solutions.

MACHINES

Sustainable Solutions For The Workplace And Beyond

We manufacture our KLIX machines in our Basingstoke, UK factory while our single serve brewers are manufactured by an approved third-party supplier. We are working to ensure our technologies contain responsibly sourced components, use energy and water efficiently, and can be easily recycled when our customers no longer need them.

We have detailed design specifications to ensure our technology is always designed with workplace needs in mind. Our engineers keep sustainability front of mind in the design phase, and we work hard to create products that are right first time—ensuring little to no waste in materials and resources.

Our technologies also have to meet stringent environmental regulatory requirements. For example, in Europe, we work with our suppliers and manufacturing groups to comply with the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) regulations that are designed to protect human health and the environment.

In addition to consistently delivering great tasting drinks, it's important that our technologies help workplaces reduce the amount of water and energy they use. Our engineers have developed innovative solutions to ensure that energy efficiency was a consideration for each new technology we developed. By ensuring each new generation of machines was more energy efficient than the last we have reduced average machine base energy use (total energy use by all MARS DRINKS machines in market) by 26%.

For example, our single serve machines contain two 330ml boilers instead of a single larger one. This dual boiler system ensures that the machine keeps just enough hot water to prepare the drinks our customers need, when they are needed, thus reducing energy use. In addition, the energy saving mode also deactivates the boiler during periods of inactivity.

The MARS DRINKS FLAVIA® Barista, launched in 2015, uses energy-efficient flow-through technology to heat water when making espressos. Instead of using a boiler to heat water, the MARS DRINKS FLAVIA Barista heats water instantly as it flows through the system. The water heater is also well-insulated to retain the heat it generates. This technology is perfectly suited to the smaller vending size of espresso drinks, balancing energy efficiency with customer need.

Because our KLIX vending machines make large volumes of drinks, they need a bigger reservoir of water. This requires more energy to keep the water warm, but by fully insulating the boiler, we minimize heat loss from the system. Through research and development into boiler size, heating element shape, and heating system control methods, we are continuing to find ways to make KLIX machines more energy efficient.

Our innovations to improve sustainability do not impact the quality or performance of the end product—for example, in 2011, we switched to LED lights instead of fluorescent, with potential carbon savings per machine of 57kg a year.³ We want to continue to develop 'invisible' solutions that have no impact on the taste or choice of the drinks available, but help workplaces reduce energy use and save money.

Designing technology that can be easily refurbished, reused and recycled at the end of life is a high priority. Across Europe, we work with a third-party company to collect the technologies at end of life. KLIX machines are then either refurbished or stripped, so their components can be reused in new machines or as spare parts. When machines or parts can no longer be reused, we recycle everything, from the plastic casing and wooden base units to the copper and gold in electrical components.

Nothing is sent to landfill —the few materials that cannot be reused or recycled are sent for incineration in a waste-to-energy plant.

PROGRESS AGAINST 2015 TARGETS	
Developing Responsible Products	
Maintain recyclable plastic cups	Achieved
25% reduction in average machine base energy use	Achieved; 26% reduction
100% recyclable Freshpacks	Not achieved; 4% of our Freshpacks were produced in recyclable Freshpacks
Supporting Our Customers	
Enable access to recycling infrastructure	Achieved in the US and Canada; Delayed in other markets
50% increase in recycling partner activity	312% Increase

Towards 2020: Solving The Waste Challenge

Workplaces across the globe have told us that their number one sustainability issue when it comes to workplace drinks solutions is keeping drinks' waste out of landfill. This is why solving the waste challenge is the single most important sustainability priority for the next five years for MARS DRINKS.

By 2020, we will source and design our packaging materials to reduce the carbon footprint of our single serve Freshpacks and KLIX cups by 25%. We understand that finding a sustainable packaging solution is a key concern of our customers and we are prioritizing this initiative. Currently we are on track to introduce a more sustainable Freshpack that will be a first step in helping us reach this 25% goal by the end of 2020. In addition, we aim to provide 100% of our customers in the US, UK and Germany with access to a sustainable end of life solution for all MARS DRINKS technologies, KLIX cups and Freshpacks.

To do this, we will work with customers to understand the solutions that best meet their needs. We will support innovation at MARS Incorporated and within the broader industry to develop better end of life solutions for consumer packaging. Ultimately our goal is for all our customers to be confident that when they choose MARS DRINKS as their workplace drinks solutions, they not only get the best technology and products, but also that they have chosen the most sustainable workplace drinks solution available.

When it comes to machines, we will take a more systematic and holistic approach to sustainability. For example, we will use a 'sustainability scorecard' to help designers consider sustainability at every step of machine design—from using responsibly sourced raw materials to designing for easy reuse and recycling.

2020 TARGETS Sustainable Solutions	
Technologies	<ul style="list-style-type: none"> • 100% of new technology platforms are more sustainable than previous versions (from 2015 baseline) • Establish, or maintain, a recycling program for all MARS DRINKS technologies
Freshpacks and Cups (single use plastic waste)	<ul style="list-style-type: none"> • Source and design packaging materials to reduce carbon footprint of Freshpacks and KLIX® cups by 25% (from 2015 baseline) • 100% Freshpacks produced in MARS DRINKS lower environmental impact pack (packaging that delivers a 25% reduction in carbon footprint) from 2015 baseline
End of Life Solutions	<ul style="list-style-type: none"> • 100% of workplace customers in the US, UK and Germany have access to a sustainable end of life solution for all MARS DRINKS' technologies, KLIX cups and Freshpacks • Support external and internal collaborations in key markets to enable better access to end-of-life solutions for MARS DRINKS' products via municipalities
Workplace Expertise	<ul style="list-style-type: none"> • Support customers in sharing information with their people highlighting ways to keep MARS DRINKS' plastic waste out of landfills
Customer Focused	<ul style="list-style-type: none"> • 100% of customers are confident that MARS DRINKS provides the most sustainable solution for single-use waste

Towards 2020

At MARS DRINKS we support businesses that want to create great working environments for their people. Increasingly people at work want to know that they have chosen a sustainable workplace drinks solution—that their coffees and teas are sourced ethically and responsibly, that their products and technology are manufactured in a sustainable way and, most importantly of all, that there are appropriate end of life solutions within easy reach to ensure drinks waste doesn't make its way into landfill.

MARS DRINKS is committed to helping workplaces around the globe to meet their own sustainability goals by providing the most sustainable workplace drinks solution. MARS DRINKS' 2016–2020 sustainability strategy sets out how we will achieve this goal by focusing on three key pillars:

- Sustainable Agriculture
- Sustainable Operations
- Sustainable Solutions

To find out more about MARS DRINKS and learn how we are progressing towards our 2020 sustainability goals, visit www.MarsDrinks.com/sustainability.

1 International Center for Tropical Agriculture study on climate change and coffee available here: <http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0124155>.

2 Data based on an independent Life Cycle Analysis, July 2011. Comparison is based on the original Freshpack going to landfill.

3 Assuming the machine is switched on constantly for a whole year, and is powered by a traditional energy mix.