



# Environmental Sustainability

Building on our legacy of environmental leadership, we have made significant progress against our 2020 goals for climate, water and waste—having achieved several of them already—and have set new, ambitious environmental goals for 2030 that will enable and inspire positive impact. These goals seek to address two of the world's most pressing environmental challenges: finite resources and growing consumption.



## HIGHLIGHTS

### Ambition 2030

We've made strong progress against our 2020 goals and the time was right to raise the bar. So this year we launched our new 2030 goals—Ambition 2030—aimed to enable and inspire positive impact while creating value for consumers and our Company. These goals focus on where we know we can make the 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 the right partnerships that enable people, the planet and our business to thrive, and this includes finding solutions so that none of our packaging finds its way to the ocean. And finally, we will tap into our greatest resources, our employees, so that they are engaged and equipped to build sustainability into their daily work and our communities.



## HIGHLIGHTS

### A Power Play

Our energy team has worked hard to deliver renewable onsite projects like a combined heat and power biomass facility in Georgia and offsite partnerships like our wind farm in Texas that have put us on track to deliver our current targets. Building off their progress, we've stepped that up for 2030. We've agreed to purchase 100% renewable electricity and will do this in North America by 2020 and globally by 2030. We have also committed to reduce scope 1 and 2 greenhouse gas emissions by 50% by 2030, using 2010 as a baseline. This science-based target aligns with climate science, and it will help us do our part to reduce the impact of climate change.



P&G will purchase 100% renewable electricity in North America by 2020 and globally by 2030.



## HIGHLIGHTS

### A Sea of Change

We understand what's happening to the world's oceans, so that is why we have included a plastics pledge in our Ambition 2030 goals. We are looking at holistic solutions that will make it possible that no P&G packaging finds its way to the ocean. We are reducing the plastic we use, increasing recycled content and the recyclability of our packaging, and leveraging innovation and partnerships to help stop the flow of plastic into our oceans. Our brands are bringing this to life:

Limited-edition H&S and Fairy bottles in several European countries contain recycled beach plastic. Almost 100% of the packaging used in Charmin, Puffs and Bounty is recyclable. Lenor introduced post-consumer resin into transparent sizes in Europe and enabled the use of 3,100 tons of recycled plastic in 2017.



P&G is reducing the plastic we use and increasing recycled content and the recyclability of our packaging.





## HIGHLIGHTS

### Partnering for Change

We know that no one company can do this alone and believe that collaboration will be critical to driving positive change at scale. We've had some initiatives that we've been able to bring to life with our partners. For example, we worked with TerraCycle and Tesco to provide one lucky school in the UK with a playground made with recycled plastic. In Italy, we worked with Carrefour to create a sustainability campaign around beach litter that enabled shoppers to help choose which beach to clean by providing a donation with purchase. In Japan, Febreze partnered with TerraCycle and a national retailer to encourage shoppers to bring in used Febreze car air fresheners to their local shops for recycling. These collections were recycled into raw materials used to manufacture safety reflectors which were donated to schools—a great example of bringing the circular economy to life.



Febreze, along with our partners TerraCycle and Tesco, gave schools in the UK a chance to win a playground made from recycled plastic.



## HIGHLIGHTS

### That's Not Garbage

Our production sites are well on their way to reaching our goal of sending zero manufacturing waste to landfill by 2020. In fact, approximately 85% of our production sites have successfully qualified as Zero Manufacturing Waste to Landfill sites. So how does this happen? It all starts with changing the mindset to see waste not as waste, but as worth. Around the world, our employees have changed their everyday behaviors, partnering with our Global Asset Recovery Purchases (GARP) team to think of creative and innovative ways to find new life for our materials. So instead of sending those suds that don't meet our specs to the landfill, we sell them to carwashes. The scraps from some of our fem care products become cat litter. Old shipping drums are repurposed into artistic waste bins, school benches and tree containers. And there is a double benefit—we create a more circular supply chain by avoiding the landfill while also getting revenue for this would-be waste. Since the program started in 2008, it has saved the Company more than \$2 billion and has helped divert five million tons of waste from the landfill.



85% of our plants  
have achieved our  
2020 goal of sending  
zero manufacturing  
waste to landfill.

# Environmental Sustainability



# Message from Shailesh Jejurikar

"This year, we took a major step in renewing our commitment to environmental sustainability. In April, we launched new, ambitious goals for 2030 that focus on where we know we can make the most meaningful difference—our brands, supply chain, society and employees. We've already achieved many of our 2020 goals, and we're committed to stay on track so we can deliver the remaining goals. However, achieving these goals is not enough. We know our stakeholders want and expect more. With our global reach, our understanding of the five billion people we serve and our innovation and supply chain capabilities, we have a unique ability to drive positive impact in the world. We can be a force for good and a force for growth, but we know we cannot do this alone. We will partner with consumers, industry, governments, civil society groups and academics so that, together, we can make an even greater impact."



**Shailesh Jejurikar**  
President, Global Fabric Care  
and Brand Building Organization,  
Global Fabric & Home Care,  
and Executive Sponsor,  
Global Sustainability



## VISION AND PROGRESS

# Ambition 2030

Ambition 2030 aims to enable and inspire positive impact on the environment and society while creating value for the Company and consumers. Our Ambition 2030 goals span our brands, our supply chain, society and our employees. We know P&G alone does not have all the answers. It will take partnerships and collaboration to make meaningful progress and take responsible consumption to the next level.



### BRANDS

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



### SUPPLY CHAIN

Reduce our footprint and strive for circular solutions



### SOCIETY

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



### EMPLOYEES

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

## VISION AND PROGRESS

## 2020 Environmental Goals Progress

## CLIMATE

**Reduce energy use at P&G facilities by 20% per unit of production by 2020**



Achieved—22% reduction per unit of production

**Reduce absolute GHG emissions by 30% by 2020**



We have reduced absolute GHG emissions by 21%

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



69% 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**



14% of energy is from renewable sources

**Implement palm oil commitments**

We continue to advance progress against our three-pillar strategy

**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

## VISION AND PROGRESS

# 2020 Environmental Goals Progress

## WATER

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



700 million people with access to water-efficient products

## WASTE

**100% zero manufacturing waste to landfill by 2020**



85% of our manufacturing sites are ZMWTL

**Reduce packaging by 20% per consumer use**



We have reduced packaging by approximately 13.5% 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 86% and have strong, ongoing effort to further increase recyclability

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



Achieved—25% reduction per unit of production

**Have 100% of our paper packaging contain either recycled or third-party-certified virgin content by 2020**



98% 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 38,100 metric tons of PCR in our plastic packaging, getting us 46% 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

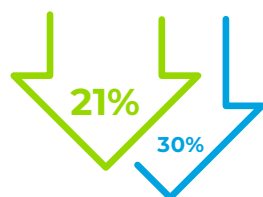
## VISION AND PROGRESS

# Environmental Progress vs. 2010 Baseline

Within our operations we strive to grow responsibly, constantly improving our efficiency while reducing our 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.



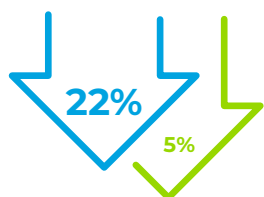
### GHG



**21% absolute reduction**  
**30% reduction per unit of production**



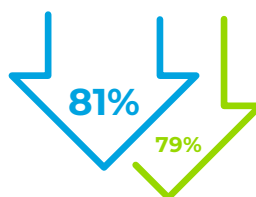
### Energy



**22% reduction per unit of production (exceeding goal early)**  
**5% absolute reduction**



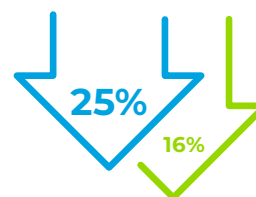
### Waste



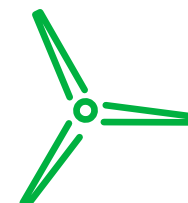
**81% reduction in solid waste with 85% of our sites achieving zero manufacturing waste to landfill**  
**79% absolute reduction**



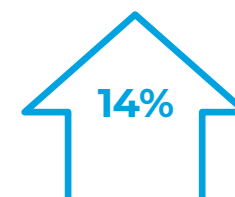
### Water



**25% reduction per unit of production (exceeding goal early)**  
**16% absolute reduction**



### Renewable Energy



**Currently 14% of our total energy comes from renewable sources**



# Brand Stories

## Head & Shoulders

We launched the Head & Shoulders Beach Bottle in France in June 2017 to a positive reception. The bottle is made with 25% recycled plastic collected from the beach and has received broad recognition as a significant innovation in sustainability, including the United Nations' Momentum for Change Award. With this consumer and commercial success, Head & Shoulders expanded this innovation to Germany, Spain, Turkey and Israel and plans are in place for further expansion.

