Environmental Sustainability
At P&G, environmental sustainability is embedded in how we do business. We have a responsibility to make the world better—through the products we create and the positive impact our brands and Company can have in communities worldwide. We've established ambitious goals to minimize our environmental footprint, to innovate with the best and safest ingredients from both science and nature, and to create products that make responsible consumption irresistible for people everywhere.
Ambition 2030

2019 marks the one-year anniversary of the announcement of our Ambition 2030 sustainability goals. These goals leverage our scale to enable and inspire positive impact on the environment and the five billion people our brands touch each day around the world. With these goals, we are focused on where we can make biggest positive difference—our brands, our supply chain, society and our employees.

People know us through our brands, and we will use the power of our innovation and our brands to delight consumers and drive positive impact. In our supply chain, we will reduce our footprint and strive for circular solutions. We can impact society by creating powerful partnerships that enable people, the planet and our business to thrive. This includes finding solutions so that none of our packaging finds its way to the ocean. And finally, we will tap into our greatest resource, our employees, so that they are engaged and equipped to build sustainability into their daily work and communities.
HIGHLIGHT

Brands Take On Responsible Consumption

Our leadership brands are working on innovative programs to create products, solutions and services that make sustainable lifestyles seamless, while continuing to offer the value and superior performance consumers expect from our brands.

The Brand 2030 framework is our next step toward meeting our Ambition 2030 goal of “100% of our leadership brands will enable and inspire responsible consumption.” Our new Brand 2030 criteria are embedded in the Company’s brand growth model and aimed at driving positive impact while creating value for consumers and our Company.

Ariel

Ariel Europe is striving to make all its packaging recyclable by 2022 and to reduce plastic packaging by 30% by 2025. The first step was to convert their SUD tubs to light-weight bags, starting in the UK as of July 2019, saving 75% plastic. Additionally, the brand announced in September 2019 to increase its PCR in Ariel bottles from 25% to 50% across Europe starting in the first quarter of 2020.

Pampers

Pampers keeps innovating toward more sustainable diapering solutions in an effort to use 30% less diapering materials per baby over their diapering time. Using innovation and more effective materials, the brand has already reduced the average weight of its diapers by 18%² in the past three years, with the same trusted dryness. Additionally, Pampers is leading cutting-edge recycling efforts for all brands of diapers and wipes, not just Pampers, with a commitment to launch recycling operations in three cities by 2021.³

1 Vs. a typical disposable diaper
2 Comparison of Pampers diapers sold in Western Europe 2019 vs. 2016
3 The recycling technology was invented by Fater, a JV of P&G and Angelini (which makes Pampers in Italy)
Reduce, Reuse, Recycle

Our goal is to have 100% recyclable or reusable packaging by 2030. In April 2019, we elevated that commitment to reduce global use of virgin petroleum plastic in our packaging by 50% by 2030.

This is an ambitious goal we will achieve via lightweighting, increasing our use of recycled plastic, driving conversion to more concentrated product forms, and when it makes sense, using alternative materials. We estimate this will avoid the use of more than 300,000 tons of virgin plastic.
Testing Reusable Packaging

Loop, a partnership with TerraCycle, is a global circular shopping platform designed to eliminate waste. Using the age-old “milkman” concept, participants purchase a variety of household products—including Tide, Ariel, Cascade, Febreze and Pantene—in durable, refillable packaging conveniently delivered straight to their doorstep. Once empty, Loop collects and cleans the packaging to be put back into circulation for reuse.

P&G was the first consumer products company to partner with international recycling leader TerraCycle in the Loop program.
Joining Forces to End Plastic Waste

In 2019, we joined forces with more than 40 companies that make plastic, use plastic in their products and packaging, and those who recycle and manage plastic waste to form The Alliance to End Plastic Waste. P&G CEO David Taylor took the lead to serve as the first Chairman of the new Alliance, a not-for-profit organization that plans to invest $1.5 billion over the next five years to help end plastic waste in the environment.

Research shows that nearly 80% of the plastic in oceans begins as litter on land, the vast majority of which travels to the sea down one of ten major rivers around the world. Many of these rivers run through densely populated areas that lack suitable waste collection and recycling infrastructure. The Alliance is supporting an array of projects and partnerships that focus on solutions in four core areas: infrastructure, innovation, education and cleanup, with particular emphasis where the need is most urgent in Southeast Asia.

The Alliance is the foremost CEO-driven international organization focused on bringing together industry, government, communities and civil society in the fight to end plastic waste.
Protecting Water for People and Nature

Pressure on water resources is increasing in many regions across the globe. Urban populations are growing, demand is outpacing the water supply, and water quality is a recurring issue. We recognize this is a complex issue that requires collaboration across private, public and civil society to solve.

The 50 Liter Home Concept, spearheaded by P&G, brings together companies, policy makers, influencers and communities to develop and scale innovations for the home that help solve the urban water crisis and, at the same time, address household energy consumption and associated GHG emissions.

Major cities around the world face the prospect of a water crisis.
P&G achieved a significant 2020 sustainability goal ahead of schedule. We are proud to share that we are purchasing 100% renewable electricity in the U.S., Canada and Western Europe. These three markets are among our largest and represent more than 70% of our purchased electricity, signifying a strong start to P&G’s Ambition 2030 goal of purchasing 100% renewable electricity globally by 2030.
Environmental Sustainability

Message from Virginie Helias

2020 Environmental Goals Progress

Environmental Progress versus 2010 Baseline

BRANDS

Brand 2030

Ambitious Packaging Goals

New Packaging that Changes the Game

Reclaiming Plastic and Giving it a New Life

Loop Tests Refillable, Reusable Packaging

Closing in on Our 2020 Packaging Goals

Responsible Consumption for Energy Savings

Water-Efficient Products

Trust and Transparency at the Core

SUPPLY CHAIN

Supply Chain

Climate

Responsible Forestry

Palm Oil

Water

Waste

SOCIETY

Creating Circular Economies

Keeping Plastic Waste out of the Environment

Responsible Consumption

Protecting Water for People and Nature

Reinventing Water for Urban Living

EMPLOYEES

Employees

Tracking Our Progress

Awards and Recognitions

Environmental Resource and Waste Summary

Global Measurement and Additional Operational Data
"At P&G, sustainability is embedded in how we do business—and has been for a very long time. In fact, 2019 marks the 20th anniversary of our environmental sustainability report. While the report’s name and design has changed over the years, one element has always remained the same—our commitment to make the world better through the products we create and the positive impact our brands can have in communities worldwide.

2019 also marks the one-year anniversary of our Ambition 2030 sustainability goals announcement. When we designed these bold commitments, our intent was to leverage our scale to enable and inspire positive impact on the environment and the five billion people our brands touch each day around the world. Although there is much to do, I’m proud to say we are already making great progress.

We are progressing with the development of innovations and products that make responsible consumption a reality for people everywhere. We are reducing our footprint and striving for circular solutions. We’re actively engaging industry, governments, civil society groups and academics to forge new paths and create breakthrough solutions that drive the greater good. Our employees are staying focused and building sustainability into their work each and every day to have a positive impact on the environment and the communities we serve.

All of this work together will have a tremendous impact to advance solutions against some of the world’s most complex and challenging issues. I believe that we can truly be a force for good and a force for growth. I am inspired by our ongoing efforts and optimistic for a bright future.”

Message from
Virginie Helias
Chief Sustainability Officer
2020 Environmental Goals Progress

As we approach 2020, we have made significant progress against the goals we set in 2010 around climate, water and waste. As we are well on our way to achieving these goals and closing out 2020, we are raising the bar with even bolder commitments called Ambition 2030.

**CLIMATE**

**Reduce energy use at P&G facilities by 20% per unit of production by 2020**
- Achieved — 21% reduction per unit of production

**Reduce absolute GHG emissions by 30% by 2020**
- We have reduced absolute GHG emissions by 25%

**Ensure 70% of machine loads are low-energy cycles**
- Achieved — 70% of loads are low-energy

**Have 100% of the virgin wood fibers used in our tissue/towel and absorbent hygiene products be third-party certified by 2015**
- Achieved — 100% third-party certified

**Reduce truck transportation kilometers by 20% per unit of production**
- Achieved — reduced kilometers by more than 25%

**Ensure plants are powered by 30% renewable energy**
- 13% of energy is from renewable sources
  
  Note: New renewable electric purchases beginning July 2019 will be included in next year’s report, helping exceed this goal.

**Implement palm oil commitments**
- We continue to advance progress in our three-pillar strategy: supplier management, smallholder program and industry influence

**Create technologies by 2020 to substitute top petroleum-derived raw materials with renewable materials as cost and scale permit**
- We have developed the ability to substitute our top petroleum-derived raw materials (resins, cleaning agents and acrylates) with renewable materials
2020 Environmental Goals Progress

**WATER**

- **Provide 1 billion people with access to water-efficient products**
  - Achieved—1 billion people with access to water-efficient products

- **Reduce water use in manufacturing facilities by 20% per unit of production with conservation focused on water-stressed regions**
  - Achieved—27% reduction per unit of production

**WASTE**

- **100% zero manufacturing waste to landfill by 2020**
  - 92% of our manufacturing sites are ZMWTL

- **Reduce packaging by 20% per consumer use**
  - We have reduced packaging by approximately 14% per consumer use

- **Ensure 90% of product packaging is either recyclable or programs are in place to create the ability to recycle it**
  - We have achieved 88% and have strong, ongoing effort to further increase recyclability

- **Have 100% of our paper packaging contain either recycled or third-party-certified virgin content by 2020**
  - 99% of the volume reported by our suppliers was either recycled or third-party-certified virgin content

- **Double use of recycled resin in plastic packaging**
  - We used approximately 45,100 metric tons of post-consumer resin (PCR) in our plastic packaging, getting us 73% of the way to our goal

- **Conduct pilot studies in both the developed and developing world to understand how to eliminate landfilled/dumped solid waste**
  - We continue to make progress implementing a variety of pilot projects with external partners
Environmental Progress versus 2010 Baseline

With our operations, we strive to grow responsibly, constantly improving our efficiency while reducing our global footprint. Global production has increased since 2010, however we have successfully decoupled that growth from our environmental footprint, achieving both absolute and production-adjusted reductions in waste, water, energy and GHG emissions.

- **GHG**: 25% absolute reduction of greenhouse gas emissions
- **Energy**: 21% reduction per unit of production
- **Waste**: 92% of our production sites are zero manufacturing waste to landfill
- **Water**: 27% reduction per unit of production
- **Renewable Energy**: 13% of energy is from renewable sources
Brands

Use the power of innovation and our brands to delight consumers and drive positive impact.

- 100% of our leadership brands will enable and inspire responsible consumption.
- 100% of our packaging will be recyclable or reusable.
- We will reduce global use of virgin petroleum plastic in our packaging by 50%.
- We will build even greater trust through transparency, ingredient innovation and sharing our safety science.
Brands Enable Responsible Consumption

Most consumers are not willing to compromise performance for sustainable lifestyles and expect brands to take action in solving some of the most complex challenges facing the world. In fact, 9 out of 10 consumers feel better about purchasing a brand that supports a social or environmental cause and more than half of those consumers expect it. P&G and its brands have the opportunity to not only create products that offer superior performance, but promote conversations, influence attitudes, change behaviors and drive positive impact on society and the environment.

Brand 2030 is the Company’s next step toward meeting its Ambition 2030 goal of “100 percent of our leadership brands will enable and inspire responsible consumption.” Our new Brand 2030 criteria are embedded in the Company’s brand growth model and aimed at driving positive impact while creating value for consumers and our Company.

To do that, we have asked each brand to implement four Brand Fundamentals and one brand-specific Ambition, ensuring a thorough long-term integration of meaningful and measurable social and environmental impacts brand strategy and experience versus only an initiative.

In FY18/19, we trained all leadership brands on the requirements and in FY19/20, we will finalize our tracking and reporting process. As our journey will take us through 2030, our intent is to regularly review these criteria and update them as science, stakeholder views, and our own experience evolves.

“Consumers today expect brands to take meaningful action in solving some of the most complex challenges facing the world. This is why P&G is focused on reinventing brands to be a force for good and a force for growth. We want our brands to be growing and creating value while having a measurable, long-term, positive impact on society and the environment.”

MARC PRITCHARD, Chief Brand Officer

The Brand 2030 framework is our next step toward meeting our Ambition 2030 goal of “100 percent of our leadership brands will enable and inspire responsible consumption.”
Brand 2030 — The Fundamentals

1) Product and Packaging Innovation
Brands will need to innovate to enable responsible consumption:

• A meaningful impact in the brand’s key environmental impact area (e.g. water, raw materials)

• 100% of packaging will be recyclable or reusable

• A meaningful increase in responsibly sourced bio-based or recycled or more resource-efficient materials

• Ariel Europe is striving to make all its packaging recyclable by 2022 and to reduce plastic packaging by 30% by 2025. The first step was to convert their single-use dosage (SUD) tubs to lightweight bags. This started in the UK and as of July 2019, has saved 75% of plastic. Additionally, the brand announced in September 2019 plans to increase its PCR in Ariel bottles from 25% to 50% across Europe starting in the first quarter of 2020.

• Pampers keeps innovating toward more sustainable diapering solutions in an effort to use 30% less1 diapering materials per baby over their diapering time. Using innovation and more effective materials, the brand has already reduced the average weight of its diapers by 18%2 in the past three years, with the same trusted dryness. Additionally, Pampers is leading cutting-edge recycling efforts for all brands of diapers and wipes, not just Pampers, with a commitment to launch recycling operations in three cities by 2021.3

• Brands like Tide, Ariel, Cascade, Febreze and Pantene are participating in Loop, a global circular shopping platform designed to eliminate waste by transforming the products and packaging of everyday items from single-use to durable, multi-use, feature-packed designs.

2) Brand Communication
Brands leverage their voice in communication and advertising production to promote social and environmental sustainability

• Ariel is using its voice to help shape a future of equals through campaigns like “Partage des Taches” in France and “Share the Load” in India, which support the idea of men and women equally sharing housekeeping tasks. In addition, it is promoting to washing in low temperatures in its recent WWF Earth Hour pledge in the UK.

• In partnership with UNICEF, Pampers has helped eliminate maternal and neonatal tetanus in 24 countries. In March 2019, one more country—Chad—now eliminated this disease. These efforts have resulted in an estimated 880,000 newborn lives4 saved since 2006.

• Several of our leadership brands are using their voice to raise awareness for the beach plastic challenge. Fairy and H&S have produced many bottles made of beach plastic.