## Fairy

Fairy Ocean Plastic bottles were launched in Europe this year in partnership with TerraCycle. It was designed to raise awareness of ocean plastic pollution and what can be done to prevent plastic waste from reaching the ocean. The innovative bottle is made from 10% ocean plastic, collected from the ocean and beaches around the world and is 100% recyclable (excluding cap and label).

## Bounty

Bounty delivers more life per roll by providing superior absorbency and strength. When people choose Bounty, they can do more with less and make a sustainable difference because 100% of the wood fiber used to make Bounty paper is from responsibly managed forests.



100% of the wood fiber in Bounty rolls is from responsibly managed forests.

## Puffs

Puffs provides soothing comfort to noses in need. Puffs are made from softwood and hardwood fibers that were produced to meet international standards for responsible forestry.

## Charmin

Charmin is soft and strong and lasts longer because people can use less Charmin Ultra Soft and Charmin Ultra Strong than the leading bargain brand. All Charmin tissue products are made from wood fiber which has been third-party certified to responsible forestry standards, so you can confidently Enjoy the Go and support healthy forests.



Our Fairy Ocean Plastic bottle is made from 10% ocean plastic and 100% recyclable (excluding cap and label).

# Brand Stories

## Downy and Lenor – Long Live Fashion Formula

When it comes to your clothes, it's our business to clean and our passion to care—for clothes and the planet. We want to help people take the best care of the clothes they love, so we can collectively reduce the impact clothing has on our planet. We found that by caring for clothes with what we call “the long live fashion formula”—using a high-quality liquid or PODs like Ariel, washing in quick and cold cycles and conditioning with Downy or Lenor—we can quadruple the clothes' life.

In Europe, we tested a typical household laundry basket with this treatment vs. using a competitive powder at a 40°C cycle and found that we could keep clothes like new for 4x longer than with the alternative treatment. To drive awareness of this within the fashion industry, we attended the Copenhagen Fashion Summit (CFS). Bert Wouters, VP for the Fabric Enhancer Franchise globally, emphasized to the audience the impact each of us can make by using the right laundry procedure. He shared compelling information, including the fact that if Europeans extended the life of one in five garments by just 10%, that would translate to saving enough carbon to power half a million homes for a year and more than 150 million liters of water from slower-paced clothing production.

## Hand-Me-Downy

In North America, millions of tons of clothing are sent to landfills each year. One of the major reasons this happens is because clothes aren't well cared for, and they wear out too soon. To help keep clothes in closets and out of landfills, Downy encouraged Canadian families to swap clothes their kids had outgrown through the first “Hand-Me-Downy” program. Downy sent Canadian families kits to host their own clothing swaps, including invitations and bottles of Downy to protect the clothes they love so they can be worn and handed down, not worn out and thrown out. Through the swaps, each family received ‘new to them’ clothes at no cost, and every article of clothing found a new home, proving that caring for clothes is better for wallets and the environment!

## Oral-B

Oral-B wants to help put some power in your toothbrush while also helping the planet. Our power brushes have a long lifecycle and are often used by consumers for up to five years before being replaced. Electrical brushes use rechargeable batteries as a source of energy and enable a much higher product performance versus disposable batteries. This results in longer lifecycle and less waste. Since July 2017, Oral-B has extended its range of products featuring Lithium Ion batteries which significantly increase the lifecycle of the brushes. These batteries are built into most Oral-B power brush models, from the Pro-2000 to our most premium Genius brushes.



Using Ariel with quick, cold cycles and conditioning with Downy or Lenor were proven to keep clothes like new for 4x longer.

# Circular Supply Chains

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 be 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.

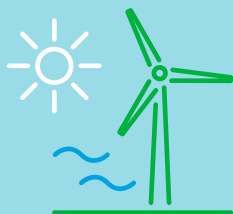
We have established specific targets that we intend to achieve by 2030:

1. 100% renewable electricity and cut GHG emissions in half at P&G sites
2. P&G sites will deliver a 35% increase in water efficiency and source at least five billion liters of water from circular sources
3. Advance at least 10 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 recently joined the Ellen MacArthur Foundation Circular Economy 100 working group. The Circular Economy 100 is a pre-competitive innovation program established to enable organizations to develop new opportunities and 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.



# Climate



We will reduce our Scope 1 & 2 greenhouse gas emissions by 50% by 2030.

We recognize the scientific consensus linking greenhouse gas emissions and climate change. As a global citizen, we are concerned about the negative consequences of climate change and believe action by governments, industry and consumers to reduce emissions to the atmosphere is necessary. We are committed to doing our part to reduce greenhouse gas emissions including adopting science-based targets to ensure we are contributing our fair share.

We are striving to reduce emissions from our own operations via increased use of renewable energy and have a relentless focus on energy efficiency. We are also helping consumers reduce their own emissions through our efforts to convert more machine-washing loads to low-energy cycles.

In 2018, we further strengthened our long-term commitment by announcing two new goals as part of our Ambition 2030 framework:

- We will reduce our Scope 1 & 2 greenhouse gas emissions by 50% on an absolute basis by 2030 (vs. 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.
- We will purchase 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.

Please click on the links below to learn more about our climate change efforts:

For more information, read our climate change policy.

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.

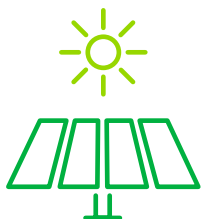


# Greenhouse Gas Emissions

## Scope 1 & 2 GHG Emissions

In 2018, we made another significant step on our journey to reducing greenhouse gas (GHG) emissions with the announcement of Ambition 2030. We have committed to cutting our absolute GHG emissions in half between 2010 and 2030. This was verified by the Science Based Targets Initiative as a goal that is in line with what leading climate scientists state is necessary to prevent global warming from increasing two degrees Celsius versus pre-industrial era temperatures. We are members of the World Wildlife Fund (WWF) Climate Savers program and worked in collaboration with WWF to develop this key milestone target.

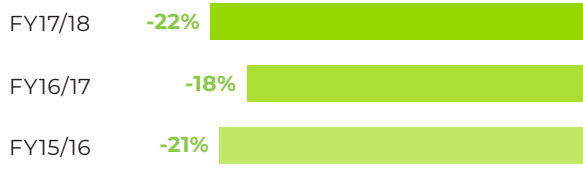
Cutting our Scope 1 & 2 GHG emissions in half is a stretching target, and there is a great deal of work to do. The foundation of our program will continue to reside in improving energy efficiency. However, efficiency improvements alone will not be sufficient to achieve an absolute 50% reduction as we continue to serve the needs of a growing consumer population. To meet this target, as part of our Ambition 2030 goals, we have committed to obtain 100% of our purchased electricity from renewable sources by 2030. Moving to renewable sources of electricity will eliminate most of our Scope 2 emissions.



Our move to purchasing 100% of our electricity from renewable sources will eliminate most of our Scope 2 emissions.

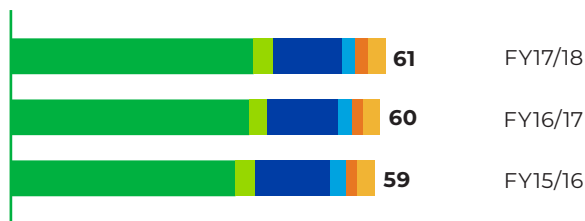
## Reduction in Energy Consumption

Percent reduction versus FY09/10, production adjusted



## Energy Consumption by GBU

Millions of gigajoules

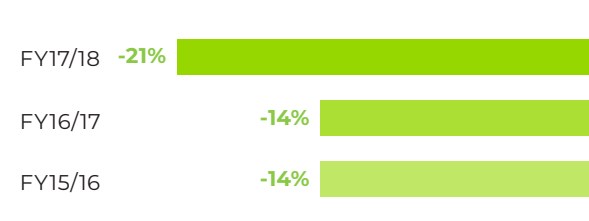


P&G has retained Lloyd's Register Quality Assurance (LRQA) to provide independent verification of our GHG program to ensure it meets the intent of the World Resources Institute/World Business Council for Sustainable Development (WRI/WBCSD) GHG protocol.



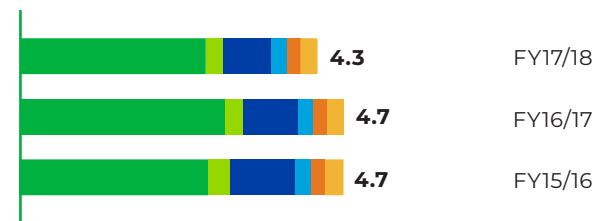
## Total Greenhouse Gas Emissions (Scope 1 & Scope 2)

Percent reduction versus FY09/10, absolute



## Total Greenhouse Gas Emissions (Scope 1 & Scope 2)

Millions of metric tons



● Baby, Feminine & Family Care    ● Beauty  
 ● Fabric & Home Care    ● Grooming  
 ● Health Care    ● Other

# Greenhouse Gas Emissions

## Scope 3 GHG Emissions

Over the last two years, we have expanded our estimates for Scope 3 emissions to include all major reporting categories. This updated data is included in the table to the right. We derived this data from lifecycle assessments that we have completed for our major categories as well as other sources such as employee travel miles. This exercise reinforced that the “use phase” of our products, especially those that use hot water during consumer use, is our single greatest opportunity for Scope 3 emissions.

As noted in the table, some data was derived in FY15/16 and was based on Life Cycle Assessment data. We do not expect large changes in these numbers from year to year, and it is clear from the data that the product use phase is the overwhelming majority of Scope 3 emissions. We intend to update Scope 3 emissions in next year’s report.

Scope 3 Categories	Tons CO <sub>2</sub> e
Purchased goods and services—upstream transport & distribution	8,560,000*
Capital goods	246,508 <sup>†</sup>
Fuel & energy activities	495,398 <sup>†</sup>
Waste generated in operations	9,035 <sup>†‡</sup>
Business travel	100,000*
Employee commuting	117,412 <sup>†</sup>
Upstream leased assets	Not material
Downstream transport & distribution	3,195,000*
Processing of sold product	Not material
Use of sold product	186,500,000*
End of life treatment of sold product	10,950,000*
Downstream leased assets	Not material
Franchises	Not material
Investments	Not material

\*FY15/16 estimate

<sup>†</sup>FY16/17 estimate

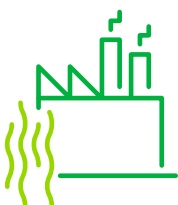
<sup>‡</sup>Scope limited to material sent to landfill

# Renewable Energy

We continue to look for unique global projects and partnerships that will allow us to source 30% of our total energy, both thermal and electric, from renewable sources by 2020. Currently 14% of our energy comes from renewables, and we are on track to meet our 2020 target.

As part of our new Ambition 2030 we have set a stretching new vision of purchasing 100% renewable electricity by 2030 for our global facilities. To jumpstart this program, our team is looking to reach 100% renewable electricity in North America by 2020 (10 years ahead of our global commitment). North America is P&G's largest consumer market. Purchasing 100% renewable electricity will allow our consumers to know that the brands they have come to know and trust for superior performance and value are also being made at sites that purchase 100% renewable electricity.

Our wind farm in Texas (which provides 100% of the electricity needed for our Fabric and Home Care facilities in the U.S. and Canada to produce brands like Tide, Downy, Cascade and Mr. Clean) and an onsite combined heat and power biomass facility in Georgia (which provides 100% of the steam needed to make Bounty and Charmin) continue to remain the shining stars of our renewable energy program. These large-scale partnerships, along with multiple smaller global onsite/offsite projects utilizing solar, geothermal and hydro, have provided key learnings and the foundation for our vision to use 100% renewable energy.



The biomass facility in Georgia provides 100% of the site's steam needed to make Bounty and Charmin.

P&G will use 100% renewable electricity by 2030.



# Energy Conservation

We continue to make solid progress in reducing our energy footprint. We have improved energy efficiency by 22% since 2010, achieving our 2020 goal several years early.

The strengths of our energy program rest on three key strategies:

1. Operating with zero losses or defects
2. Investing in new technologies to improve efficiency and deliver savings
3. Leveraging Total Employee Ownership

We have an Energy Team that delivers tools and systems integrated with our manufacturing work systems to reduce losses and continuously improve operating efficiency. We continue to focus on enabling our people to identify and quickly eliminate losses in energy consumption. We are also benchmarking efficiencies internally and externally to determine where we can invest in new technologies to improve base operating efficiencies. It's because of these efforts we have improved energy efficiency by 22% since 2010 which has resulted in hundreds of millions of dollars in direct savings and reduced emissions.

A good example of how we bring this to life is at our Louveira plant in Brazil. The plant expanded the loss elimination culture by creating a Sustainability Committee that targeted consumption, reduction and responsibility in each footprint area including energy. The team is made up of employees across all departments and uses the power of Total Employee Involvement to speed up identification, quantification

and solutions. Because of the dedicated focus of the team, they were able to analyze data from their operations and implement several projects improving their efficiency. This includes improvements in shutdown practices, roof materials, integrated cooling system controls, vacuum system improvements and drive system efficiencies. Overall, the site has increased energy efficiency 51% since FY 09/10.

## Energy Success Stories

### Mechelen Plant, Belgium

Another example of these focused efforts can be seen at our Mechelen plant in Belgium. The site energy team developed an action plan to improve the energy efficiency of making automatic dish washing pods delivering a 22% reduction vs. the same six month period the previous year.

The key areas where they drove efficiency improvements were regular air leak and defect audits, improved production throughput, focused shutdown practices and improved process settings on their air handling systems.

*“Our site continues to produce high quality product to delight consumers with a reduced environmental impact, contributing to the conservation of natural resources.”*

*– Niels Jacobs, Site Energy Leader*

### Baddi Plant, India

We installed an innovative new heat pump at our Gillette blades and razors plant in Baddi, India. This allowed the site to save money and exceed goals on energy efficiency improvements and GHG reductions.



*Our Louveira plant in Brazil improved their efficiency reducing emissions and saving millions of dollars.*

### Amiens Plant, France

At our Amiens site in France, where we produce our Ariel, Lenor and other Fabric Care products, we installed electric heat pumps to provide indoor heating and eliminated the need for additional steam generated from fossil fuels. Because this plant uses 100% renewable electricity, the electric heat pumps help reduce our GHG emissions.



# Low-Energy Washing

The energy used during the machine washing of laundry is one of the biggest impacts on our corporate GHG emissions footprint and, as such, we have been focused on innovating to enable consumers to get clean clothes using less energy. Our goal is to have 70% of all global washing machine loads done in low-energy cycles by 2020. This year, we are at 69% thanks to consumer habit changes in machine technology and innovation that gets clothes clean in cold conditions.

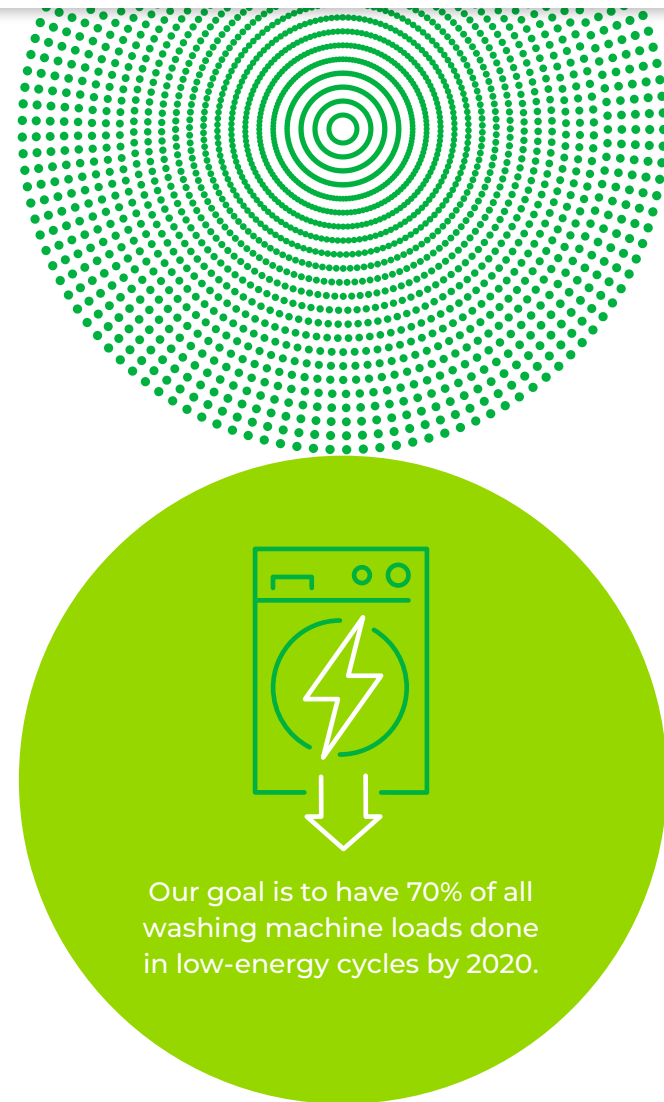
## Innovating to Get Clean in Cold

We continued to innovate all our detergent formulas for best performance in low-energy cycles. In North America, this year we further increased sales of Tide HE Turbo, which is specifically designed to perform well in the strongly growing segment of HE machines and shorter washing conditions.