1 Versus a typical disposable diaper
2 Comparison of Pampers diapers sold in Western Europe 2019 versus 2016
3 The recycling technology was invented by Fater, a JV of P&G and Angelini (which makes Pampers in Italy).
4 Based on WHO and UNICEF estimated figures as of Feb 2019

MORE ON LOOP
3) Transparency
Brands are transparent about ingredients and share their safety science.

- Herbal Essences is leading the way in sharing comprehensive information about its ingredients, transparently explaining their four-step safety process and being recognized by PETA as a cruelty-free brand. Herbal Essences bio:renew is the first global hair care brand to have its botanicals endorsed by the Royal Botanic Gardens at Kew, a world-leading authority on plants.

4) Supply Chain Impacts
Brands reduce supply chain impacts, including responsible sourcing of priority materials. Manufacturing sites are on track to meet the Company’s Ambition 2030 goals.

- As of 2019, SK-II is produced with 100% purchased renewable electricity, dramatically reducing manufacturing CO2 emissions. SK-II also recirculates more than 20% of the Pitera wash water back into the process by treating it to drinking water quality. In addition, the latest production facilities for SK-II were LEED Silver certified under the new LEED v4 standard, the first manufacturing site in Japan to achieve this honor.

- Bounty and Charmin are committed to responsible sourcing, ensuring 100% of the virgin wood pulp we purchase is third-party certified by one of our accepted forest certification systems. In addition, the our manufacturing sites for these brands have reduced their energy use by 25% and water consumption by 29% since our 2010 baseline, helping reduce not only our footprint but that of our consumers as well.
There are many pilot projects underway to develop and test new products and new packaging solutions that will accelerate our progress and bring us closer to our global goal of reducing plastic waste.

**Tide Eco-Box**
Tide introduced this e-commerce solution in 2018 to reduce weight and the amount of plastic used in the package. Its re-engineered formula gives consumers more cleaning per drop than Tide Original liquid detergent in a shipping-safe package made with 60% less plastic.

**Olay Refillable Pod**
Olay is the first mass retail skincare brand in the U.S. to test refillable packaging, offering its best selling Olay Regenerist Whip moisturizer with a recyclable refill pod that fits right in the jar. The online test kicked off in North America in October 2019.

**Olay Strip It**
To reduce plastic, four young engineers in our Bangkok Plant came up with #OlayStripIt, carton perforations framing the Olay logo that would clearly show if anyone had tried to open the package prior to sale. It’s estimated this simple innovation will eliminate 8,000kg of plastic.
Reclaiming Plastic and Giving It a New Life

Each year, upwards of eight million tons of plastic waste end up in rivers, lakes and oceans. For several years, we have teamed up with an innovative waste management company, TerraCycle, to create recyclable shampoo, conditioner and dish washing bottles made of plastic removed from beaches and waterways. Organizing beach cleanups and partnering with retailers around the world to feature the bottles helps bring awareness to the issue of plastic waste and encourages people to reduce, reuse and recycle.

Giving Packages and Products a New Life

• In the U.S., in February 2019, Gillette and TerraCycle announced for the first time in the U.S. that all brands of disposable razors, replaceable-blade cartridge units and razor plastic packaging are recyclable on a national scale. Through the partnership, consumers are invited to recycle their razors in three ways: the at-home recycling program, local recycling drop-offs and the Gillette On Demand recycling program.

• In April 2019, P&G Korea, led by Febreze and Oral-B, officially launched the “Plastic-Free Campaign” with local retailer Emart and TerraCycle. We worked with them to install plastic collection boxes at Emart stores, collecting plastic to upcycle into meaningful products such as traffic safety reflectors for children.

• In the UK, Head & Shoulders and ASDA created in-store awareness of the Head & Shoulders shampoo bottles that now contain up to 25% post-consumer recyclate plastic. Because milk bottles are a high-selling products, Head & Shoulders launched its bestselling formula with new artwork with the simple message—“part of me was a recycled milk bottle” to communicate the real difference shoppers and brands can make by taking action on recycling.

• In partnership with the Tokyo 2020 Organizing Committee and the International Olympic Committee (IOC), we kicked off the Podium Project in June 2019. The Olympic Games winners’ podiums will be created from recycled materials—and consumers can directly contribute. Retail partner AEON WELCIA Group will encourage shoppers to bring their used plastic back to the store in collection bins. The goal is to collect 1.5 million pieces of plastic packaging consisting of polyethylene and polypropylene from Japanese consumers to produce recycled plastic resin.

• We will unveil the podiums at the Tokyo 2020 Olympic Games. After the games conclude, we plan to recycle the podiums once again to create new packaging and educational materials to explain and promote the Olympic and Paralympic movements and the overall importance of sustainability.
Bottles Made from Discarded Plastic

Fairy Beach Bottle
Fairy debuted a Beach Bottle across Europe producing more than two million beach bottles made with 100% recycled plastic—10% of it collected from beaches.

Head & Shoulders Surpasses One Million Beach Bottles
Since its introduction in 2017, Head & Shoulders has produced more than 1 million bottles made with recycled beach plastic in more than 10 countries in Europe and Latin America.

Japan’s Joy Introduces Beach Plastic Bottle
P&G Japan’s iconic dish care brand, Joy, introduced a limited edition hand dish wash detergent bottle made with 25% beach plastic sourced, recycled and manufactured entirely in Japan.

Herbal Essences
To celebrate World Water Day in March, Herbal Essences teamed up with TerraCycle to launch three limited-edition collections in their bio:renew lineup: Sea the Change, Love the Shore and Waves of Change. The recyclable shampoo and conditioner bottles were made of 25% beach plastic and available at select Target stores through June 2019.

Beach Clean-Ups

• In the UK, we joined with Tesco and Keep Britain Tidy to rally UK shoppers to help clean up beaches across the country after the summer season. “The Big Beach Clean” invited shoppers to take action and nominate their favorite beaches to be one of 10 clean ups across the country. Alongside this, in support of the campaign, a combined team of employees from P&G and Tesco went to the UK countryside to clean up discarded plastic. With one team combing the beach at Landguard Point and one riverside at the River Colne, the teams collected dozens of bags of litter.

• In Spain, we partnered with CARREFOUR and Paisaje Limpio to clean local beaches and organized a roundtable discussion with reps from the Company, CARREFOUR and Influencer Calleja to discuss the journey behind this effort and the importance of driving responsible consumption.

Volunteers help clean local beaches in Spain.
INTRODUCTION

ETHICS & CORPORATE RESPONSIBILITY

COMMUNITY IMPACT

DIVERSITY & INCLUSION

GENDER EQUALITY

ENVIRONMENTAL SUSTAINABILITY

BRANDS

Loop Tests Refillable, Reusable Packaging

“Loop aims to not just eliminate the idea of packaging waste but greatly improve the product experience and the convenience in how we shop.”

TOM SZAKY
CEO, TerraCycle

Residents in New York and Paris can now get their favorite home and personal care products in durable, refillable and reusable containers collected and returned to their doorstep. Announced in January 2019, we were one of the first consumer products companies to partner with international recycling leader TerraCycle in the Loop program. Some of our brands participating in the Loop test markets in Paris and New York include Tide, Ariel, Cascade, Crest, Pantene, Herbal Essences, Pampers, Always, Oral-B, Gillette, Venus and Febreze.

Through Loop, consumers order household products online such as Tide and Febreze, foods like Haagen-Dazs and Tropicana juice, or beauty icons Pantene and Herbal Essences, all of which arrive in new, durable, refillable containers in a reusable shipping tote that eliminates the need for cardboard boxes. Once consumers are done with their products, they simply put the empty containers back into the tote and use a dedicated website to request a pick up directly from their home. The durable containers are then cleaned, refilled and reused.

“Loop gives us the opportunity to test and learn what a refill and return business model must deliver in order to make it a truly scalable, sustainable proposition. We are also using this test to see how ‘collect and recycle’ operations for used razor blades, diapers and toothbrush heads can be optimized.”

VIRGINIE HELIAS
Chief Sustainability Officer
Doubling Our Use of PCR

Our goal was to double the use of PCR versus our baseline level of 26,000 metric tons. This year, we used approximately 45,100 metric tons of PCR in our plastic packaging, which represents an increase of approximately 73% versus baseline and puts us on track to hit our goal.

Ensure That 90% of Our Product Packaging is Recyclable or That Programs are in Place to Create the Ability to Recycle Them

For purposes of tracking progress against our goal, a package is considered recyclable when there is an in-market, at scale recycling system in place for that material type. This includes collection, sortation, processing for end use and an established end market for collected material. Using this definition, approximately 88% of our packaging would be considered recyclable today. This relatively high value reflects the fact that the vast majority of our current packaging is made from materials and forms that are readily recyclable (e.g., corrugated boxes, cartons, high-density polyethylene [HDPE] bottles and polyethylene terephthalate [PET] bottles).

Difficult-to-recycle materials including films, resins not readily collected by curbside programs and mixed material packaging continue to be our biggest opportunity. We partner with other organizations in the recycling value chain to find solutions for these materials. One example is our leadership in the Material Recovery for the Future (MRFF) initiative to recover and recycle films via curbside collection. MRFF is being demonstrated at scale in the J.P. Mascaro & Sons Total Recycle material recovery facility in Pennsylvania. With this program in place, we will exceed our goal of 90% of our packaging being recyclable.

As we have now declared our Ambition 2030 goal of getting to 100% recyclable or reusable packaging, this will be the last year we report separate progress against our 90% target. Going forward, we will simply report against our 2030 objective of 100% recyclable or reusable packaging. As the scope of our 2030 goal is different than the scope of our current 2020 goal, results reported next year may differ from current results. The largest factor will be that our 2030 goal focuses on consumer packaging, as this is what we believe is most meaningful to drive the change necessary in our industry. Packaging that ships to our customers, which is primarily corrugated boxes that are readily recyclable and recycled, will no longer be in scope of our tracking such that we expect our reported recyclable or reusable values to be lower next year.
Closing in on Our 2020 Packaging Goals

Reduce Packaging by 20% per Consumer Use by 2020

Our goal is to reduce packaging by 20% per consumer use by 2020 versus our 2010 baseline. In FY18/19, we achieved a 14% reduction per consumer use, which is off our glide path for our 2020 goal. We continue to experience market-driven headwinds that are impeding progress against our goal. In some key markets, customer requests for smaller case counts increased the amount of corrugate usage per consumer use of product. We also shifted some products to smaller sizes to better meet consumer needs, which increased the amount of packaging per consumer use.

However, through our ongoing focus on packaging efficiency and several packaging design breakthroughs, we were able to offset these headwinds and deliver a 14% reduction versus our 2010 baseline. While we will continue our efforts, we do not expect to make much further progress in the next year and do not anticipate hitting this goal in 2020.

We also recognize that increased use of corrugate, while impeding progress against our goal, represents a material and packaging type that is recycled at very high rates, has a very high recycle content and is renewable.

Summary of Resin Usage in Plastic Packaging

In FY18/19, we used approximately 714,000 metric tons of plastic packaging. Of this, 45,100 metric tons were post-consumer resin. Resin types and packaging formats are summarized below.

<table>
<thead>
<tr>
<th>Resin Type</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>PE</td>
<td>44%</td>
</tr>
<tr>
<td>PET</td>
<td>31%</td>
</tr>
<tr>
<td>PP</td>
<td>13%</td>
</tr>
<tr>
<td>Other</td>
<td>22%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Package Type</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rigsds (e.g., bottles, caps, tubs, thermoform, injection molded parts)</td>
<td>55%</td>
</tr>
<tr>
<td>Flexibles (e.g. pouches, bags, wraps, sachets)</td>
<td>43%</td>
</tr>
<tr>
<td>Others (tubes, jars)</td>
<td>2%</td>
</tr>
</tbody>
</table>

Our ongoing focus on packaging efficiency and several packaging design breakthroughs helped us deliver a 14% reduction in packaging versus our 2010 baseline.
The energy used during the machine washing of laundry is one of the biggest impacts on our corporate greenhouse gas (GHG) emissions footprint and, as such, we have focused on innovating to enable consumers to get clean clothes using less energy. In 2010, we set a goal to turn 70% of all washing machine loads into energy-efficient cycles by 2020. We are thrilled to report that this year, we reached our goal—one year ahead of schedule.

We define low-energy washing as 0.4 kWh or below per cycle. This accounts for cold water and low-temperature cycles as well as most high-efficiency (HE) machine cycles. We knew we couldn’t achieve this alone; machines are more efficient and consumers are savvier than ever about their water and energy use. We continue to partner with top washing machine manufacturers globally to help educate consumers about the benefits of quick and cold-water washing cycles and have distributed more than six million informational packets globally to new machine purchasers.

Ariel UK and World Wildlife Fund Pledge to “Turn to 30⁰”

Ariel has been at the forefront of driving consumer behavior change when it comes to washing at cold temperatures with our long-running “Turn to 30⁰” campaign. Ariel once again partnered with WWF UK to encourage people to take simple, everyday actions to protect the planet, one of which was “turn washing temperatures down to 30°.” For every pledge made with #VoiceForThePlanet, Ariel donated £1 to WWF UK. During March and April, WWF UK saw a large number of pledges made across the country.

Ariel’s “Turn to 30⁰” in the UK donated £1 to WWF UK for each of pledges made.

Tide #QuickColdPledge

Tide has been urging people to take the #QuickColdPledge and turn their washing machine to the quick and cold cycles to lighten our impact on the environment. About 80% of a washing machine’s energy consumption comes from heating the water. By delivering a superior performance in quick and cold cycles, Tide helps people get the clean they need while saving time, money and energy.

Even after reaching our sustainability goal of 70% of wash loads occurring in energy-efficient wash cycles, we will continue to enable energy efficiency while washing. As part of our Ariel 2030 Brand Ambition, we aim to reinvent a clean that redefines green, saving 50% of our resources, including the energy used for doing the laundry. We want to continue to educate and enable more energy-efficient washing cycles by lowering the average temperature of household washing globally. This will not only help the environment but also help consumers save on their energy bills and better protect their clothes, giving clothes a longer life and keeping garments out of the landfill.
We Provided More Than One Billion People with Access to Water-Efficient Products

Helping consumers save water in their home has been a key focus of our 2020 water goals. Over the last four years, we’ve worked to qualify a suite of products as water-efficient products based on the technology they utilize and the habits they inspire. Thanks to the hard work of our researchers, formulators, sustainability team and brand leaders, we have achieved this 2020 goal and provided more than one billion people with access to water-efficient products one year ahead of schedule. But our work is not finished here. Our brands will continue to look for opportunities to reduce in-home water use and to educate consumers on the topic.

We achieved our 2020 goal of providing one billion people with access to water-efficient products.