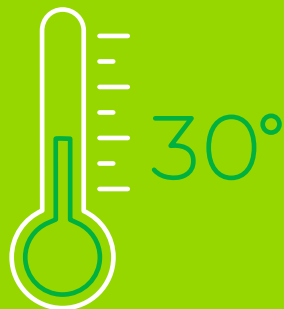
We introduced a new enzyme into our Tide detergents that we co-developed with Novozymes. This amylase enzyme is specifically designed to work well in low temperatures—meaning it can work quickly to attack tough stains in even the coldest washing conditions. More than 40 specialized scientists from around the globe worked for nearly two years, applying leading techniques in enzyme optimization, including 3D computer modeling, advanced data analytics and high throughput robotic systems to evaluate hundreds of thousands of enzyme molecules. This process continued until the team finally identified a winning enzyme that could perform in both cold and quick conditions. “Arctic,” as this enzyme is named, is inspired by the frigid and challenging conditions of the arctic waters and tundra. Arctic is a fast and efficient, biodegradable cold-water enzyme, making it perfect for use in Tide.



We partnered to create a new enzyme specifically designed to work well in low-temperature washing.



# Low-Energy Washing



Our “Turn to 30°” campaign asked people to make pledges to turn down washing temperatures to 30° to reduce their energy consumption.

## Steps in the Right Direction

With a strongly growing high-efficiency washing machine segment in North America, we focused particularly on ensuring that HE machine users have the best possible outcome in energy-efficient cycles through Tide HE Turbo Clean and education on the use of quick and cold cycles.

We also continued to grow and support our plant-based laundry detergent, Tide purclean, which offers great cleaning performance even at low temperatures. Tide purclean is USDA-certified bio-based and has 4x the cleaning power of the leading natural detergent.<sup>1</sup> Due to its ‘no compromise performance’, it was recently awarded the Environmental Leader’s Product of the Year.

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 30°’ campaign. It was why, this year, Ariel partnered with WWF UK to encourage people to make a promise for the planet in line with Earth Hour. People were asked to make one of seven pledges to protect the planet, one of which was “turn down washing temperatures to 30°.”

For every pledge made with #PromiseForThePlanet and #EarthHourUK, Ariel donated one euro to WWF UK. Across March and April, the campaign reached more than 326 million people, and WWF UK saw more than 58,000 pledges made across the country. Almost a quarter of these pledges were to turn down washing temperatures to 30°.

As in previous years, 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 will again reach about 18 million households next fiscal year.

We believe low-energy cycles are not only a win for the environment but a win for consumers, since colder, shorter cycles mean saving on energy bills and reducing damage to clothes from long, high-temperature cycles. While there will always be some loads washed at higher temperatures, we expect the trend towards more energy-efficiency cycles to continue over the coming years. Given that, we will remain focused on enabling consumers to adopt more sustainable, low-energy washing habits without compromising on the clean they need.

<sup>1</sup>One dose Tide purclean vs. four doses leading natural detergent.

# Renewable Materials

We are continuing our efforts to develop the ability to replace our top fossil-derived materials with renewable materials. We have identified cleaning agents, resins and acrylates as our top fossil-derived materials. We have previously reported on establishing our ability to replace resins and cleaning agents with renewably-derived materials. We have now established this capability for acrylates.

Acrylates are a key constituent of the superabsorbent materials used in our absorbent hygiene products. We have developed two technologies to produce renewable superabsorbent polymers from lactic acid which have identical properties as fossil-derived superabsorbent polymers. These patented technologies have been demonstrated at lab scale, and we are currently seeking to license these technologies to external parties with hopes of enabling production and commercialization at scale.

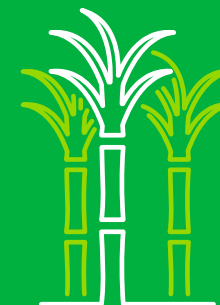
Now that we have achieved our goal, we will look for opportunities to utilize these materials as cost and scale permit. Two examples of our use of bio-resin are highlighted to the right.

## Tampax and Pampers

Tampax recently launched a 90% plant-based plastic tampon applicator on its Cotton Comfort line in France and Pure & Clean line at Target (U.S.). This innovative material is made from sustainably-sourced sugarcane from our supplier Braskem® in Brazil. P&G also sources this bioplastic for use in Pampers Pure. The sugarcane is converted into ethanol and eventually into plastic utilizing a by-product from the rest of the plant to provide some of the energy needed to fuel this process.

The sugarcane is certified to the Bonsucro® standard, which has a mission to ensure that responsible sugarcane production creates lasting value for people, communities, businesses, economies and ecosystems. Also, the “I’m Green™” bioplastic production processes are certified by International Sustainability and Carbon Certification (ISCC Plus), an international certification system for biomass and sustainable fuels that sets specific production standards.

The sustainable innovations in Tampax and Pampers to include sustainably sourced bio-materials supports our 2020 goal to “develop the capability to replace petroleum-derived raw materials with renewable materials as cost and scale permit.” The use of sustainable bio-polyethylene from sugarcane is the result of years of research and partnership with World Wildlife Fund, the Bioplastic Feedstock Alliance and other research partners.



TAMPAX



After years of research, Tampax and Pampers use sustainably sourced bio-polyethylene from sugarcane.

# Packaging

## Reduce Packaging By 20% Per Consumer Use

Our goal is to reach 20% reduction per consumer use in packaging, and this year we were able to achieve a slight increase of 0.5% against our goal despite significant external headwinds impacting our results. We have now achieved a reduction of 13.5% vs. our 2010 baseline. The primary challenge we face in this area is customer requests for smaller case counts which require an increase in our use of corrugate (shipping boxes). Corrugate is renewable, has a high recycle content and is recycled at a high rate—all of which help to mitigate impacts from increased use of corrugate. While we are proud of the significant reduction in packaging we have achieved so far and will continue our efforts to reduce even further, current headwinds are such that it will be very difficult for us to achieve our original target by 2020.

## Double the Use of Recycled Resin in Plastic Packaging

We have committed to double the use of recycled resin in our plastic packaging. This year, we used approximately 38,100 metric tons of post-consumer resin (PCR) in our plastic packaging, which represents an increase of approximately 46% vs. baseline. Our goal is to get to 52 kiloton of recycled resin, and we have identified several projects that we believe will help us deliver our goal. We are currently working with our business units to ensure we have adequate time to execute the needed projects by 2020.

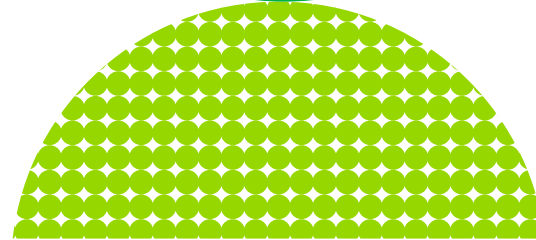
## Ensuring 90% of Our Packaging is Recyclable or There Are Programs In Place to Develop the Ability to Recycle It

For FY17/18, 86% of our packaging is considered recyclable, and we are working hard to continue to optimize the designs and advance the recycling infrastructure. We continue to expand many of our brand programs, including the shrink sleeve wrap for Lenor in the UK and Air Care recyclability program with TerraCycle, for example. A new program was announced this year, Materials Recovery for the Future, that has the potential to introduce new materials into the recyclability stream. We are also encouraging consumers to increase recycling of our packaging by expanding use of the How2Recycle label across our brands in North America.

During FY17/18, our use of plastic packaging was approximately 55% polyethylene, 15% polypropylene and 10% PET. The remainder consisted of mixed and other plastics. During FY18/19, we will continue our efforts on the goals listed above and will be developing additional perspective on our use of plastics which we will share in our next report.



86% of our packaging is considered recyclable.



# Packaging

## Materials Recovery for the Future

We are taking a leadership role working in collaboration with other brands, retailers and recyclers on a research pilot called Materials Recovery for the Future (MRFF). The goal of the pilot is to test the technical and economic feasibility of adding lightweight flexible plastic packaging formats to municipal recycling so that one day consumers can simply place this packaging in their curbside recycling with other recyclables. In 2016 and 2017, we studied how flexible plastic packaging flows in a recycling system, what equipment is most efficient to sort it and what products could be made from the recycled material. We also selected a recycling facility partner—JP Mascaro Sr. and his team at TotalRecycle, a state-of-the-art, family-owned business in Berks County, PA serving municipalities throughout the state.

In 2018 and 2019, we will continue to work with our MRFF partners and JP to upgrade TotalRecycle to sort and bale this packaging as a new recycled feedstock for product manufacture. The data will be available for other communities and facilities interested in upgrading their facilities to recycle flexible packaging.



Researchers and P&G's Steve Sikra sort through packaging to be recycled.

## Pantene Success Story

P&G's Eastern European Team delivered exceptional value via partnership with the Beauty Care Business Unit to reduce waste and improve recyclability. The team replaced plastic gift set trays with pulp trays that were not only made of recycled paper but are also fully biodegradable. This innovation allowed P&G to increase our use of recycled fiber while saving 48,000m3 of water and 960,000 kW of electricity.



Our new pulp gift set trays are made of recycled paper and are fully biodegradable.



# Responsible Forestry

Forests are critical to earth's ecosystem and to the plants, animals and human communities that depend of 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 are striving to protect and enhance the forests we depend on.

We have maintained our commitments to ending and reversing deforestation by sourcing wood products certified to leading international forest certification standards. Earlier this year, we announced new near- and long-term commitments, included in our Ambition 2030 goals, to protect and enhance the forests we depend on. Specifically, we intend to increase the area of certified forests globally, while working to strengthen leading certification systems. In addition, we will 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.

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.

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 impact 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.





# Responsible Forestry

## Wood Pulp Supply Chains

### Procurement Policy

As part of our procurement practices, we require that all wood used for pulp supplied to us has undergone a risk assessment in accordance with the Forest Stewardship Council® (FSC®) Controlled Wood standard. The FSC Controlled Wood risk assessments ensure that unwanted wood sources are avoided and that wood harvesting is done legally per our procurement policy. We have a preference for FSC, which makes use of both FSC Chain of Custody (FSC COC) and Controlled Wood (FSC CW) inputs.

We require that the forest certification systems utilized by our wood pulp suppliers adhere to 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. P&G 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. P&G supports 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 (e.g. [www.hcvnetwork.org](http://www.hcvnetwork.org)).
- 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 well-being 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).

### 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 programs.

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 stringent forest management certification scheme and are supported by leading international environmental NGOs.

Based on the market availability of certified pulp, P&G's supply chain will also source from other third-party forestry certification systems. They include:

- 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)



**We prefer FSC certified pulp because the certification ensures forests are responsibly managed.**

# Responsible Forestry

## Pulp for Our Tissue/Towel and Absorbent Hygiene Products

In fiscal year 17/18, we purchased 1.5 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:

Country of Origin	% of Total
Argentina	1%
Brazil	34%
Canada	33%
United States	32%
<b>Total</b>	<b>100%</b>

Certification System	% of Total
FSC COC	37%
FSC CW	7%
PEFC	30%
SFI	26%
<b>Total</b>	<b>100%</b>

FSC COC—FSC Chain of Custody  
FSC CW—Controlled Wood

## Working Together to Make a Difference

P&G is a proud participant in World Wildlife Fund's (WWF®) Global Forest & Trade Network (GFTN), a corporate forum for supporting responsible forest management and forest product sourcing.

Many of our projects and activities are inspired by our commitments as participants in GFTN such as:

- Continuing to implement our preference for FSC certification, including overall volume increases in FY17/18.
- Continuing support for efforts to expand group certification for family forest owners in the U.S. with Domtar.
- Progress in the Coastal Carolinas landowner outreach project.
- P&G's efforts at Tissue 2017 Conference & Expo to convene discussions with other companies and NGOs about sustainable forestry and Caribou issues in Canada.



We are a proud participant of WWF's Global Forest & Trade Network, working with partners that support responsible forest management.

## FSC Group Certificate Support

In 2016, P&G 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. The FSTOA is now working towards having 600,000 acres of timberland under FSC group certification.



P&G's Charmin toilet tissue and Puffs facial tissue products are FSC certified by Rainforest Alliance.

# Responsible Forestry

## Carolinas Working Forest Conservation Collaborative Update

In May 2016, we helped launch the Carolinas Working Forest Conservation Collaborative (CW FCC), a collection of organizations led by the American Forest Foundation working together to help family forest owners manage their land sustainably.

The current project area consists of 5,946,494 acres, almost three times larger than our original goal of 2.4 million acres. Because of the early success of the program, all the original goals have been expanded. For example, the project is now looking to reach out to almost four times as many forest owners and directly engage twice the number of forest owners in workshops and field days to increase knowledge of forest stewardship and practices.

We are pleased with the early success of the program which enjoys the direct support of more than 20 leading international, national and regional conservation organizations.

## Paper Packaging

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:

Total volume in metric tons	~700,000
% Recycled	85%
% Virgin	15%
% of virgin fiber that was third-party-certified	91%
% of total recycled or third-party-certified virgin	98.5%

This year, 98.5% of the volume reported by our suppliers was either recycled or third-party-certified virgin content. That means less than 2% of the reported volume was virgin material that was not third-party-certified. We also experienced a 12% reduction in the total metric tons because of initiatives to reduce our overall use of paper board. Over the course of the next years, we will remain focused on working with our suppliers to get to our goal of 100%.



By 2020, 100% of our paper packaging will contain either recycled or third-party-certified virgin content.

# Palm Oil

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 ensuring that our sourcing of palm oil 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.



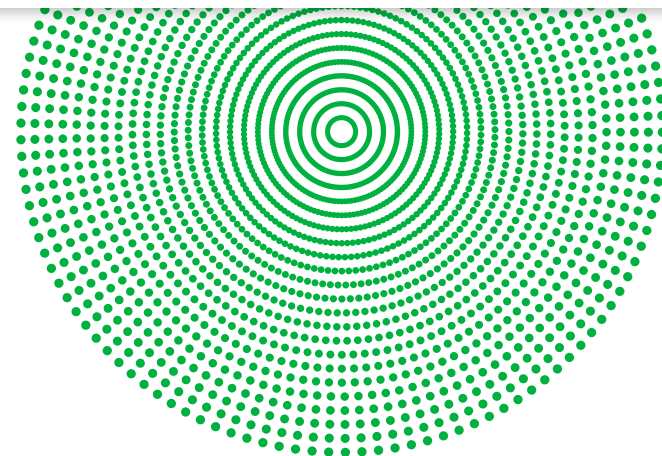
## Palm Oil Procurement Policy

P&G is committed to ensuring our suppliers meet RSPO Principles and Criteria (P&C) 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. 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 should be applied to identify and conserve HCS forests. We have been supporting inclusion of HCSA to the 2018 RSPO P&C and are expecting to incorporate the revised P&C for verifying our commitments.



# Palm Oil

## Progress

During FY17/18, 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.

Maintained 100% RSPO certification for palm oil/palm oil derivatives and continued to make progress in our efforts to source 100% of our palm oil as RSPO Segregated (SG) by the end of 2018. We remain on track to hit that goal and are developing plans to procure 100% of our palm oil derivatives as RSPO SG by the end of 2020.

Completed a comprehensive palm oil mill risk assessment to understand which palm oil mills in our supply chain are located in areas considered to be high-risk. Roughly ~7% (~90 mills) were found to be in high-risk locations, and during FY18/19 we will focus on developing additional verification programs for these sites.

Continued to play a leadership role in multi-stakeholder discussions seeking to advance a consensus approach to assessing High Carbon Stock areas via our participation in the High Carbon Stock Approach Steering Group.

Announced a major commitment as part of our Ambition 2030 program to significantly scale our smallholder program which is focused on improving the livelihoods of the smallholder farmers in our supply chain.

Explored key drivers of land use planning to help us prioritize our efforts. You can read key learnings from that exercise [here](#).

You can read more about the detailed progress in each of our three pillar areas by clicking on the links below.

This year, we sought to gain a better understanding of drivers of land use planning within the palm industry.



# Palm Oil

## Pillar I: Supplier Management

### Palm Oil

We use ingredients derived from palm oil and palm oil derivatives in Beauty Care and Fabric Care products. Our major PO and POD suppliers are Wilmar, Golden Agri, Musim Mas and Apical.

We are proud of our progress on palm oil and are on target to deliver 100% RSPO SG palm oil by the end of 2018. We're also developing 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

	Metric Tons*	RSPO Certified (%)	RSPO MB Certified (%)
Palm Oil/Palm Oil Fractions	52,529	100%	98%
Palm Oil Derivatives	63,976	100%	100%

\*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

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.

### Palm Kernel Oil

We use ingredients derived from palm kernel oil and palm kernel oil derivatives in some Fabric Care, Home Care, Hair Care and Beauty Care products.

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 is 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. This glidepath

	Metric Tons*	RSPO Certified (%)	RSPO MB Certified (%)
Palm Kernel Oil	366,474	8%	8%
Palm Kernel Oil Derivatives	30,464	0%	0%

\*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

should drive our RSPO certification levels for a year-on-year increase in certified PKO. Given the complexity of the PKO supply chain and a lack of supply of physically certified PKO, our commitment is to work with our PKO suppliers to aggressively drive year-on-year increases

in the percent of physically certified RSPO PKO we buy. We are also focusing our smallholder efforts on our PKO supply chain as we know we have a large concentration of smallholders in our Malaysian PKO supply chain. You can read more about those efforts here:

# Palm Oil



This year, we conducted a risk-assessment on all 1,269 palm oil mills in our supply base to identify mills at a high deforestation risk.

## Pillar I: Supplier Management

### Risk Assessment and Verification

We expect all suppliers (including their third parties) to fully comply with our Responsible Sourcing policy and will act swiftly to address any allegations of non-compliance. To help inform our efforts on verification of compliance, in FY17/18, we conducted a risk assessment using the PALM Tool (Version 2: Updating the PALM Risk Assessment Methodology. Sargent et al., publication forthcoming) on the World Resources Institute's (WRI) Global Forest Watch Pro (GFW Pro) to identify palm oil mills in our supply base that are at a high risk based on presence of deforestation risk factors in the area surrounding the mill. We assessed 1269 mills and identified ~90 (~7%) as high risk. The majority of these (>85%) were third party mills used by our direct suppliers.