Tide Plus in India

In many parts of the world, handwashing laundry is part of a household’s daily routine. A large volume of the household’s weekly water usage goes toward getting their clothes clean. The challenge is even bigger when water is scarce, as it is in many states of India. Tide Plus detergent helps Indian homes save more than 10% of the water in every wash (versus previous Tide Plus technology) by eliminating a rinse in the laundry washing process. Each household can save more than 4,000 liters per year by utilizing the Tide Plus technology on laundry day. Three hundred and seventy million people in India have access to the water saving potential of Tide Plus, which could help save water equivalent to 6 billion showers per year.*

Pantene Foam Conditioners

Pantene’s suite of foam conditioners help women reduce the amount of time they spend rinsing conditioner from their hair. Foam conditioners rinse out of hair 50% faster than normal cream conditioners. Each week, users of quick rinse foam conditioners can save up to four gallons of water versus traditional cream conditioner, all while getting their hair silky smooth. Many people have access to foam conditioners across China, Spain/Portugal, U.S., Germany, UK, Russia and Eastern Europe.

*Calculated on 35 liters average amount of water per 10 min shower
Nothing is more important to us than ensuring our products are safe for consumers and the environment. Providing people with the information they need to make informed choices while continually improving our product portfolio with the product performance and ingredient preferences they seek remains a core focus for the Company. Last year, we committed to sharing more information about our safety science and ingredient choices. We looked across all our product offerings and innovations to develop our Ingredient Citizenship principles. These guide how we evaluate and share the ingredients we choose for our products.

Throughout our history, we have stood for products of superior value and performance, which requires the best and safest ingredients available—whether sourced from science or nature. Innovation with ingredients is an ever-evolving area where we invest in developing new options and continually consider what is possible. This is evident in several of our product launches, which integrate new ingredients for a superior consumer experience.

For example:

**Tide purclean** integrates plant-based surfactants to achieve outstanding cleaning. Tide purclean is a USDA-certified bio-based detergent with four times the cleaning power of the leading natural detergent. Tide purclean continues to grow ahead of the naturals laundry category and recently has been ranked the #1 natural laundry detergent by a leading consumer publication.

**Tampax Pure** offers a 100% cotton core and a 90% plant-derived applicator for comfort and protection.

**Pampers Pure** diapers and wipes were created with responsibly sourced plant-based materials (such as cellulose, cotton and plant-based fibers derived from sugar cane) and other thoughtfully selected materials and made with 100% purchased renewable electricity.
Trust and Transparency at the Core

Not only are we innovating with product ingredients and sourcing choices, we are also sharing more about those choices with greater ingredient transparency. Our Brand websites and PG.com offer more information than ever before about our ingredients, as well as the safety process we follow to ensure our products are safe to use as directed. You can see this come to life through a few examples here:

• The naturals category is growing at an accelerated speed across the industry, yet it is an area with little regulation, lots of variation and potential for irresponsible sourcing. P&G Beauty entered a long-term partnership with The Royal Botanic Gardens at Kew to change how we innovate with natural ingredients, learning from their deep expertise in plants, their usefulness and conservation. Kew Gardens has more than 260 years of expertise in botanical science, 300 research scientists, and is the most biodiverse place in the world. Our first collaborative effort under this innovation partnership can be found in Herbal Essences' bio:renew lineup around the globe. Customers can rest easy knowing the botanicals in Herbal Essences bio:renew have been verified by the plant experts at Kew.

• As more consumers ask for transparency about ingredients used in beauty products, they also ask for their products to use ingredients they trust as safe. Herbal Essences heard this call and brought to market two new sulfate-free shampoos formulated to meet the Environmental Working Group's (EWG) VERIFIED™ stamp of approval. This means Herbal Essences meets the rigorous criteria and provides additional information on the product label in an effort to drive greater ingredient transparency and informed choices. With this credential, Herbal Essences is the first mass hair care brand in mass retailer stores to meet the strict clean beauty standards set by EWG—creators of the Skin Deep® Healthy Living® app—making clean beauty options both affordable and accessible.

Herbal Essences is the first mass hair care brand in mass retailer stores to earn the EWG VERIFIED™ stamp of approval.
Supply Chain

Reduce our footprint and strive for circular solutions.

- We will protect and enhance the forests we depend upon.
- We will improve livelihoods of palm smallholders by increasing yields from existing lands.
- 100% renewable electricity and cut GHG emissions in half at P&G sites.
- P&G sites will deliver a 35% increase in water efficiency and source at least five billion liters of water from circular sources.
- Advance at least 10 significant supply chain partnerships to drive circularity on climate, water or waste.
Reducing our Footprint at Every Stage

Across our global operations, we are making intentional choices to reduce the footprint of our suppliers, buyers and manufacturing sites, sourcing sustainable materials and exploring new business models to drive circular solutions. We are combining resources, reach and knowledge with strategic global partners to drive the scale and speed needed to make a real difference.

Striving for Circular Solutions

Circularity has always been a part of our ongoing conservation and environmental footprint reduction efforts within water, waste and renewable energy. However, as we look toward the next decade, we are committed to being both a force for good and a force for growth. As part of that vision, we have embraced the need to create a more circular end-to-end supply chain. To achieve this, we will need to start thinking differently about the incoming materials, manufacturing work process, distribution and transport of our products. Circularity is not only the right thing to do, it also helps make our operations more efficient and resilient.

We have established specific targets that we intend to achieve by 2030:

- 100% renewable electricity and cut GHG emissions in half at our sites
- Our sites will deliver a 35% increase in water efficiency and source at least five billion liters of water from circular sources
- Advance at least 20 significant supply chain partnerships to drive circularity on climate, water or waste

To learn new methods, find creative partners and to accelerate our circular journey, we joined the Ellen MacArthur Foundation’s Circular Economy 100 working group. The Circular Economy 100 is a pre-competitive innovation program enables organizations to develop new opportunities and realize their circular economy ambitions faster. It brings together corporations, governments, cities, academic institutions, emerging innovators and affiliates in a unique multi-stakeholder platform.
As a global citizen, we’re concerned about the negative consequences of climate change and are committed to doing our part to reduce greenhouse gas emissions. We focus our efforts on reducing the intensity of greenhouse gas emissions (GHG) from our own operations, helping consumers reduce their own GHG emissions through the use of our products, and finally, building partnerships with our suppliers and retailers to optimize transportation of our products, such as reducing the number of trucks on the roads.

For additional perspective on climate change implications that could be relevant for the Company and the steps we are taking to address them, please download our climate change perspective document.

Reducing GHG Emission

Scope 1 and 2
We’re on track to deliver our science-based target to reduce absolute greenhouse gas emissions by 30% in 2020 versus 2010. We have reduced absolute scope 1 & 2 greenhouse gas emissions by 25%. The Science Based Targets Initiative recently updated their guidance and validated our target as “well below 2°C.”

We have two key strategies to reduce greenhouse gas emissions by 2020:

- Improve operating efficiency by 20%. We have exceeded that target delivery: a 21% improvement this year versus 2010.
- Moving to low-carbon energy sources with a goal of utilizing 30% renewable energy by next year.

In 2018, we made another significant step on our journey to reducing greenhouse gas (GHG) emissions with the announcement of Ambition 2030. We committed to:

- Reducing our Scope 1 & 2 greenhouse gas emissions by 50% on an absolute basis by 2030 (versus 2010 baseline). This is our second science-based target and complements our initial science-based target of a 30% reduction in Scope 1 & 2 emissions by 2020.
- Purchasing 100% renewable electricity in North America by 2020 and globally by 2030. These targets will further advance our efforts to increase our use of renewable energy.

We have retained Lloyd’s Register Quality Assurance (LRQA) to provide independent verification of our GHG program to ensure it meets the intent of the GHG Protocol Corporate Accounting and Reporting Standard.
Climate

Reduction in Energy Consumption
Percent reduction versus FY09/10, production adjusted

<table>
<thead>
<tr>
<th></th>
<th>FY18/19</th>
<th>FY17/18</th>
<th>FY16/17</th>
</tr>
</thead>
<tbody>
<tr>
<td>Energy Consumption by GBU</td>
<td>Millions of gigajoules</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Baby, Feminine &amp; Family Care</td>
<td>61</td>
<td>61</td>
<td>60</td>
</tr>
<tr>
<td>Beauty</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fabric &amp; Home Care</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grooming</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health Care</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Total Greenhouse Gas Emissions (Scope 1 & Scope 2)
Percent reduction versus FY09/10, absolute

<table>
<thead>
<tr>
<th></th>
<th>FY18/19</th>
<th>FY17/18</th>
<th>FY16/17</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Greenhouse Gas Emissions (Scope 1 &amp; Scope 2)</td>
<td>Millions of metric tons</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Baby, Feminine &amp; Family Care</td>
<td>4.1</td>
<td>4.1</td>
<td>4.6</td>
</tr>
<tr>
<td>Beauty</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fabric &amp; Home Care</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Grooming</td>
<td></td>
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</tr>
<tr>
<td>Health Care</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Achieving this goal was a meaningful step on our sustainability journey, but the work doesn’t stop there. We know we can’t solve the world’s most pressing environmental challenges alone. Continued progress requires collaboration, and we are focused on creating partnerships that will enable people, the planet and the business to thrive.

Reducing Our Carbon Footprint at Manufacturing and Distribution Sites
A great example of how our climate actions are coming to life is through our efforts in Taicang, China where we produce Head and Shoulders, Pantene, Rejoice and Vidal Sassoon. Designing in sustainability from day one, Taicang was built around the concept of a Chinese water garden and is one of our most sustainable sites globally. They have achieved LEED silver certification, utilize 100% renewable electricity from wind, are qualified as zero manufacturing waste to landfill, and have demonstrated breakthrough water/wastewater recycling. Since their startup in 2012, the plant has continued focus on reducing their footprint, using lean operational strategies to deliver an additional 27% reduction in energy per unit of production.

Our Boston plant produces Gillette Razors and is also the home of Gillette’s World Shaving Headquarters and R&D center. Over the last five years, this site has reduced their absolute energy consumption over 10% by partnering with their local utility to improve energy efficiency of their operations.

Similar to Taicang above, our Milenio Gillette Blades & Razors Plant in Irapuato, Mexico continues to be a leading example of sustainable manufacturing within their region. The plant sends zero manufacturing waste to landfill, reuses treated wastewater and gets most of their electricity from an offsite wind energy partnership. Recognizing their ongoing efforts to reduce energy (such as major compressed air and cooling upgrades) the plant has won the Energy Efficiency State Award for 4 consecutive years.

We are proud to share that we are purchasing 100% renewable electricity in the U.S. and Canada, and most of Europe.
Scope 3 GHG Emissions

More than 99% of our Scope 3 emissions come from just four categories — purchased goods and services, downstream transportation and distribution, use of sold product, and end of life treatment of sold product. Of these, the “use phase” of our products, especially those that use hot water during consumer use, is our single greatest opportunity for Scope 3 emissions.

Given these four categories account for more than 99% of Scope 3 emissions, we focused this year’s data update on those categories and derived new estimates for them using life cycle assessment (LCA) data and calendar year 2018 production volumes. Findings were consistent with prior years, indicating consumer use of our products remains our greatest opportunity area. Updated data on packaging materials were included in purchased goods and services which and we also updated our business travel emissions. The business travel estimate includes commercial airline travel by employees that were managed by our primary outside travel agencies. Travel arranged by other agencies is not covered in the calculation and would therefore exclude the following markets—Singapore (Prior to March, 2019), China, Taiwan, Indonesia, and Russia. We expect to include those countries in next year’s report.

<table>
<thead>
<tr>
<th>Scope 3 Categories</th>
<th>Tons CO₂e</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purchased goods and services—upstream transport &amp; distribution</td>
<td>16,421,000(^1)</td>
</tr>
<tr>
<td>Capital goods</td>
<td>247,000(^2)</td>
</tr>
<tr>
<td>Fuel &amp; energy activities</td>
<td>495,000(^3)</td>
</tr>
<tr>
<td>Waste generated in operations</td>
<td>9,000(^3)</td>
</tr>
<tr>
<td>Business travel</td>
<td>151,042(^4)</td>
</tr>
<tr>
<td>Employee commuting</td>
<td>117,000(^2)</td>
</tr>
<tr>
<td>Upstream leased assets</td>
<td>Not material</td>
</tr>
<tr>
<td>Downstream transport &amp; distribution</td>
<td>5,394,000(^1)</td>
</tr>
<tr>
<td>Processing of sold product</td>
<td>Not material</td>
</tr>
<tr>
<td>Use of sold product</td>
<td>199,133,000(^1)</td>
</tr>
<tr>
<td>End of life treatment of sold product</td>
<td>13,251,000(^1)</td>
</tr>
<tr>
<td>Downstream leased assets</td>
<td>Not material</td>
</tr>
<tr>
<td>Franchises</td>
<td>Not material</td>
</tr>
<tr>
<td>Investments</td>
<td>Not material</td>
</tr>
</tbody>
</table>

\(^1\) Calendar year 2018 estimate from LCA data
\(^2\) Fiscal year 2016/17 estimate
\(^3\) Scope limited to material sent to landfill
\(^4\) Covers period June 1, 2018 – May 31, 2019
Responsible Forestry

Although we do not own or manage commercial forests, many of our products and packages are dependent on raw materials from forest-based supply chains. Therefore, we play a key role, through our procurement and manufacturing practices, to ensure the sustainability of the world’s forest resources.

Forests are critical to earth’s ecosystem and to the plant, animals and human communities that depend on them. The world’s forests hold the potential to mitigate some of the most important threats we face such as climate change, but they remain under pressure from population increases and economic demands. One of the easiest ways to counteract threats to forests is by looking for and purchasing wood products which are sourced from responsibly managed forests and tree plantations.

We remain committed to sourcing wood pulp certified to leading international forest certification standards. We have been working diligently to define Ambition 2030 plans, which go beyond our prior efforts to enhance and protect the world’s forests and which help advance our commitments to:

- Increase the area of certified forests globally, while working to strengthen leading certification systems.
- Play a leadership role in developing a collaborative science-based forest-positive approach that supports sustaining and expanding working forests that we and others depend on.