### Focus Areas for FY18/19

**Concession Maps:** We believe that increased transparency on concession maps is an important part of enabling verification and holding suppliers accountable for any violations of their palm policies. We require all direct suppliers to be RSPO members. As a result, they are required to publish concession maps for their own lands. In FY18/19, our objective is to work with our direct suppliers to have concession maps of indirect third-party suppliers also published. As a first step, we have asked our suppliers to identify any existing barriers to the publication of concession maps so that we can work with our suppliers and other relevant stakeholders to find solutions for those barriers.

**Verification:** We will focus our verification efforts on sourcing areas characterized as high risk per our palm oil mill risk assessment process. We will work with relevant suppliers to ensure verification of Responsible Sourcing requirements for high risk locations. As a first step, we will assess the sufficiency of current verification process of all suppliers. Based on those findings, we will develop a glidepath and process for verification of high-risk locations in consultation with relevant suppliers to ensure we have an optimized process that avoids duplication of effort.

# Palm Oil

## Pillar II: Smallholders Program

As per our Ambition 2030 announcement, we have committed to significantly scale our smallholder program. The objective of this program is to improve the livelihood of smallholders while verifying production practices to meet our sourcing criteria. The program focuses on the independent smallholders and small growers in our PKO supply chain that supply fresh fruit bunches (FFB) to FGV mills in Malaysia. There are approximately 30,000 smallholders supplying up to 90,000 mT of PKO into this network, and our target is to enable these smallholders to be at or above the national yield average.

### Pilot Results

In FY15/16, we partnered with Wild Asia and Proforest to develop the capability and capacity of smallholders and collection centers in two project sites in Parit Raja and Benut, both located in the western part of the State of Johor, Malaysia. The two project sites covered seven collection centers and 2000 smallholders.

Together with our project partners, we have developed the P&G Responsible Sourcing Criteria Scorecard for Smallholders to assess smallholders against our criteria. The Scorecard covered six P&G palm sustainability policies:

- 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
- Respect for human and labor rights

- Respect 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
- Traceable supply chain

At the end of June 2018, Wild Asia, Proforest and MISI have assessed 560 smallholders against the P&G Responsible Sourcing Criteria for Smallholders. We will use the learnings from these initial pilots to help us scale our efforts.

### P&G Oil Palm Data Warehouse

Developing full traceability to smallholder farms and growers is an important enabler towards ensuring sustainability of P&G's complex PKO supply network. To achieve this, we partnered with MIMOS, Malaysia's national Applied Research and Development Center, to develop the P&G Oil Palm Data Warehouse. The Data Warehouse is capable of securely storing and analyzing data collected by our project partners to turn them into useful and actionable information. The Data Warehouse will also be Blockchain-enabled, and we plan to test this with a group of smallholders and collection centers' dealers.



We partnered with MIMOS of Malaysia to create a Palm Oil Data Warehouse to store and analyze data from our project partners.

Our initial work with MIMOS has showed that our PKO supply network can already be fully traceable to the collection centers which is one step upstream from the mills and one step downstream from smallholder



farms and growers. A collection center (also referred as FFB dealers) is a place where smallholders sell their FFBs before being transported to mills. By developing traceability to collection centers, we will be able to utilize geospatial technology to understand the environmental landscape within a 10–30 KM radius enabling us to prioritize key collection centers for our smallholders program. We plan to complete this traceability exercise before the end of FY18/19.

# Palm Oil

## Pillar II: Smallholders Program

### Scaling Efforts: Development of Learning Farms

We are partnering with International Plant Nutrition Institute (IPNI) in a multi-year agreement to develop up to 75 core innovator farms and 165 primary innovator farms (together termed as learning farms) by 2020 with the objective of improving the livelihood of smallholders in the P&G palm supply chain in Malaysia. The program will focus on our current project sites in Johor and will provide sustainable intensification of oil palm for independent smallholders in Johor, Malaysia. The program will focus on increasing FFB yield by enabling farmer access to knowledge about crop and nutrient best management practice.

This program has the objective of improving the yields by 30–50% and will drive both livelihood income and ensure sustainable practices in the P&G supply chain.

### Smallholder Objectives for FY18/19

During FY18/19, we will work to achieve the following objectives:

1. Expand the project sites from seven to 32 collection centers and ~8000 smallholders in Johor and develop full traceability to collection centers
2. Develop the first 15 core innovator farms
3. Partner with NGOs and universities to develop standardized sustainability training modules and develop a strategy to reach and train up to 1000 smallholders

## Pillar III: Industry Influence

As a member of the High Carbon Stock Approach Steering Group (HCSA SG), RSPO's Principle & Criteria Taskforce, RSPO's Smallholder Working Group and RSPO's Human Rights Working Group, we are collaborating to drive harmonized industry approaches that can help advance shared objectives. Below are descriptions of some of the key collaboration areas:

### No Deforestation, Peat and Exploitation (NDPE) Policy and the RSPO P&C

Enhancing the RSPO Principal & Criteria (P&C) to better align with current NDPE policies represents a significant opportunity to strengthen the P&C and enable and accelerate industry efforts to verify NDPE compliance. As member of HCSA SG and RSPO No Deforestation Interim Group, we are actively participating in the collaborative effort to incorporate both HCSA and an approach for High Forest Cover (HFC) landscape/ countries into the RSPO P&C. Via the RSPO P&C Task Force and Working Groups, we are helping drive integration of no deforestation, no peat development and the broader human, labor and land tenure rights policies into the RSPO P&C. A revised version of the RSPO P&C are expected to be approved in November 2018.



As a member of HCSA SG and RSPO, we help drive collaboration between RSPO and High Forest Cover countries.



We are working towards higher standards and harmony across the industry supply chain.

### RSPO Smallholder Standard and Inclusion

The new RSPO Smallholder Standard is critical to enabling the RSPO smallholder strategy issued in 2017. As a member of the Smallholder Interim Group, we are contributing to developing an inclusive, engaging standard that will drive stepwise, supported improvement of practice and productivity and livelihood of this key supply chain sector into the RSPO system. We also continue to support the 13th, 14th and 15th RSPO Roundtable Meetings in bringing smallholders from multiple regions to join this learning and sharing event.

We are encouraged by the progress on these important efforts so far but recognize there is still important work to do. We will continue to advance the progress and implementation in support of our commitments and industry common goals.

# Water

## Advancing Our 2020 Water Sustainability Goals

As we approach the end of the decade, we are excited at the progress we've made against our 2020 water goals. While we've already announced our next decade of water goals, we are committed to continuing to work towards achieving all three of our 2020 water goals.

### Goal

Reduce water used in P&G manufacturing facilities by 20% per unit of production versus 2010 with conservation focused on water-stressed regions.

### Progress

25% water reduction per unit of production, completion of Tier 2 of our Manufacturing Water Risk Assessment process

Provide one billion people with access to water-efficient products.

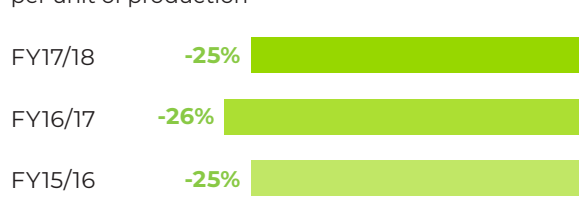
700 million people with access

Provide 15 billion liters of clean drinking water to those who need it most.

14 billion liters of clean drinking water

### Reduction in Water Consumption

Percent reduction versus FY09/10, per unit of production



### Water Consumption by GBU

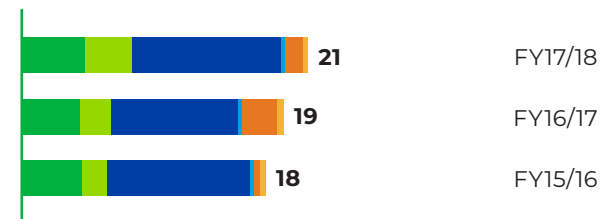
Millions of cubic meters



● Baby, Feminine & Family Care  
 ● Beauty  
 ● Fabric & Home Care  
 ● Grooming  
 ● Health Care  
 ● Other

### Wastewater COD\* Disposed by GBU

Thousands of metric tons



\*Chemical Oxygen Demand



# Water

## Reducing Water Use and Focusing Where it Matters Most

Water is an essential input at many of our facilities around the world. Creating a culture of water efficiency at our sites has been a priority for our manufacturing teams for more than two decades. Thanks to the work of many employees across our global portfolio, we've been able to reduce our manufacturing water usage by 25% per unit of production since 2010. We continue to exceed our goal of 20% reduction per unit of production and will keep focused on increasing efficiency into the next decade.

In combination with our efficiency work, we've also continued to move through our Manufacturing Water Risk Assessment process which was developed in partnership with the World Resources Institute (WRI) and World Wildlife Fund (WWF). This past year, we completed Tier 2 of our process, which involved working closely with experts at Environmental Resources Management (ERM) to deploy, collect and analyze in-depth site water questionnaires at each of the 40 Tier 2 sites.



After a rigorous scoring and ranking process, we found that 24 of our facilities are exposed to high water risk. These 24 facilities have been moved into Tier 3 of our assessment process. These facilities represent almost every business we operate and span ten unique countries.

### P&G 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
- P&G Site Water Use per Year—P&G
- Access to Water—WHO/UNICEF



#### ALL SITES SCREENED

~70% of sites in lower-risk regions

# 2

#### P&G Tailored Site Questionnaire (Completed)

Prioritize sites based on outcome of responses

- The P&G questionnaire was built upon the facility questionnaire in WWF's Water Risk Filter



#### PRIORITY SITES FROM 1

~30% of sites have entered the Tier 2 process

# 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.



#### PRIORITY SITES FROM 2

~15% of sites will complete the Tier 3 process

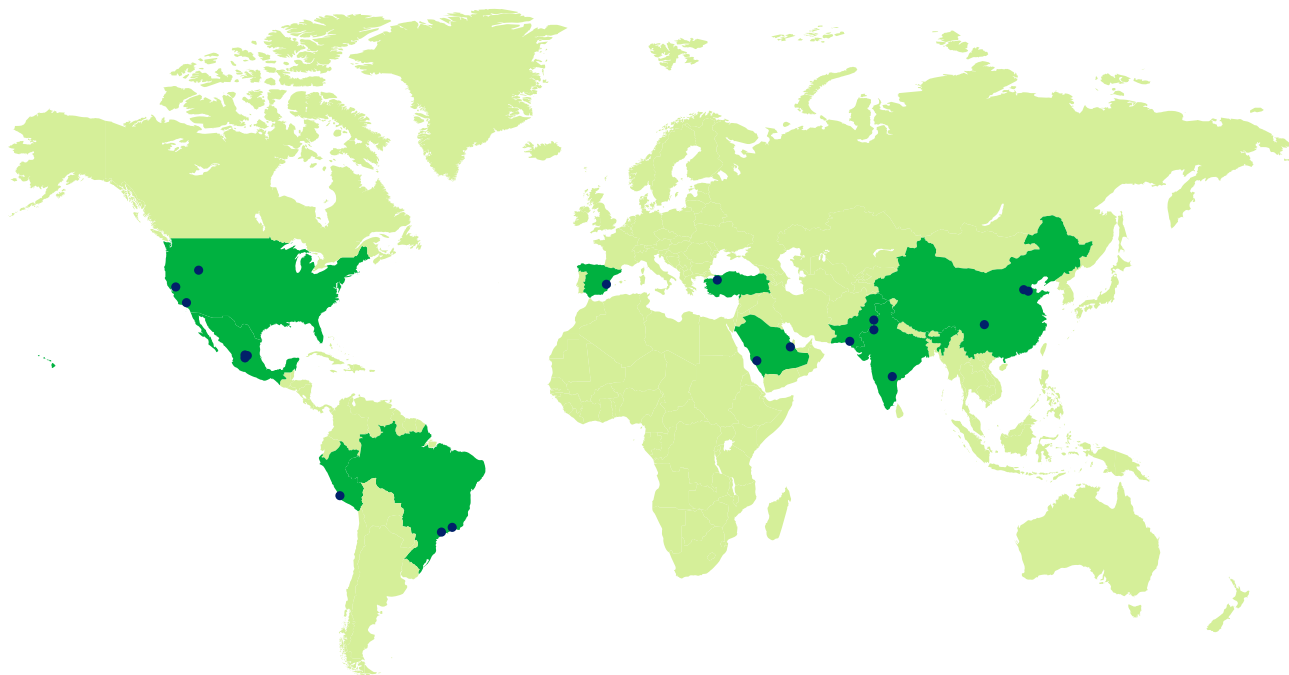
# Water

## The Alliance for Water Stewardship (AWS) Standard

Each of the 24 Tier 3 facilities will create site water stewardship plans by the end of 2020. They will do this by following 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. The AWS Standard will help each site create plans that address risks both inside and outside their four walls. It will also help to tie site efforts around water to local water challenges that are being experienced by not only the site but also by others in the same basin. This year, we became a member of AWS and are happy to support the work they do to ensure consistency and credible recognition of good water stewardship practices.



P&G Tier 3 Facilities



# Water

## Pulp & Paper Water Stewardship

Water has always been an important focus at the manufacturing facilities that produce our Bounty, Charmin and Puffs products. Those sites are building on their long history of compliance and efficiency measures, to a more holistic water stewardship strategy. As part of this strategy, the business acted in two ways:

1. Completed the Alliance for Water Stewardship (AWS) Standard Self-Verification process for a key facility and
2. Embarked on a partnership opportunity with a supplier.



**Our family care products are at the forefront of water stewardship in their manufacturing facilities.**

The AWS Self-Verification was completed at our Oxnard, California facility, already known across the Company for its impressive water savings and water management strategy in a water-stressed region. World Wildlife Fund (WWF) guided the site through the AWS Standard and enabled greater understanding of risks and opportunities both inside and outside the plant. As of October 2018, the site has declared itself to meet the AWS global standard for water stewardship.

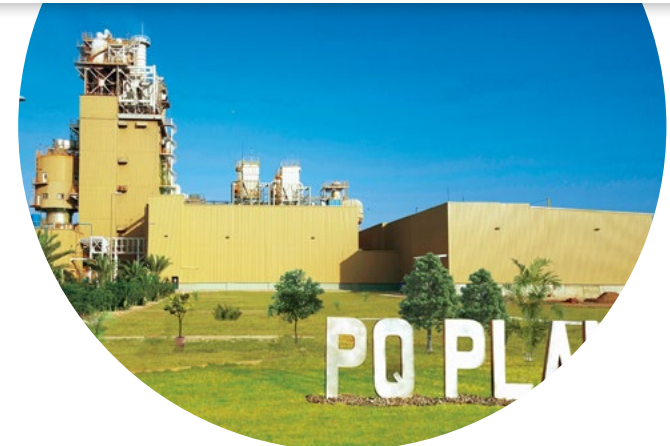
Again, working closely with WWF, we collaborated with our supplier, Fibria, to collect and share our respective water management practices, challenges and solutions to help us, and others in the industry, move beyond compliance and efficiency towards holistic water stewardship. Our findings will soon be shared publicly so others can benefit from our experience.

## Finding Circular Solutions

Our Global Fabric Care business, including brands Tide, Gain, Ariel, Ace and Lenor, has been working hard to reduce fresh water use in their manufacturing plants, thus reducing their impact to their local water basins. The various plants have identified and implemented solutions to reduce water use, including capturing and using rain water and reusing utility reject water that would otherwise go to the sewer. Several Fabric Care plants located in Mexico, Pakistan, Czech Republic and the U.S. have found unique circular approaches to beneficially reuse water from one process as feed water into another process.

A recent circular example is the Port Qasim plant in Pakistan, which is located within a water-stressed region. Since every drop counts, the plant looked for ways to reduce their absolute fresh water intake by reusing the water used to clean and flush holding tanks back into the manufacturing process.

Fabric Care continues to look for new circular water sources to reduce their local water impact.



We implemented solutions to reduce water use, including capturing and using rain water and reusing water from one process into another process.

# Water



## Providing Consumers Access to Water-Efficient Products

Our goal is to provide one billion people with access to water-efficient products by 2020. At the end of FY17/18, about 700 million consumers had access to water-efficient products around the world. This year, we qualified two products that enable women to spend less time in the shower: dry shampoos and leave-on treatments.

### Dry Shampoos

In many places around the world, the shower accounts for a large percent of the household's weekly water use. It also adds up to precious hours of time. More and more women are finding ways to extend the time between washes. One way we've enabled them to do this is through our dry shampoos. This product enables consumers to go longer between washes and helps to refresh their hair on days they decide to skip the wash. 50 million people have access to dry shampoos in countries like China, Germany, the U.S. and the UK.



Our dry shampoos and leave-on treatments help consumers use water more efficiently.

### Leave-On Treatments

We've designed products that enable women to skip the rinse out conditioner step in their shower regimen. This allows them to reduce their time in the shower and save water, while still ensuring they have the silky-smooth hair they desire. 40 million people have access to leave-on treatments across countries like Mexico, China, Brazil, the U.S and the UK.

## Clean Water Through Science and Partnership

More than a decade ago, a P&G scientist, in collaboration with the U.S. Centers for Disease Control, invented a 4-gram packet that can transform dirty water to clean, drinkable water in only 30 minutes. Today, with the help of more than 150 partners, this technology is delivering clean drinking water to those who need it most. Our goal is to provide 15 billion liters of clean water by 2020 through our Children's Safe Drinking Water (CSDW) Program. This year, we made progress against this goal and have provided more than 14 billion liters of clean water to people around the world since the program began in 2004.