Wood pulp for tissue/towel and absorbent hygiene products, wood fibers used in paper packaging and palm oil for our laundry and beauty products are strategic commodities where our sourcing practices have the greatest impacts on ensuring responsible use of the world’s forest resources. Each of these materials has a different supply chain, and their unique complexities led us to develop individual programs as described in the following sections.
Suppliers are expected to comply with the following criteria for responsible forest management:

- Ensure the safety of forestry and manufacturing operations for employees and the environment.
- Ensure that unwanted wood sources are avoided, and that wood is legally harvested, and that all legal requirements are met. We will not knowingly use illegally sourced materials in our products.
- Ensure that their supply chain incorporates the principles of responsible forest management and continuous improvement in their own operations, and that they are verified by independent forest and chain-of-custody certification.
- Ensure that trees are not harvested from high-conservation value forests unless they are credibly certified to the most rigorous forest management standards. We support multi-stakeholder efforts to develop information sources and tools that will help suppliers identify these areas on their own forestlands and in their procurement of wood raw materials from third parties.
- Ensure that there is no sourcing from genetically modified trees in pulp delivered to us.
- Ensure that their own and their supplier practices reflect our social values and support of universal human rights through work with local governments and communities to improve the educational, cultural, economic and social wellbeing of those communities.
- Ensure that their supply chain used to produce our pulp does not contain fiber from conflict timber (timber that was traded in a way that drives violent armed conflict or threatens national or regional stability).

We require that the forest certification systems utilized by our wood pulp suppliers adhere to responsible forest management.
Responsible Forestry

Third-Party Certification

100% of the virgin wood pulp we purchase for use in our tissue/towel and absorbent hygiene products is third-party certified by one of our accepted forest certification systems.

We give preference to FSC certified pulp when it is available and meets product performance and business requirements. FSC certification protects water, wildlife and local people by ensuring forests are responsibly managed. FSC standards are recognized worldwide as the most trusted forest management certification scheme and are supported by leading international environmental NGOs.

Based on the market availability of certified pulp, our supply chain will also source from other third-party forestry certification systems, such as:

- Programme for the Endorsement of Forest Certification (PEFC)
- Sustainable Forestry Initiative® (SFI)
- Brazilian Forest Certification Programme (CERFLOR)
- Canadian Standards Association (CSA) Group Sustainable Forest Management System (SFM)

Pulp For Our Tissue/Towel and Absorbent Hygiene Products

Pulp Sources

In FY18/19, we purchased 1.3 million metric tons of air-dried pulp for use in our tissue/towel, diaper and absorbent hygiene products. The pulp was sourced from the following countries and used the following third-party certified fiber:

<table>
<thead>
<tr>
<th>Country of Origin</th>
<th>% of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Argentina</td>
<td>&lt; 1%</td>
</tr>
<tr>
<td>Brazil</td>
<td>35%</td>
</tr>
<tr>
<td>Canada</td>
<td>35%</td>
</tr>
<tr>
<td>United States</td>
<td>28%</td>
</tr>
<tr>
<td>Sweden</td>
<td>1%</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
</tr>
</tbody>
</table>

Certification System

<table>
<thead>
<tr>
<th>Certification System</th>
<th>% of Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>FSC COC</td>
<td>39%</td>
</tr>
<tr>
<td>FSC CW</td>
<td>4%</td>
</tr>
<tr>
<td>PEFC</td>
<td>22%</td>
</tr>
<tr>
<td>SFI</td>
<td>35%</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
</tr>
</tbody>
</table>

FSC Group Certificate Support

In 2016, we met with the Four States Timberland Owners Association (FSTOA), led by Domtar, to discuss expanding the amount of timberland that is under forest management certification.

Together, we are committed to lowering the technical and financial hurdles to increasing forest certification in family-owned forests through Domtar’s FSTOA FSC group certificate.

Our participation supported the growth in certified lands, and we continue to support the operation and expansion of the association.

We give preference to FSC certified pulp because the certification ensures forests are responsibly managed.

Our Charmin toilet tissue and Puffs facial tissue products are FSC certified by Rainforest Alliance.
Responsible Forestry

Advancing Global Certification

Strengthening Forest Certification
In early 2019, the PEFC Council made a call for volunteers to participate in a new permanent Sustainable Forest Management Working Group. We were nominated to join the working group and selected as a participant, representing customers and consumers. The working group will continue development of PEFC’s sustainable forest management approach and provide guidance on the implementation and interpretation of PEFC’s benchmark standards for forest management certification. Our participation in this working group will help advance our Ambition 2030 commitment to strengthen the world’s leading forest certifications systems.

Continuing Collaboration

Arbor Day Foundation Tree Planting
We worked with Arbor Day Foundation (ADF) and additional collaborators to help ReLeaf Michigan plant trees in Detroit’s Corktown neighborhood Muliett Park in June 2019. The trees were planted by volunteers, and the new trees will help Detroit meet its goal of providing all residents with a park within a ten-minute walk. The trees beautify the park and will grow to provide shade for the park’s amenities. The two organizations previously collaborated in a similar tree-planting event in Detroit in 2017.

New Forestry Commitments

Today, all our Family Care products are made with 100% certified pulp, sourced from responsibly managed forests. Charmin and Puffs are also Forest Stewardship Council© (FSC©) and Rainforest Alliance certified. For every tree we use, at least one is regrown. And we will go even further to increase acres of certified forests, strengthen certification globally and accelerate research into alternative fiber approaches.

Among its new commitments, P&G Family Care will:
- Work with experts to increase the number of forest acres that are FSC-certified in the U.S. and Canada. FSC is a widely respected certification. We are committed to nearly doubling our use of FSC-certified fiber to 75% across all P&G Family Care brands in the next five years.
- Partner with FSC Canada to protect caribou as outlined in the new FSC Canadian Forest Management Standard. This standard has been recognized by many NGOs for protecting caribou to the highest level available, as noted by the Natural Resources Defense Council (NRDC) in 2019 and the World Wildlife Fund (WWF) in 2018 and 2019.
- Invest a total of $20 million dollars by 2025 to accelerate research into non-wood fiber alternatives and FSC certified fast-growing fibers. Our goal is to develop fibers that are consumer-preferred, sustainably sourced and can be produced at scale. We will work with external experts to strengthen these efforts and find disruptive solutions. We aspire to include greater than 50% of these environmentally preferred fibers in our products.
- Help the Arbor Day Foundation plant two million trees via their California Wildfire Restoration project. Our support will help to restore forests that have been devastated by wildfires.
- Use 100% recycled fiber in our fiber-based packaging by 2025. Fiber-based packaging is the best way to reuse fiber while creating a product that people prefer.
- These commitments will help ensure the preservation of forests now and in the future. For more details, check out a recently published blog post from FSC or our Charmin website and blog post:

Supply Chain

All of our Family Care products are made with 100% certified pulp sourced from responsibly managed forests.
Responsible Forestry

We continually strive to optimize the design of our packaging, aiming to use the least amount of material while ensuring adequate protection, delivery and safe use of our products. As part of our ongoing efforts, we continue to identify source reduction opportunities to decrease overall material usage and to use recycled paper when it offers the best option to meet performance and business requirements.

Our paper-based packaging is derived from wood fiber, and we have a responsibility through our procurement practices to ensure that the wood fiber in our packaging has been responsibly sourced. We have made a specific commitment that by 2020, 100% of our paper packaging will contain either recycled or third-party-certified virgin content. Over the last year, we have expanded our efforts to collect data from an increased number of suppliers to assess progress against this goal. This year, we have received data from more than 100 suppliers that represent more than 95% of our global paper packaging spend.

This data, which was self-reported by our suppliers, is summarized in the following table:

<table>
<thead>
<tr>
<th>Total volume in metric tons: ~740,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>% Recycled</td>
</tr>
<tr>
<td>% Virgin</td>
</tr>
<tr>
<td>% of virgin fiber that was third-party-certified</td>
</tr>
<tr>
<td>% of total recycled or third-party-certified virgin</td>
</tr>
</tbody>
</table>

This year, 99% of the volume reported by our suppliers was either recycled or third-party-certified virgin content. That means less than 1% of the total reported volume was virgin material that was not third-party certified. Over the course of the next year, we will work to close the remaining gap versus our goal.
Palm Oil (PO) is an important, versatile and highly efficient vegetable oil that is used as a raw material by both food and non-food industries. In some regions of the world, the rapid expansion of PO production has threatened environmentally sensitive areas of tropical forests and peat lands and has resulted in incidents where the rights of independent smallholder farmers and indigenous peoples have been infringed.

We are committed to the responsible sourcing of palm that does not contribute to deforestation and respects the rights of workers and indigenous peoples. We are members of the Roundtable on Sustainable Palm Oil (RSPO) and support their standards to drive responsible palm practices across the industry. In addition, we have established a robust approach to ensuring the responsible sourcing of palm derived materials which includes supplier management, improving lives of smallholders and industry influence.

Palm Oil Responsible Sourcing Policy

P&G is committed to ensuring our suppliers meet RSPO Principles and Criteria (P&C) 2018 and have the necessary policies and procedures in place to ensure:

- No development of high-conservation-value (HCV) areas and high-carbon-stock* (HCS) forests
- No new development of peat lands regardless of depth
- No burning to clear land for new development or replanting
- Compliance with P&G’s existing Sustainability Guidelines for External Business Partners
- Respect for human and labor rights
- Respect for land tenure rights, including rights of indigenous and local communities to give or withhold their free, prior and informed consent for development of land they own legally, communally or by custom

All of our suppliers have submitted their relevant policies and procedures to demonstrate how they will meet our requirements. Our expectation is that our suppliers apply these policies to all of their operations, not just those supplying P&G. If we find a supplier is violating any of the above requirements, and if that supplier does not acknowledge and take action to resolve the concern, P&G will suspend or eliminate palm oil purchases from that supplier. A supplier would need to have a documented action plan and demonstrate meaningful progress to be considered for reinstating supply agreements.

*The High Carbon Stock Approach (HCSA) Toolkit was incorporated into the 2018 RSPO P&C and should be applied to identify and conserve HCS forests, and verify our commitments.
Progress

During FY18/19 key milestones included:

• Greatly increased transparency of our supply chain by publishing both palm oil supplier names and a detailed list of the Palm Oil Mills in our supply chain. We have traced >98% of our supply chain to Palm Oil Mills.

• Maintained 100% RSPO certification for palm oil/palm oil derivatives and have switched all our PO purchases to RSPO Certified SG and we remain on track to purchase 100% of our palm oil derivatives as RSPO SG by the end of 2020. Our target is to move the remaining palm purchases (PKO and PKOD) used in P&G brands to RSPO Certified (or equivalent) by the end of CY 2022.

• Announced a 3rd party collaboration with FGV, our key PKO supplier and JV Partner in Malaysia, to invest in and accelerate FGV’s human rights remediation efforts. Details of this effort can be found here:

FGV REMEDIATION EFFORTS

• Dr. Kuanchun Lee, a P&G Principle Scientist, was elected to the RSPO Board of Governors representing the Consumer Good Forum’s manufacturing companies and played a key role in the Principles and Criteria (P&C) 2018 task force which gained RSPO approval at its RT 16 in Kota Kinabalu in November 2018.

• Moved our Smallholders Program in Malaysia from a series of pilots to a full-fledged program through the creation of the P&G Center for Sustainable Smallowners (P&G-CSS) to drive livelihood improvement and supply chain verification to P&G Responsible Sourcing Policy.

• We have participated in the RSPO Independent Smallholder Standard (RISS) development and will guide independent smallholders in the Smallholders Program into the RISS certification process

• We have participated in the RSPO Jurisdictional Working Group to develop the framework and certification structure to enable broader compliance to RSPO standards and our Responsible Sourcing Policy.

3 Pillar Framework

We continue to advance progress against our 3-pillar framework. You can read more about the detailed progress in each of our three pillar areas by clicking on the links below:

PILLAR I: SUPPLIER MANAGEMENT

PILLAR II: PROGRESS

PILLAR III: INDUSTRY INFLUENCE
Palm Oil

Pillar I: Supplier Management

Palm Oil

We use ingredients derived from palm oil and palm oil derivatives in Skin & Personal Cleansing and Fabric Care products.

We are proud of our progress on Palm Oil and achieved 100% RSPO Segregated (SG) Palm Oil purchases at the end of 2018. We’re also advancing plans to move our Palm Oil Derivatives to RSPO Segregated (SG) by the end of 2020. Until that time, we will maintain our Palm Oil derivatives to be RSPO Mass Balance (MB) Certified. Our ability to achieve that may be influenced by broader market dynamics and supply availability, but we have already engaged with our suppliers on plans to achieve this goal. This is consistent with our belief that it is the demand for palm oil that is driving forest conversion and peat land pressures and the greatest impacts can be achieved by industry placing a disproportionate focus on driving sustainable palm oil production practices across all categories and regions that use palm oil.

Learn more about why we are moving to RSPO SG PO.

Palm Kernel Oil

We use ingredients derived from Palm Kernel Oil and Palm Kernel Oil Derivatives in Fabric Care, Home Care, Hair Care and Skin & Personal Cleansing products. Our major PKO and PKOD suppliers are FGV, Wilmar, ICOF, KLK, GAR and AAA.

Thanks to a unique partnership with the Malaysia Institute for Supply Chain Innovation and FGV, our single largest PKO supplier, we have gained significant visibility to the sourcing plantations and regions of FGV’s PKO supply chain. In fact, we now know that about 96% of our palm kernel oil was sourced from a known subset of FGV’s palm oil mills. FGV are currently on a glidepath to re-certify their mills which voluntarily withdrew their RSPO certification in 2016. As FGV progresses their recertification efforts, our percentage of RSPO MB certified PKO will increase. We are targeting to reach 100% RSPO MB PKO and PKOD for ingredients used in P&G products by the end of 2022.

<table>
<thead>
<tr>
<th>Palm Oil/Palm Oil Fractions</th>
<th>Palm Oil Derivatives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Metric Tons</td>
<td>63,802</td>
</tr>
<tr>
<td>RSPO Certified (%)</td>
<td>100%</td>
</tr>
<tr>
<td>%MB</td>
<td>24%</td>
</tr>
<tr>
<td>%SG</td>
<td>76%</td>
</tr>
</tbody>
</table>

1 This represents the total volume of PO and PO derivatives purchased by P&G. Approximately 95% of this is used internally by P&G brands. The remaining 5% is sold to external parties through our P&G Chemicals division

2 We achieved 100% RSPO SG Palm Oil, Palm Oil Fractions at the end of 2018. The data in this table reflect totals over FY18/19 (July 1, 2018–June 30, 2019) which is why not listed as 100% RSPO SG

<table>
<thead>
<tr>
<th>Palm Kernel Oil Derivatives</th>
<th>Palm Kernel Oil</th>
<th>Metric Tons</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>288,694</td>
<td>85,322</td>
</tr>
<tr>
<td>RSPO Certified (%)</td>
<td>16</td>
<td>16</td>
</tr>
<tr>
<td>RSPO MB Certified (%)</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

*This represents the total volume of PKO and PKO derivatives purchased by P&G. Approximately 65% of this is used internally by P&G brands. The remaining 35% is sold to external parties through our P&G Chemicals division
Palm Oil

Suppliers’ Traceability
The map below shows the Palm Oil Mill location from our traceability exercise which cover over 98% of our palm purchases. The key direct suppliers are Wilmar, ICOF, AAA, GAR and Kalmart.

2020 and Beyond
While we are proud of the progress we have made for the oil we procure, we recognize that challenges remain in the broader palm oil industry. As a result, we will be expanding the focus of our efforts to include elements which can help drive broader systemic change within the industry. This includes the following:

Enterprise-wide Monitoring of Supplier Operations
We believe an industry wide monitoring system based on use of aerial/satellite imagery, concession maps, and knowledge of HCV/HCS areas would be a powerful tool to help ensure consistent enforcement of palm oil sourcing policies. The technology needed for such a system exists today but broad collaboration across the value chain will be required to maximize the impact such a system could have. We are committed to working with our peers in the CPG industry and our suppliers to evaluate how such a system could be implemented and maintained and will make this a focus of our efforts in FY19/20.

Jurisdictional Approaches:
We believe that jurisdictional approaches offer an opportunity to help reward positive efforts of regions/states to establish robust responsible sourcing basins. As a first step to understand what we can do to help support regions seeking to advance responsible practices, we have joined the Tropical Forest Alliance to learn more about emerging efforts in our key sourcing regions of Indonesia and Malaysia. As we go forward, we will look to support jurisdictional efforts by preferentially sourcing oil from these efforts when it is feasible to do so.

Conserve and Protect Sensitive Areas
We will go beyond our current sourcing efforts and identify where we can make a positive difference by investing in conservation of sensitive areas. Over FY19/20 we will work with external partners to define specific areas and investments we can make that will help protect sensitive areas.

Focus Areas for FY19/20
- Advance supply chain efforts to reach 100% RSPO SG for POD by Dec 2020.
- Implement PKO and PKOD RSPO Certification glidepath towards 100% by Dec 2022.
- Strengthen the supply chain risk assessment to determine the landscapes around P&G supplying mills where there is a large coverage of ecologically sensitive areas. Use this data to inform work with the relevant stakeholders to establish/participate in conservation programs.
- Advance work to develop Supplier Enterprise-wide Monitoring System. This will include evaluation and selection of existing monitoring systems and participating in multi stakeholder efforts to develop a process for grievance alerts and ensuring appropriate follow up actions.
### Palm Oil

#### Pillar II: Smallholders

The P&G Smallholders Program is focused on the independent smallholders within our oleo-chemicals supply chain in Malaysia. Its two main objectives are:

1. Develop the capability and enable the capacity of independent smallholders to be sustainable suppliers in compliance with P&G Palm Responsible Sourcing Policy
2. Improve independent smallholders’ livelihood through yield increase

**P&G Center for Sustainable Small-owners (P&G-CSS)**

FY18/19 was a major milestone year where we strategically partnered with the Malaysia Institute for Supply Chain Innovation (MISI), a member of the MIT Global SCALE Network to establish P&G-CSS. As the main delivery partner for the P&G Smallholders Program, the mission of P&G-CSS is to safeguard the interest of the smallholders and improve their livelihood while ensuring ethical and responsible sourcing for oil palm with commitments to no deforestation, no new plantation on peatlands and no exploitation in the supply chain.

#### FY18/19 Key Highlights

| Collection Centres On-boarded | 15 |
| Smallholder Farms Traced | 4500 |
| mT PKO Traceable to Smallholders | 4000 |
| Smallholders Engaged | 1263 |
| Learning Farms Developed | 12 |

**a. Traceability & Sustainability Compliance**

P&G-CSS has signed on-boarding agreement with 15 Collection centers in Johor, Malaysia

- These Collection Centers (CC) are critical Fresh Fruit Bunches (FFB) aggregation points representing a network of 4,500 smallholders

**b. Ambition 2030—Livelihood Improvement**

Completed foliar, soil and vegetative samplings for the 12 Learning Farms

- Implemented Fertilizer Plan for improved nutrient management for Learning Farms
- Created supply chain financing mechanism for fertilizer procurement to support independent smallholders
SUPPLY CHAIN

Palm Oil

c. RSPO Partnership for Smallholders
P&G sits in the RSPO Smallholder Standing Committee to oversee the execution of the RSPO Smallholder Strategy etc.
- P&G with MISI become impact partners for the RSPO Smallholder Academy
- 4 P&G-CSS staff have qualified as Master Trainers for the RSPO Smallholder Trainer Academy
- P&G-CSS contributed to and partnering with RSPO to assess feasibility and auditability of the RSPO Independent Smallholder Standard (RISS).

d. Oil Palm Data Warehouse (OPDW)
Our technology partner, MIMOS - Malaysia's National R&D Centre has completed the first phase of OPDW with track and trace capability from our oleo-chemicals operations to independent smallholders in the P&G Smallholders Program
- OPDW is embedded with big-data analytics and block-chain technologies to optimize data collection and digitalization
- To-date, 1210 independent smallholders' profile with 1224 farm assessments have been uploaded into OPDW, analyzed and reported through P&G Palm Responsible Sourcing Policy for Smallholders Scorecard
- Its traceability capability has enabled us to trace about 98% of our palm sourcing to mills

FY19/20 Objectives
Prepare and guide first 250 independent smallholders in our program towards RISS eligibility phase audit
- Continue development of 30 Learning Farms and train 100 smallholders on good agricultural practices through Field Days
- Expand our Program to on-board seven new CC on top of current 15 CC
- Create certification and sustainability awareness among smallholders through regular engagements, awareness campaigns and training modules
- Further enhance the digital capability of OPDW and P&G's traceability to mills analysis to strengthen our transparency

As leaders in their fields, MISI and MIMOS are strategic partners to the P&G Smallholders Program.
Pillar III: Industry Influence

Continuing to develop and drive harmonization of industry approaches and standards is critically important not only for P&G, but also the industry as a whole to deliver the P&G Palm Responsible Sourcing Policy and industry common goal and support social aspirations of the palm community. P&G has been member of the High Carbon Stock Approach Steering Group (HCSA SG), RSPO’s No Deforestation Taskforce (NDTF), No Deforestation Joint Steering Group (NDJSG), Smallholder Interim Group (SHIG), Smallholder Standing Committee (SHSC), Jurisdictional Working Group (JWG), to enable implementation of the P&C 2018, and development of RSPO Independent Smallholder Standard (RISS), and the Jurisdictional approach and certification process. As a member of the RSPO Board of Governors, we are contributing to strengthen RSPO’s impact in continuously transforming the industry and expanding sustainable palm oil to a norm. Key highlight of the collaboration areas and progress are outlined below:

**Implementing No Deforestation, Peat and Exploitation (NDPE) Policy with RSPO P&C**

The 2018 P&C was approved by the RSPO members in November 2018, achieved a key milestone incorporating NDPE into the RSPO standard and enabling a key means to verify NDPE compliance for the industry. P&G as member of HCSA SG, RSPO NDTF and NDJSG are contributing to the transition into integrated HCS and HCV process for No Deforestation, development of High Forest Cover (HFC) landscape/countries procedure into the RSPO P&C. These are critically important in enabling effective and credible implementation of the P&C.

**RSPO Independent Smallholder Standard (RISS) and Inclusion**

Implementing the RSPO Smallholder Strategy is key to improve the livelihood, drive inclusion and participation of more smallholders in the RSPO system. The new RSPO Independent Smallholder Standard is the means to realize the strategy. As member of the Smallholder Interim Group, we have been contributing to develop the RSPO Independent Smallholder Standard (RISS)—a more simplified, inclusive process, with stepwise approach to support continuous improvement of practice and productivity of this key supply chain sector into the RSPO system, and key eligibility requirements to enable market support to the smallholders to advance the milestones toward 100% RSPO compliance. We are supporting the RSPO Smallholder Academy and aiming to developing readiness of the P&G Smallholders Program to become RISS certified and are looking forward to the approval of RISS in November 2019. Four of our field officers in our Program were trained to the Academy’s Master Trainer and will be supporting the P&G Program as well as the smallholder strategy implementation. For the fourth consecutive year, P&G sponsored the Linking and Learning program at the RSPO Roundtable 16 meeting in Kota Kinabalu, Sabah, bringing smallholders to share their experiences on RSPO, and to be updated on the RSPO strategy and programs to support them. We are committed to continuing the support to the smallholders who produces 40% of the palm oil globally and have been nominated to sit in the RSPO Smallholder Standing Committee which will oversee the successful implementation of the RSPO Smallholder Strategy and Standard.

**RSPO Jurisdictional Approach**

The RSPO Jurisdictional Approach is aiming to engage and ensure the RSPO and non-RSPO member producers in a jurisdiction are meeting the P&C and be certified eventually. P&G is member of the Jurisdictional Working Group to develop the process and certification system that will incorporate HCS-HCV mapping at large scale for protection and land-use planning, step-wise approach for continuous improvements, and strong governance structure under the jurisdictional entity. The JA is an important system in advancing RSPO’s outreach to the broad independent supply chain with support from the multi-stakeholder community. We are looking forward to refining and finalizing the system by 2020 in collaboration with the JWG members.

**Consumer Goods Forum Palm Oil Working Group (CGF POWG)**

P&G is member of the CGF POWG to mobilize resources in driving industry progress on NDPE policy and goals, as well as enabling alignment and development of standards and methodologies. We are supporting the priorities to increase transparency by developing sector-wide deforestation monitoring system and implement the Forced Labor Priority Industry Principles to strengthen social responsibility in palm oil supply chain.
Water is essential for the daily operation of our facilities and production of many of our products. Creating a culture of water efficiency at our sites continues to be a focus with the launch of our Ambition 2030 goals. Thanks to the work of many employees across our global portfolio, we've been able to reduce our manufacturing water usage by 27% per unit of production since 2010.

Water Efficiency at Our Manufacturing Sites

Our Mexico Hair Care plant is in an area which has been experiencing water stress. The employees are committed to reducing their use of fresh water and are leveraging innovative data analytics to drive actionable insights from water meters installed throughout the site. The analysis of this data provides the plant with a daily understanding of water consumption so they can act immediately to eliminate losses. The plant can also benchmark their water efficiency performance with other sites. In the first month of operation, the site identified five projects that can improve their production adjusted water efficiency by 10%.

Our Feminine Care plant in Hungary developed innovative solutions to expand their business without increasing their demand on the local water supply. The plant’s water recycling process consists of industrially proven water treatment technologies. This plant can recycle a remarkable 98% of the Always Infinity manufacturing area’s daily water demand. This is equal to more than 230 million liters of recycled water per year. Waste produced from this recycling operation is repurposed, allowing the plant to maintain its Zero Manufacturing Waste to Landfill status.

Our newest manufacturing plant in West Virginia is recycling more than 230 million liters of water per year, or the average annual water consumption of 550 West Virginia households. Rejected water from the plant’s water purification process is treated and reused in plant utility systems and product formulations. This recycled water offsets fresh water supplied to the plant.

Water 2020 Goals

Reduce water use in manufacturing facilities by 20% per unit of production with conservation focused on water-stressed regions

Achieved—27% reduction per unit of production

Reduction in Water Consumption
Percent reduction versus FY09/10, per unit of production

<table>
<thead>
<tr>
<th></th>
<th>FY18/19</th>
<th>FY17/18</th>
<th>FY16/17</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reduction in Water Consumption</td>
<td>-27%</td>
<td>-25%</td>
<td>-26%</td>
</tr>
</tbody>
</table>

Water Consumption by GBU
Millions of cubic meters

<table>
<thead>
<tr>
<th></th>
<th>FY18/19</th>
<th>FY17/18</th>
<th>FY16/17</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baby, Feminine &amp; Family Care</td>
<td>63</td>
<td>64</td>
<td>62</td>
</tr>
<tr>
<td>Beauty</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fabric &amp; Home Care</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grooming</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health Care</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Wastewater COD* Disposed by GBU
Thousands of metric tons

<table>
<thead>
<tr>
<th></th>
<th>FY18/19</th>
<th>FY17/18</th>
<th>FY16/17</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baby, Feminine &amp; Family Care</td>
<td>16</td>
<td>21</td>
<td>19</td>
</tr>
<tr>
<td>Beauty</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fabric &amp; Home Care</td>
<td></td>
<td></td>
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<tr>
<td>Grooming</td>
<td></td>
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<tr>
<td>Health Care</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Chemical Oxygen Demand
**Water Risk Assessments**

In combination with our efficiency work, we’ve continued to make progress in our commitment to focus our efforts in areas exposed to high water risk. We developed a Water Risk Assessment framework in partnership with the World Resources Institute (WRI), World Wildlife Fund (WWF) and Environmental Resources Management (ERM) in order to guide our efforts to the highest priority areas.

After completing steps 1 and 2 of the Water Risk Assessment framework, 24 manufacturing sites were identified as being exposed to high water risk. These 24 sites moved on to Tier 3 of our assessment process.

**Water Risk Assessment Framework**

1. **Water Risk Screening (Completed)**
   - Identify risk level of sites based on:
     - Baseline water stress score — World Resources Institute
     - Gross national income per capita — World Bank
     - Company site water use per year — P&G
     - Access to water — WHO/UNICEF

2. **Tailored Site Questionnaire (Completed)**
   - Prioritize sites based on outcome of responses.
   - The Company questionnaire was built upon the facility questionnaire in WWF’s Water Risk Filter

3. **In-Depth Site Water Analysis (Current Phase)**
   - Prioritize risks for mitigation and develop site water stewardship plans.
   - Alliance for Water Stewardship (AWS) International Water Stewardship Standard 1.0 steps 1-3.
The Alliance for Water Stewardship

As part of a two-year program, each of the 24 Tier 3 facilities will create site water stewardship plans. In the past year, half of these facilities followed steps 1, 2 and 3 of the Alliance for Water Stewardship (AWS) International Water Stewardship Standard 1.0. This standard provides a globally applicable framework for major water users to understand their water use and impacts and to work collaboratively and transparently for sustainable water management within a basin context.

By using the AWS Standard, each of the facilities created site-specific water stewardship action plans, learned more about the shared challenges in their local water basins and identified key stakeholders for potential future partnerships. These facilities will continue their focus on improving water efficiency within the facility as they execute their water stewardship action plans. The remaining sites will complete their assessments this year.
We have a vision that one day zero consumer and manufacturing waste will go to landfill. To help lead the way and demonstrate what is possible, our production facilities across the world are on a mission to get to zero manufacturing waste to landfill by 2020.

We started our Zero Manufacturing Waste to Landfill (ZMWTL) journey in 2008, and what we once considered an impossible dream is close to becoming a reality. Our “Waste to Worth” program has helped us transform our processes and the way we operate across our 100+ manufacturing sites, that effectively became waste champions. Working closely with our Global Asset Recovery Purchases (GARP) team, we found beneficial use for our waste, helping the Company save more than $2 billion while diverting more than five million tons of would-be waste from landfill. In the past year, the team has continued to make phenomenal progress.

- Our Pantene and Head & Shoulders manufacturing site in Thailand received a “Responsible Care Award” in the first year of enrollment to the Responsible Care Management System® and for their performance in health, safety and environmental protection. The award recognizes companies with outstanding compliance within (1) Community Awareness & Emergency Response, (2) Process Safety, (3) Employee Health & Safety, (4) Pollution Prevention, (5) Distribution and (6) Product Stewardship. Building off this work, the site also partnered with the Plastic Institute of Thailand and Chulalongkorn University to conduct a local material flow analyses to better understand consumer habits and waste consumption across Thailand.

### Waste Disposed

Percent reduction versus FY09/10 per unit of production

<table>
<thead>
<tr>
<th>Year</th>
<th>Reduction</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY18/19</td>
<td>-86%</td>
</tr>
<tr>
<td>FY17/18</td>
<td>-81%</td>
</tr>
<tr>
<td>FY16/17</td>
<td>-79%</td>
</tr>
</tbody>
</table>

### Solid Waste Non-Hazardous by GBU

Thousands of metric tons

<table>
<thead>
<tr>
<th>Year</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY18/19</td>
<td>30</td>
</tr>
<tr>
<td>FY17/18</td>
<td>40</td>
</tr>
<tr>
<td>FY16/17</td>
<td>46</td>
</tr>
</tbody>
</table>

### Disposed Waste by GBU

Thousands of metric tons

<table>
<thead>
<tr>
<th>Year</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY18/19</td>
<td>56</td>
</tr>
<tr>
<td>FY17/18</td>
<td>72</td>
</tr>
<tr>
<td>FY16/17</td>
<td>77</td>
</tr>
</tbody>
</table>

### Solid Waste Hazardous by GBU

Thousands of metric tons

<table>
<thead>
<tr>
<th>Year</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY18/19</td>
<td>3</td>
</tr>
<tr>
<td>FY17/18</td>
<td>2</td>
</tr>
<tr>
<td>FY16/17</td>
<td>3</td>
</tr>
</tbody>
</table>
Waste

• Our Global Asset Recovery Purchases (GARP) program continues to be a great enabler in our waste efforts as we find innovative ways to reduce waste and disposal costs. Here are some of the innovative solutions GARP has implemented this year:
  
  • In our Manchester plant (Baby Care) in the United Kingdom, we have diverted from landfill about 1600 tons of scrap diapers/year, which are now recycled and repurposed as absorbent materials for animal litter.
  
  • In the USA, we send water sludge from our multiple Fabric Care and Chemical plants to Bio Energy companies where it is used for Anaerobic Digestion to create Bio-methane from waste, offsetting the use of fossil fuels for energy generation.
  
  • Our Edwardsville Mixing Center designed a process with an external partner to take line scrap soap products and re-purpose it to be used to clean rail cars in their operations.
  
  • After accomplishing ZMWTL for five consecutive years, our Akashi plant is now “All in to CLEAN.” It is located in an industrial zone along with many other Japanese manufacturing sites. With trucks coming in and out all day, this industrial zone has filled with litter. In response, the Akashi plant established a volunteer network for cleanup activities. Employees take turns to clean the industrial zone with their peers to ensure this is not just a one-time event, but an ongoing effort.
  
  • Marktheidenfeld and Altfeld converted employee coffee machines from plastic cups to stainless steel cups. The training team at the Marktheidenfeld plant labeled and distributed stainless steel cups with employees’ names at both the Marktheidenfeld plant and Altfeld distribution center during Earth Week. Reusable coffee cups were also distributed at the Walldurn plant.
  
  • This year, our UK office in Weybridge eliminated 95% of single-use plastic on-site in our employee restaurant and coffee shop, installing a bring-your-own culture for reusable coffee cups and water bottles. Our sites in Cobalt, Harrogate and our Newcastle Innovation Center are on the path to do the same.

Countries that are ZMWTL

- Belgium
- Brazil
- Canada
- Chile
- China
- Colombia
- Czech Republic
- Egypt
- France
- Germany
- Hungary
- India
- Indonesia
- Ireland
- Italy
- Japan
- Mexico
- Morocco
- Nigeria
- Pakistan
- Philippines
- Poland
- Romania
- Russian Federation
- Singapore
- South Africa
- South Korea
- Spain
- Thailand
- Turkey
- Ukraine
- United Kingdom
- Vietnam

Zero Manufacturing Waste to Landfill

Sites qualified by FY

<table>
<thead>
<tr>
<th>FY</th>
<th>Sites</th>
</tr>
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<tbody>
<tr>
<td>FY18/19</td>
<td>6</td>
</tr>
<tr>
<td>FY17/18</td>
<td>16</td>
</tr>
<tr>
<td>FY16/17</td>
<td>22</td>
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<tr>
<td>FY15/16</td>
<td>18</td>
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<tr>
<td>FY14/15</td>
<td>11</td>
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<tr>
<td>FY13/14</td>
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<tr>
<td>FY12/13</td>
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<td>FY11/12</td>
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</tr>
<tr>
<td>FY9/10</td>
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</tr>
<tr>
<td>FY8/9</td>
<td>1</td>
</tr>
<tr>
<td>FY7/8</td>
<td>1</td>
</tr>
</tbody>
</table>
Society

Create transformative partnerships that enable people, the planet and our business to thrive.

• We will find solutions so no P&G packaging will find its way to the ocean.
• We will protect water for people and nature in priority basins.
• We will advance recycling solutions for absorbent hygiene products.
As part of our Ambition 2030, we are aiming to enable and inspire a positive impact and have set goals that we believe will be good for consumers, good for the planet and good for business. We’re committed to making an impact on society by forming the right partnerships that enable larger, more systemic solutions that one company working alone could never achieve. From climate and energy solutions like the Renewable Energy Buyers Alliance (REBA), to water stewardship efforts like the California Water Action Collaborative (CWAC) to tackling plastic waste across the value chain with the Alliance to End Plastic Waste, our efforts to join many stakeholders in pre-competitive arrangements is a critical part of how we will innovate and accelerate progress, and make a bigger overall impact.

A great example is joining the Ellen MacArthur Foundation’s Circular Economy 100, a pre-competitive innovation program established to enable organizations to realize their circular economy ambitions faster. It brings together corporations, governments and cities, academic institutions, emerging innovators and affiliates in a unique multi-stakeholder platform.

Another example of collaboration is our Taicang plant in China. Taicang was the first site to adopt the Green Supply Chain Index (GSCI) and Blue Map APPA to manage suppliers’ environmental performance. The team spearheaded a pilot of an end-to-end green supply chain effort in partnership with the China Institute of Public Environment Affairs (IPE), and later conducted a green supply chain workshop in April 2019 to share best practices with representatives from suppliers, customers, our plants and local businesses. These best-in-class sustainable practices were published on the IPE website.
Keeping Plastic Waste Out of the Environment

“Addressing plastic in our oceans, rivers and land is everyone’s responsibility—including the companies that use much of the plastic in the world today. It’s a complex issue with no one-size-fits-all solution, and will require partnership with many stakeholders to make progress on long-term systemic changes.”

DAVID TAYLOR, Chairman of the Board, President and Chief Executive Officer

Solving the plastic waste issue requires unprecedented levels of investment, novel partnerships and accelerated innovation—the kind that harness free market forces and scalable solutions as powerful engines of growth. That’s why we’ve been working alongside many others in the industry to take action across the entire ecosystem—from package design to collection and sorting to recycling innovation to fostering end markets. Only by working together will we unleash the circular economy of plastics.

Investing in Recycling Infrastructure

In 2019 we joined more than 40 companies that make plastic, use plastic in their products and packaging, and those who recycle and manage plastic waste to form The Alliance to End Plastic Waste. Our CEO David Taylor took the lead to serve as the first board chair of the new alliance, helping form the not-for-profit organization that plans to invest $1.5 billion over the next five years to help end plastic waste in the environment.

Research shows that nearly 80% of the plastic in oceans begins as litter on land, the vast majority of which travels to the sea down one of ten major rivers around the world—eight are located in Asia, and two are in Africa. Many of these rivers run through densely populated areas that lack suitable waste collection and recycling infrastructure. The alliance supports an array of projects and partnerships that focus on solutions in four core areas: infrastructure, innovation, education and clean up, with particular emphasis where the need is most urgent in Southeast Asia. Coming together in an unprecedented alliance, member companies and organizations span the globe. In addition to providing financial support, member companies are contributing logistics capabilities, expertise in recapturing and recycling used plastics and the ability to jointly create end markets that will help bring plastic further into the circular economy.
Investing in Recycling Infrastructure

We are one of the leading corporations to commit funding to Circulate Capital, an investment management firm launched in 2018 dedicated to incubating and financing companies and infrastructure that prevent ocean plastic in South and Southeast Asia. In May 2019, Circulate Capital announced a blended finance partnership with the U.S. Agency for International Development (USAID) to combat ocean plastic pollution. Through this new agreement, USAID will provide a $35 million, 50% loan-portfolio guarantee through the Development Credit Authority (DCA) to incentivize private capital investment and new business development in the recycling value chain in South and Southeast Asia. The public sector support from the USAID partnership enhances the private sector support that Circulate Capital has received to combat ocean plastic, which is more than $100 million committed by the world’s leading corporations, including the Company, PepsiCo, Dow, Danone, Unilever and The Coca-Cola Company. At least 50% of the total investments covered by the USAID guarantee will be used for loans in Indonesia, Philippines, Vietnam and Sri Lanka where USAID’s Municipal Waste Recycling Program supports local partners in reducing ocean plastic pollution.

In 2017, our sustainable packaging expert Gian deBelder kicked off a coalition of companies to pioneer the Holy Grail project under the Ellen MacArthur Foundation’s New Plastics Economy Pioneering Projects mantle. The Holy Grail of recycling is a collaborative effort designed to solve one of the largest obstacles facing plastic recycling: ineffective sorting at recycling facilities. The project investigated how tagging of packaging can have a drastic impact on more accurate sorting and high-quality recycling via tracers and digital watermarks embedded in the plastic. Improved sorting can improve both the quality and quantity of recycled material on the market, which would mean more plastics go back to the marketplace and bring value instead of becoming waste.

Over the past three years, we and our coalition partners have invested expertise and resources in the Holy Grail project to devise a more consistent and scalable tagging system across all packages. Project Holy Grail proved the value of tracer and digital watermark technologies, a crucial step in determining the best direction for establishing a universal method for faster processing and better results. By working with dozens of companies across the whole value chain, including machine vendors, technology providers, material producers, packaging manufacturers, brands, retailers and recyclers, the Holy Grail project was able to use the technologies in tests, making progress toward the entire industry establishing and adhering to a standardized method.

In the Packaging Europe Sustainability Awards in September, Project Holy Grail won both the Overall Sustainability Awards 2019 trophy along with honors for the Driving the Circular Economy category.

In partnership with the Department of Education and NGO World Vision, P&G Philippines has launched Pag-asa sa Basura, (Hope in Waste), a school-based waste collection and recycling program to drive sachet and plastic collection for upcycling in schools in Metro Manila. The program aims to organize and strengthen the solid waste management committees of these schools and operationalize sustainable plastic collection systems. By the end of its first year, we hope to collect one million sachets.

In India, we have put in place a system to recover and recycle packaging waste in several communities near our operations. We are working with various waste management companies and the industry to collect, segregate and recycle plastic packaging waste. We have already started in Maharashtra, Madhya Pradesh and Gujarat and will expand to eight more states within 2019.
Keeping Plastic Waste Out of the Environment

Reclaiming Material and Fostering End Markets

PureCycle

While looking for more ways to incorporate additional recycled content (PCR) into our products and packages, we found the availability of high-quality recycled polypropylene (rPP) was limited. Company scientist Dr. John Layman invented a breakthrough technology that uses a solvent and extraction process to remove color, odor and contaminants from used polypropylene to restore it to ultra-pure recycled resin. To drive scale, we licensed the technology to PureCycle Technologies, which completed construction of its feedstock evaluation unit in July 2019 and plans to open its full-scale production plant in Ohio in 2021. The full-scale plant is expected to produce more than 105 million pounds of virgin-like polypropylene per year, fostering a substantial increase in demand for waste polypropylene and thus providing alternatives to landfilling or exporting plastic waste. Many consumer packaged goods companies have already committed to purchase the material starting in 2021. In fact, the demand is so great that PureCycle has sold out of all plant one production for the next 20 years and is planning to build a second plant in Europe.

Flexible packaging refers to any lightweight plastic packaging that is able to flex or wrap, such as plastic pouches, overwraps and bags. Today, flexible plastic is used in a variety of packages for foods, personal care and household goods, but not widely collected for recycling. Current consumer take-back programs for flexibles at retail storefronts in the U.S. and Europe see low participation rates. Meanwhile, residential recycling programs experience high levels of contamination and increased mechanical processing costs when consumers incorrectly attempt to recycle film in their curbside bins. Much of this material is currently sent to landfills due to lack of consumer education, lack of collection and processing infrastructure, and lack of established end markets. We have joined several collaborative efforts to identify and test a range of solutions that can then be scaled up to accelerate flexible packaging into a true circular economy.

Materials Recovery for the Future (MRFF)

We joined MRFF as one of the early supporters who saw the potential to test in-market and scale the best solutions to increase household recycling of flexible packaging for eventual sale as PCR. MRFF brings together leading companies across the value chain to fund and collaborate on a pilot to demonstrate the economic and technical feasibility of adding flexible plastic packaging to single-stream household recycling. The pilot was launched in Pennsylvania in the summer of 2019 to demonstrate how to effectively, efficiently and profitably recycle flexible packaging by:

- Reducing labor costs at MRFFs
- Increasing the quality of paper bales
- Creating a new source of revenue with the “rFlex” bale
- Eliminating the need to dispose of flexible packaging in landfills

MRFF started in September 2019 and will gradually scale up to reach 200,000 households by early 2020. The households must be equipped with covered rolling carts to keep the lightweight flexible material dry and stop it from blowing away, so we and others have worked with The Recycling Partnership to offer grants to local PA communities to purchase covered carts. The local recycling facility, JP Mascaro, has upgraded their equipment to enable efficient sorting and baling of the material.
Keeping Plastic Waste Out of the Environment

Reclaiming Material and Fostering End Markets (continued)

The Recycling Partnership Film and Flexibles Taskforce

The Recycling Partnership (recyclingpartnership.org) is a national nonprofit organization that leverages corporate partner funding to transform recycling in states, cities and communities all across America. It’s the only organization in the country that engages the full recycling supply chain from the corporations that manufacture products and packaging to local governments charged with recycling, to industry end markets, haulers, material recovery facilities and converters. We are one of five companies serving as anchor funders and advisors for The Recycling Partnership’s new Film and Flexible Taskforce formed in 2019. The taskforce will employ a four-step framework that includes data gathering and benchmarking, goal setting, establishment of pilot programs and determining the means for long-term scalability. Initial data gathering will include capture rate studies, consumer insights research and analysis of end markets, among other areas. Goal setting and pilot programs will include partnerships with cities and community recycling systems over a multi-year period, as well as piloting pathways of feedstock for potential chemical recycling solutions.

CEFLEX

CEFLEX is a collaborative effort underway across Europe working to identify solutions. We continue to participate in CEFLEX (Circular Economy for Flexible Packaging) and have done since 2016. CEFLEX is on a Mission Circular: , the goal of which is to collect all flexible packaging in Europe by 2025 and for 80% of it to be recycled and be returned to the economy. The CEFLEX project is a true cross-value chain collaboration where more than 130 companies and organizations have committed to implementing the actions to realize the circular economy for flexible packaging. The big focus is on redesigning flexible packaging (enabled by the CEFLEX design guidelines) and creating sustainable end markets, both in and outside packaging applications. A short video providing more background is below.

Aligning consistent metrics, common goals

When it comes to tackling plastic waste, we share the World Wildlife Fund’s No Plastic in Nature by 2030 vision and agree that a clear roadmap with measurable, concrete action steps is necessary to achieve our goals. That’s why we are one of the six Principle Member companies to join ReSource: Plastic, WWF’s newest global initiative bringing companies together to help solve the plastic waste issue. Introduced in May 2019, Resource: Plastic maps out a systems approach in partnership with many stakeholders—common metrics, best practices, accountability and more. WWF hopes to accelerate change at an even faster rate and identify new solutions to old problems facing the planet.

We are proud to be a founding signatory of the WRAP UK Plastics Pact, a bold and unique initiative that aims to transform the UK’s plastic system by 2025. By bringing together the entire plastics value chain behind a common set of ambitious, collective targets, it will move the UK toward a system that keeps plastic in the economy and out of the environment. It will encompass innovation, research and new business models to rethink and redesign what packaging we as an industry put in the market and how we can all encourage greater reuse of packaging. Launched on April 26, 2018, the pact now has more than 100 UK organisations from across the entire plastics value chain signed up as members and supporters.
Accelerating the growth and development of renewable energy can happen if industries join forces to scale progress. That’s why we are actively engaged in joint initiatives to help advance broader, collaborative efforts on climate change.

We participated in the 2019 global Climate Change Conference, held under the auspices of the UN organization UNFCCC (United Nations Framework Convention for Climate Change). The global summit, called COP24 (24th Conference of the Parties), is the biggest international forum to tackle the issue of climate change. We joined the round table discussion on UN Sustainable Development Goal 12: ensure sustainable consumption and production patterns. The objective of the session was to bring together perspectives from government representatives, cities, NGOs and businesses to initiate a debate on the role of these actors to accelerating the climate change agenda.

**Diaper Recycling**

Pampers is the world’s first diaper brand to use new advanced technology to recycle diapers—all diaper brands—to high-value applications and give used diapers a new life. The unique technology was invented by FaterSmart, a joint venture of the Company and Angelini in Italy, and is leading the way in complete recycling systems for used absorbent hygiene products (AHPs) such as baby diapers. The technology is already proven and live in Italy, operating at industrial scale and capable of recycling 10,000 tons of used AHP per year. This corresponds to the amount of AHP waste generated by approximately one million people. The technology is creating secondary raw materials that can be used in new products and application, giving used diapers a new life.

We are committed to rolling AHP recycling out globally to maximize the positive impact this technology can have. For example, we started a pilot program in the Netherlands in partnership with the Municipality of Amsterdan and others. We placed smart bins near day-care centers and drug stores in two neighborhoods of Amsterdam. Parents registered to the program via a new Pampers recycling app. Since January 2019, more than 400 families have registered and joined the program. In total, more than 20 tons of diaper waste—more than 100,000 diapers—have been collected for recycling. It is recognized and funded by the EU through the Bio-Based Industries (BBI) project called EMBRACED. And we are exploring how to scale this even further. We are committed to being operational in ten cities by 2030.
Protecting Water for People and Nature

Growing pressure on water resources in many regions has the potential to impact suppliers, manufacturing sites and the communities we serve. This inspired our renewed focus on water into the next decade of our goals as we aim to protect water for people and nature in priority basins.

Across the world, and even within countries, there is a diverse mix of landscapes, cultures, economies and climates that make water issues complex and require solutions unique to each river basin. That is why we embarked on a data-based water risk assessment with expert partners at WRI, WWF and ERM to identify the areas of the world we should focus on for maximum positive impact. Using data from the WRI Aqueduct Water Risk Atlas and other sources, 18 priority basins across seven countries were identified by understanding where our consumers, suppliers and facilities are most exposed to current and future water risks.

<table>
<thead>
<tr>
<th>Country</th>
<th># Priority Basins</th>
<th>Priority Basin</th>
</tr>
</thead>
<tbody>
<tr>
<td>China</td>
<td>3</td>
<td>Xuanhui He, Hai He Delta, Tuo Jiang</td>
</tr>
<tr>
<td>Mexico</td>
<td>3</td>
<td>Moctezuma, Laja, Lerma/Salamanca</td>
</tr>
<tr>
<td>USA</td>
<td>5</td>
<td>Lower Bear/Malad, Great Salt Lake, Lower American, Lower Sacramento/Putah Calleguas</td>
</tr>
<tr>
<td>India</td>
<td>3</td>
<td>Sutlej, Yamuna 1, Musi/Aler</td>
</tr>
<tr>
<td>Saudi Arabia</td>
<td>2</td>
<td>Saudi Arabia West Coast 5, Persian Gulf Western Coast 2</td>
</tr>
<tr>
<td>Spain</td>
<td>1</td>
<td>Segura</td>
</tr>
<tr>
<td>Turkey</td>
<td>1</td>
<td>Kocaeli</td>
</tr>
</tbody>
</table>
Protecting Water for People and Nature

Progress

Now that we've identified where our consumers, suppliers and facilities could be most impacted by current and future water risks, it's time to identify shared water challenges, potential partners and viable solutions for each basin. We've already made progress toward understanding the situation in each of these unique areas and will learn even more in 2020 after completing the Alliance for Water Stewardship (AWS) Standard 1.0 steps 1-3 at our Tier 3 facilities (see page 12 of v.1.0 for more details). Based on what we've learned so far, we've already moved forward with local engagement in the U.S. and Mexico.

United States

Five of our 18 priority basins are in the western U.S., and the majority of those are in the state of California. There is already a lot of great work going on within the state to protect and enhance California’s water resources. In order to contribute to these efforts, we joined a platform of diverse stakeholders who came together to pursue collective action projects that will improve water security in California. The California Water Action Collaborative (CWAC) was created in 2014 and is focused on building social capital for improved water management, returning water to natural systems and driving corporate water stewardship aligned with state and global water stewardship goals. We hope that being a part of this multi-sector organization will enable us to make a meaningful impact in our priority basins in California.

Mexico

Three of our 18 priority basins we are focusing on this next decade are in central Mexico, including the basin that surrounds Mexico City. Over the past year, P&G has engaged with local experts at The Nature Conservancy to learn more about the water issues and potential solutions in and around the city. As a first step towards being part of the solution, we joined the Mexico City Water Fund: Agua Capital. Agua Capital was created in 2018 as an innovative platform for collaboration among different sectors to contribute to the water security of Mexico City with emphasis on nature-based solutions. P&G, along with the other board members, intend to address the overexploitation of the aquifers, inefficiencies in infrastructure and operations, flood management and improvement of wastewater treatment and reuse.

We've come a long way already in our water stewardship journey, and will go even further working in collaboration with others to solve the challenges facing our priority basins. We look forward to partnering with others to work toward our goal to protect water for people and nature in priority basins and sharing our progress along the way.
Reinventing Water for Urban Living

It is predicted that by 2030, there will be a 40% gap in global water supply and demand. Pressure on water resources is growing, and some cities, like Cape Town, South Africa have already experienced Day Zero: a day when the city nearly ran out of water and the government required all four million residents to reduce their water use at home to 50L per person. Not only is water essential for the daily operation of our facilities and production, it is also an integral part of many of our products in the home. Whether it’s bathing, laundry, cooking or dishes, homes use 10% of the global water supply, reinforcing the need for rethinking the future of water consumption.

Homes in the U.S. can use up to 500 liters of water per day, per person—a rate that is not sustainable. Several years ago, we started exploring innovations in waterless and water-efficient products, purification systems and experience platforms. During the World Economic Forum Davos in January 2019, we led a multi-faceted discussion to explore whether homes could run at 50 liters and still feel like 500 liters, unlocking solutions for sustainable, affordable living.

The 50 Liter Home Concept, spearheaded by the Company, is bringing together companies, policy-makers and communities to develop and scale innovations for the home that help solve the urban water crisis. It is an ambitious undertaking that requires cross-sector collaboration to harness diverse expertise and resources, like home fixtures and appliance makers, city governments, utilities, tech partners, NGOs, real estate developers, engineering, home design and more.

Major cities around the world face the prospects of a water crisis, and 14 of the world's 20 largest cities are already experiencing water scarcity.

Most homes in the U.S. use up to 500 liters of water per day, per person—a rate that is not sustainable.
Employees

Engage and equip P&G employees to build sustainability thinking and practices into their work and their communities.
Employees

Ambition 2030 Leadership Award

Leadership accountability is critical to our Ambition 2030 goals, as it is only by making sustainability an integral part of how we deliver business results that we’ll be able to achieve our goals. We want to ensure that sustainability is built in, not bolted on. To recognize this effort, we created a new Ambition 2030 Leadership Award which acknowledges the leadership and commitment required to deliver meaningful results in the area of sustainability. The award will recognize business leaders at our Band 5 or 6 level who have contributed to the significant advancement of our Ambition 2030 goals in one or more of our four core focus areas: brands, employees, supply chain and society.

Earth Week Inspires Action

Across the world, we organized a range of Earth Week 2019 volunteer activities designed to raise awareness and take action to reduce our environmental footprint and bring about a healthy planet. Here are some highlights:

• Our Taicang plant successfully engaged employees via three days of sitewide activities. Employees participated in group discussions to identify new ideas for meeting site sustainability goals, a “green corner” photo sharing program where employees could upload their nature photos to WeChat, and a fishing outing in the site’s natural clean pond. In this program, employees participated in sustainability activities for energy, water and waste savings in the site’s daily operation.

• All our sites across Northern Europe participated in a variety of activities to remind employees of our sustainability efforts and reinforce the idea that small changes can make a world of difference under the theme of Sustainability at Scale. This year, our Northern Europe Head Office in Weybridge UK partnered with Do Nation, a start-up company with a mission to make people live a little bit greener every day. Together we ran a three-month program—from February to April —that saw employees pledge to make their daily routines more sustainable. As result of employees’ collective commitments, we saved more than 38,900 tons of carbon.
Employees

Gardens Spring Up at Hair Care Plants
Inspired by our recent Kew Gardens partnership and in line with the Ambition 2030 Corporate goal to “engage, equip and reward employees for building sustainability thinking and practices into their everyday work,” we are leveraging our scale by creating gardens in all our manufacturing sites. These gardens support sustainability-related challenges like enabling pollination, protection of native species, and water conservation. We are leveraging the current efforts of gardening, landscaping and maintenance to create a positive sustainable impact for our people, brands and nature while beautifying our sites.

Among our accomplishments this year:
• Planting 16,000 square meters of beautiful gardens in all our Hair Care plants that are sustainably built with reused materials and recycled water.
• Actively tackling pollination issues, protection of native plants and water conservation.
• Creating a win-win model of sustainability and beautification that drives a positive impact in our people and brands.
• Bringing our people closer to the themes of biodiversity, native plants and elevating topics such as pollination around a brand context (e.g. planting ingredients used in our products).
• Growing native plants even at our sites located in water-stressed regions like Dammam in Saudi Arabia, Mariscala in Mexico and Port Qasim in Pakistan.

Community Volunteers Educate and Inspire Action
Our North Africa and Levant region have partnered with Youth Think Green (YTG) NGO to take action in the community, working with young people on a range of environmental activities:
• Preparing small pots of green herbs and flowers that kids could take home for their gardens.
• Raising awareness around ways to prevent ocean plastic waste with an upcycling activity, like taking used plastic bottles and making them into toys, pencil cases, napkin boxes and mobile hangers.
• Embracing the culture of renewable energy by reviewing how to calculate a base for a solar panel system and make-your-own solar-powered mobile charger.

Helping young people understand the importance of sorting waste and making neighborhoods cleaner are the objectives of Clean Earth. This new program launched in Poland and enabled employees to visit local help educate students on these topics. They joined with students and teachers to collect and sort litter from local parks, playgrounds and streets. More cleaning days are planned as well as expansion into the Czech Republic and Hungary.

Positive Employee Survey Results
In March 2019, more than 80% of employees declared they are contributing to the Company’s sustainability efforts in our annual employee survey. This percentage increased more than five points compared to 2018. Many employees provided perspective that they value the Company’s work in the space and welcome the chance to put more effort into where we make the greatest difference: our brand innovations and corporate partnerships.
The health and safety of our employees and our contractor partners is a foundational to the Company and directly linked to our core values.

- Nothing we do is worth getting hurt
- Safety can be managed
- Every injury and illness can and should be prevented
- Safety is everyone’s responsibility

The Company tracks our total injury rate (TIR) and lost work day case rate (LWDC). TIR includes any injury that requires medical treatment beyond first aid, including work restrictions. LWDC is a subset of all injuries that were serious enough to result in the individual missing the next assigned work shift. Our TIR target for both employees and contractors is 0.35 injuries per 200,000 hrs. No targets are set for LWDC rates. To achieve these results, we have implemented an integrated Health, Safety and Environmental program. This program sets expectations that enable evaluation of each site’s leadership involvement, behavior and culture, equipment design and maintenance standards, and training and procedures. We specifically focus on life-safety critical systems such as electrical safety, confined space entry, fall prevention/protection, material handling and isolation of hazardous energy. The TIR and LWDC rate results are summarized in the charts to the right.
We have more than 43 manufacturing plants and technical centers that are celebrating more than one million safe work hours without a lost workday injury.

Audit Programs

Our internal HSE audit program is designed to ensure sites are complying with both local regulatory requirements as well as corporate policies, standards and procedures. These audits are completed at all plants, innovation centers and distribution centers worldwide. Recently, we modified the audit program to eliminate numerical scores and move to identifying specific findings and classifying those findings as critical, major or minor. All findings are tracked to closure by the corporate HSE. The fundamental philosophy is to use the standards worldwide, implemented by trained HSE leaders and audited each year using a consistent, comprehensive approach. Audits measure performance against mandatory standards and operating procedures. The target is to have no critical findings and continually reduce the number of major or minor findings. This year, 96% of the sites were assessed.

Sites Conducting Annual Audits

(Percentage)

<table>
<thead>
<tr>
<th>Manufacturing Site</th>
<th>Safe Hours*</th>
<th>GBU</th>
<th>Region</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ibadan</td>
<td>12,000,000</td>
<td>Fabric and Home Care</td>
<td>IMEA</td>
</tr>
<tr>
<td>Takasaki</td>
<td>7,400,000</td>
<td>Fabric and Home Care</td>
<td>Asia</td>
</tr>
<tr>
<td>Dammam</td>
<td>7,100,000</td>
<td>Beauty</td>
<td>IMEA</td>
</tr>
<tr>
<td>Boryspil</td>
<td>7,000,000</td>
<td>Baby, Feminine and Family Care</td>
<td>Europe</td>
</tr>
<tr>
<td>Xiqing</td>
<td>6,300,000</td>
<td>Beauty</td>
<td>Asia</td>
</tr>
</tbody>
</table>

*Rounded down to the nearest 100,000

<table>
<thead>
<tr>
<th>Technical Center</th>
<th>Safe Hours*</th>
<th>GBU</th>
<th>Region</th>
</tr>
</thead>
<tbody>
<tr>
<td>Brussels Innovation Center</td>
<td>7,200,000</td>
<td>Technical Center</td>
<td>Europe</td>
</tr>
<tr>
<td>Singapore Innovation Center</td>
<td>3,000,000</td>
<td>Technical Center</td>
<td>Asia</td>
</tr>
<tr>
<td>Kronberg Innovation Center</td>
<td>2,500,000</td>
<td>Technical Center</td>
<td>Europe</td>
</tr>
<tr>
<td>London Innovation Center</td>
<td>2,400,000</td>
<td>Technical Center</td>
<td>Europe</td>
</tr>
<tr>
<td>Newcastle Innovation Center</td>
<td>2,100,000</td>
<td>Technical Center</td>
<td>Europe</td>
</tr>
</tbody>
</table>

Top 5 Sites with the Highest Number of Employee Safe Working Hours

Tracking our Progress
Tracking Our Progress

Compliance with Laws and Regulations

There are numerous health, safety and environmental requirements worldwide. Plants are subject to safety rules and emission limits with operating requirements that may be embodied in sources such as statutes, regulations, laws and permits. It is our intent to comply with both the letter and the spirit of statutes, regulations, laws and permit requirements. Identified compliance issues are treated seriously, and all noncompliance matters are resolved as expeditiously as possible.

Notices of Violation

We continually strive for zero notices or penalties. The charts below summarize data from the last three years and provide perspective on notices of violation (NOVs) received during FY18/19. Note, several fines are still under review but are included in the total numbers.

A breakdown of NOVs is provided below:

<table>
<thead>
<tr>
<th>Year</th>
<th>Number</th>
<th>Fines</th>
</tr>
</thead>
<tbody>
<tr>
<td>2019</td>
<td>40</td>
<td>$62,060</td>
</tr>
<tr>
<td>2018</td>
<td>17</td>
<td>$249,430</td>
</tr>
<tr>
<td>2017</td>
<td>24</td>
<td>$102,804</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Violation</th>
<th>Number of NOVs</th>
<th>Fines</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water-Based</td>
<td>9</td>
<td>$11,064</td>
</tr>
<tr>
<td>Air-Based</td>
<td>8</td>
<td>$3,466</td>
</tr>
<tr>
<td>Solid-Waste-Based</td>
<td>4</td>
<td>$2,700</td>
</tr>
<tr>
<td>Paperwork</td>
<td>0</td>
<td>$0</td>
</tr>
<tr>
<td>Transportation-Based</td>
<td>4</td>
<td>$0</td>
</tr>
<tr>
<td>Other</td>
<td>4</td>
<td>$0</td>
</tr>
<tr>
<td>Worker Safety</td>
<td>11</td>
<td>$44,830</td>
</tr>
<tr>
<td>Total</td>
<td>40</td>
<td>$62,060</td>
</tr>
</tbody>
</table>
Air Emissions

Each site assesses total suspended particulates, volatile organic compounds (VOCs), carbon monoxide (CO), nitrogen oxides (NOX) and sulfur oxides (SOX). The chart below summarizes data from the last three years.
Awards and Recognitions

LEED

We are committed to designing sustainability into our facilities, including pursuing LEED certification for all new facilities. We now have 36 projects sites with LEED Silver or Gold certification. Some recent projects include our Amiens distribution facility (first P&G LEED facility in France), Albany Georgia (applying sustainable design principles as they rebuild from a tornado), and our new greenfield site in Tabler Station West Virginia which received multiple LEED Silver certifications. We are also very proud of our SK-II production site in Shiga, Japan which was awarded LEED Silver under the new LEEDv4 standard, the first manufacturing site (from P&G or any other company) in Japan to achieve this honor.

<table>
<thead>
<tr>
<th>Location</th>
<th>Gold</th>
<th>Silver</th>
</tr>
</thead>
<tbody>
<tr>
<td>Albany, GA, U.S.</td>
<td></td>
<td>1*</td>
</tr>
<tr>
<td>Amiens, France</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Ben Cat, Vietnam</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Box Elder, UT, U.S.</td>
<td>2*</td>
<td></td>
</tr>
<tr>
<td>Cabuyao, Philippines</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Cincinnati, OH, U.S.</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Cruz, Brazil</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Greensboro, NC, U.S.</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Budapest / Gyongyos, Hungary</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Guangzhou, China</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Hyderabad, India</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Jakarta, Indonesia</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Lagos, Nigeria</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Singapore</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Tabler Station, WV, U.S.</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Taicang, China</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>4</strong></td>
<td><strong>32</strong></td>
</tr>
</tbody>
</table>

*Represents a LEED v4 Certification at this location.
Environmental Resource and Waste Summary

The table below reports environmental statistics for Manufacturing Operations in our Global Business Units, Technical Centers and Distribution Centers.

<table>
<thead>
<tr>
<th>Production (metric tons)</th>
<th>Totals (absolute units x 1,000)</th>
<th>2019 Global Business Unit Detail¹ (absolute units x 1,000)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2019</td>
<td>2018</td>
</tr>
<tr>
<td>Finished Products Manufactured²</td>
<td>15,175</td>
<td>15,144</td>
</tr>
<tr>
<td>Raw Materials from Recycled Sources³</td>
<td>674</td>
<td>633</td>
</tr>
</tbody>
</table>

| Manufacturing Waste (metric tons) | | |
|-----------------------------------|---|
| Solid Waste Generated             | 655 | 624 | 632 | 254 | 71 | 233 | 34 | 35 | 27 |
| % Recycled/Reused Waste           | 95.8% | 94% | 92.6% | 94.1% | 97.6% | 96% | 100% | 100% | 94% |
| % Disposed — Hazardous            | 0.4% | 0.4% | 0.5% | 0.0% | 0.3% | 0.8% | 0.0% | 0.0% | 2.1% |
| % Disposed — Non-Hazardous        | 3.8% | 5.6% | 6.9% | 5.9% | 2.1% | 3.2% | 0.0% | 0.0% | 3.9% |

| Other Waste (metric tons) | | |
|--------------------------|---|
| Effluents (excluding water)⁴ | 16 | 21 | 19 | 4.26 | 3.06 | 7.42 | 0.25 | 0.82 | 0.06 |
| Air Emissions⁵           | 7 | 8 | 8 | 4.82 | 0.22 | 1.83 | 0.04 | 0.10 | 0.18 |
| Construction & Demolition Waste | 8 | 19 | 7 | 3.17 | 0 | 5.04 | 0.09 | 0.05 | 0.14 |

| Energy and Greenhouse Gas (GHG) | | |
|---------------------------------|---|
| Energy Consumption (gigajoules) | 61,176 | 60,891 | 60,423 | 39,307 | 3,495 | 11,192 | 2,424 | 1,834 | 2,924 |
| Total GHG Emissions (metric tons)⁶ | 4,050 | 4,053 | 4,559 | 2,539 | 266 | 664 | 198 | 156 | 227 |
| Scope 1 — Direct GHG Emissions (metric tons)⁷ | 2,210 | 2,143 | 2,122 | 1,614 | 91 | 321 | 65 | 43 | 76 |
| Scope 2 — Indirect GHG Emissions (metric tons)⁷ | 1,840 | 1,910 | 2,437 | 925 | 175 | 343 | 133 | 113 | 151 |
| Biogenic GHG Emissions (metric tons) | 57 | 68 | 89 | | | | | | |

| Water (cubic meters) | | |
|----------------------|---|
| Water Consumption    | 63,125 | 63,666 | 61,826 | 38,634 | 5,525 | 14,267 | 1,149 | 1,601 | 1,949 |

¹ Baby, Feminine and Family Care includes Baby Care, Feminine Care and Family Care. Beauty includes Beauty Care and Personal Beauty Care. Fabric and Home Care includes Fabric Care, Home Care and Chemicals. Grooming includes Blades and Razors and Devices. Health Care includes Personal Health Care and Oral Care. Other includes major stand-alone offices/technical centers that support the business units and our largest distribution facilities. Numbers do not include production from contract manufacturing operations.

² Estimated from FY18/19 finished product production volumes. Updated to exclude intermediate products that are used as raw materials in other P&G categories.

³ Data is tracked at a corporate level.

⁴ Wastewater chemical oxygen demand (COD).

⁵ Air emissions include particulates, SO2, NOX, CO and VOC.

⁶ Total GHG emissions = Scope 1 + Scope 2. Scope 2 emissions calculated using a market-based method.

⁷ Market-based Scope 2 GHG emissions. Note: Location-based Scope 2 emissions 2019 were 2,544,082 metric tons.
Global Measurement and Additional Operational Data

2020 Goal Measurement Systems
We go to great lengths to ensure rigor, accuracy and transparency in our reporting. Below, we share additional information on some of our 2020 Goal Measurement Systems to help ensure clarity and transparency on the data we are reporting.

Greenhouse Gas Emissions
For the purposes of monitoring progress against our goal and listing emissions levels in charts and graphs, we utilize market-based Scope 2 GHG emissions. The WRI/WBCSD GHG accounting protocol provides additional perspective on market-based versus location-based GHG emissions.

Our GHG emissions data has been verified by an external third party, Lloyd’s Register Quality Assurance (LRQA).

Low-Energy Cycle Machine Washing Loads
Each year, we carefully review habits and practices data to help us assess progress against our low-energy washing goal. The objective of this goal is to get consumers to use low-energy cycles, and we can play a significant role in that by providing detergents with outstanding performance in low-energy cycles. Our benchmark for qualifying low-energy cycles has been 0.4 kWh per wash cycle. Cycles included in our tracking are cold cycles in traditional top load machines and cold and warm cycles in all HE machines (top & front loading).

Packaging Reduction
The average packaging reduction is calculated using products that represent the top 70% (by volume) of the categories that have the largest impact on packaging use (Fabric Care, Home Care, Baby Care, Feminine Care, Family Care, Oral Care, Personal Cleansing Care, Shave Prep, Hair Color and Hair Care). While a subset of overall data, we believe it is representative of overall corporate data and focuses resources on the biggest SKUs and categories with the biggest impact on packaging.

We go to great lengths to ensure rigor, accuracy and transparency in our reporting.
Global Measurement and Additional Operational Data

2020 Goal Measurement Systems

Recyclability of Packaging
For purposes of tracking progress against our goal, a package is considered recyclable when there is an in-market, at-scale recycling system in place for that material type (e.g., collection, sortation, processing for end use and established end-market for collected material). While we require large-scale systems to be in place in at least one location, we do not require a minimum percent access or recovery rate per package in every country or market for the package to be considered recyclable for purposes of tracking progress versus our goal.

Paper Packaging
Data for calculating progress versus our paper packaging goal was self-reported by our suppliers. The data collected this year covered materials procured directly by the Company as well as contractor manufacturers and covered more than 95% of our global spend.

Renewable Energy
When calculating the renewable energy powering our plants, we include the renewable energy level of the local electrical grid that provides power to the plant.

Water Conservation
Our goal to reduce water use in manufacturing facilities by 20% per unit of production applies to freshwater consumption, which means freshwater intake from the following sources:

- Tap water: water supplied by municipalities or third-party companies via piping systems or trucks, at any quality they deliver
- Ground water from site wells
- Surface water: non-brackish as rivers, lakes, creeks, etc., at any quality they deliver

Venezuela
Due to current conditions in Venezuela and consistent with how we have approached other corporate reporting, we have excluded our three facilities in Venezuela from the manufacturing data included in this report. For transparency, the estimated combined data from these three sites within our 2010 baseline was energy (353,752 gigajoules), water (233,188 cubic meters), and GHG emissions (20,589 metric tons), which represents less than 0.5% of the respective global footprints. These changes have already been incorporated into the baseline restatement.

Baseline Restatement
This year, we adjusted our GHG emissions baseline in accordance with the principles in the WRI and WBCSD Corporate Standard for Greenhouse Gas Accounting. Changes included adjustments for acquisitions and divestitures as well as other minor modifications and corrections to historic data. Our original baseline was 5,466,601 metric tons. Our revised baseline, which we will use for calculating progress versus GHG emissions reduction goals, is now 5,407,790 metric tons. As part of this work, we also updated our baselines for energy, water and waste. Original energy baseline was 67,904,220 gigajoules. It is now 63,755,819 gigajoules. Original water baseline was 77,049,114 cubic meters. It is now 75,029,004 cubic meters. Original waste disposed was 354,563 metric tons. It is now 335,488 metric tons. The baseline year remains the same: they Company’s FY09/10.
Data in this report covers the period of July 1, 2018 to June 30, 2019. Financial information is given in U.S. dollars. Questions related to this report can be directed to mediateam.im@pg.com. This report references GRI 102: General Disclosures 2016. A GRI Content Index for this report can be found here.