# Waste

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 manufacturing sites are on a mission to get to zero waste to landfill now.

## Manufacturing Waste

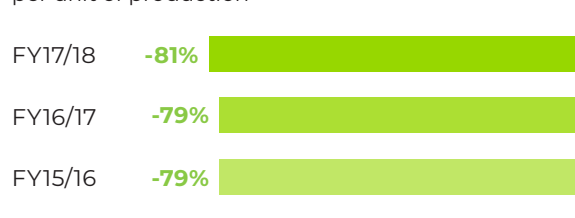
### Zero Manufacturing Waste to Landfill (ZMWTL)

We started our Zero Manufacturing Waste to Landfill program in 2008. At that time, it seemed like an impossible dream as our 100+ manufacturing sites were producing more than one million tons of waste per year. What started as a sustainable movement, to see trash 'not as waste, but as worth' has helped transform the way our sites think about raw materials. Waste champions across our manufacturing sites and within our Global Asset Recovery Purchases (GARP) team quickly started to find beneficial uses for our waste. Not only helping avoid landfills but helping generate revenue at the same time. Since 2008, the team has helped save the Company more than \$2 billion and has helped divert more than five million tons of waste from the landfill.

Once ~50% of our sites reached ZMWTL (less than two years ago), we decided to look for ways to accelerate our zero-waste journey, setting a stretching target that ALL of our production sites would send Zero Manufacturing Waste to Landfill by 2020. In the last two years, the waste team has made phenomenal progress, with approximately 85% of our facilities currently being qualified as ZMWTL, well on track to meet our 100% goal by 2020.

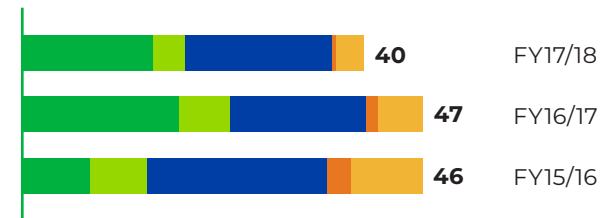
### Waste Disposed

Percent reduction versus FY09/10 per unit of production



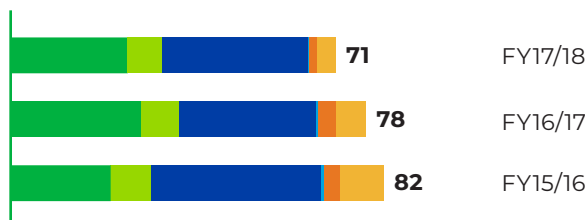
### Solid Waste Non-Hazardous by GBU

Thousands of metric tons



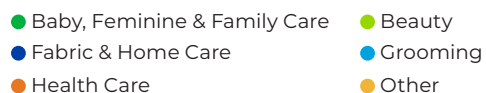
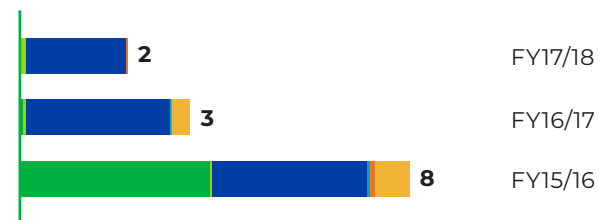
### Disposed Waste by GBU

Thousands of metric tons



### Solid Waste Hazardous by GBU

Thousands of metric tons





# Waste

In addition to individual sites, our waste teams also look for ways to drive ZMWTL across entire business units, countries and regions. This year, our Health Care Business achieved 100% ZMWTL in all their production sites across the globe, joining Fem Care, Oral Care and Grooming in reaching this milestone. Furthermore, our Fabric & Home Care business had a very strong year, going from 50% to 83% of their sites receiving our ZMWTL certification, with 98% of their total waste (production volume) diverted from landfill.

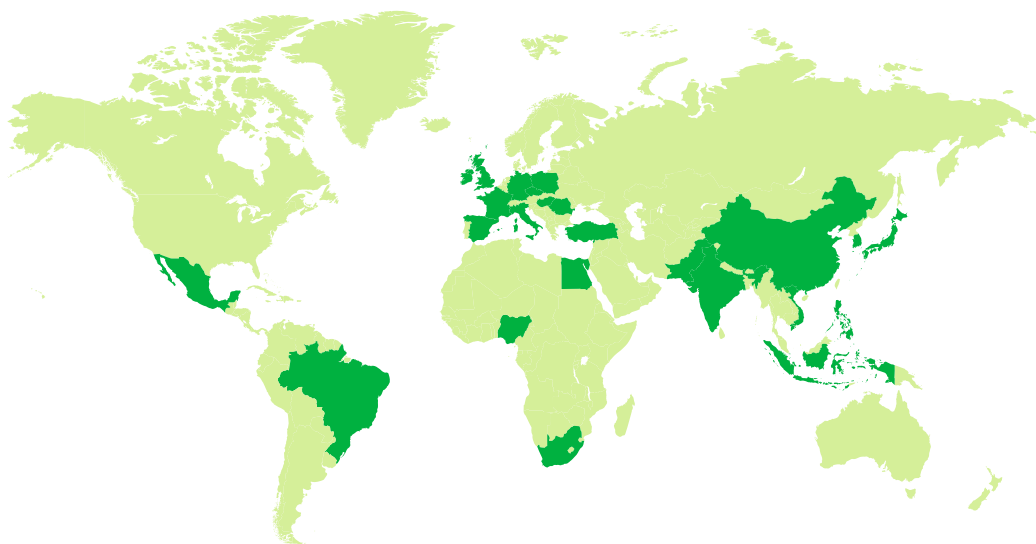
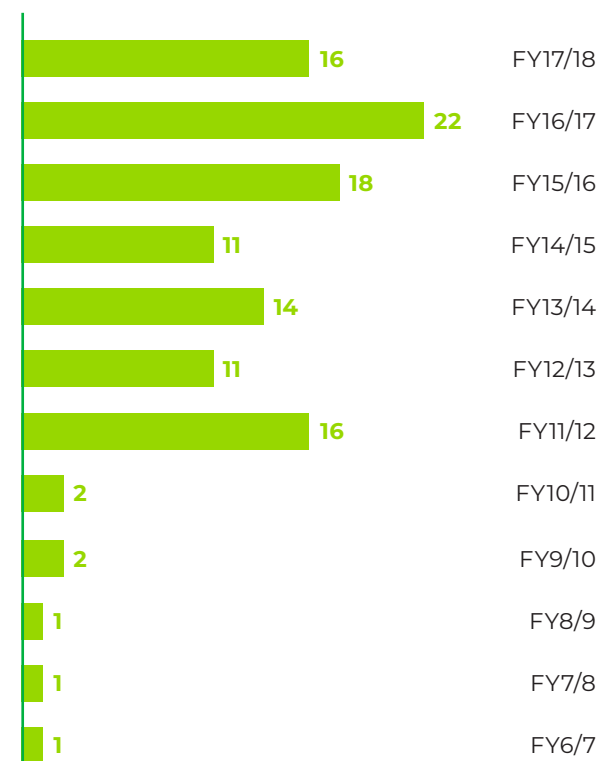
We also have two regions close to 100% ZMWTL, Europe and Asia, and we expect them to reach this milestone by this time next year. In total, we now have 26 countries where all our manufacturing sites have qualified as ZMWTL. This year, we qualified 16 more sites, and in the process, saved the Company millions of dollars.

## Countries that are ZMWTL

Belgium	Nigeria
Brazil	Pakistan
China	Philippines
Czech Republic	Poland
Egypt	Romania
France	Singapore
Germany	South Africa
Hungary	South Korea
India	Spain
Indonesia	Turkey
Ireland	United Kingdom
Italy	Vietnam
Japan	
Mexico	

## Zero Manufacturing Waste to Landfill

Sites qualified by FY



# Waste

## Global Asset Recovery Purchases (GARP)

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:

- Our Tepejé Plant in Mexico (Baby Care) worked with an external supplier to recover plastic from the diapers production waste and converts it into plastic pellets that are used as primary raw material to make items like buckets, brooms and other plastic-based goods.
- In China, we are beneficially re-using toothpaste as a component for car cleaner, and shampoo/conditioner is re-purposed to help clean pets.
- In Canada, our Belleville Plant (Fem Care) is converting our highly absorbent scrap and process waste into various spill mitigation products.
- In Brazil, our Baby Care Plant in Louveira is converting our diapers production waste into dog hygienic mats, and hair care and detergent production waste are used as a component for car washes.
- Our Oral Care operations are converting toothpaste into car cleaner, toothbrushes and floss into wood plastic composites, and our rinse wash waste is used for biofermentation and plastic recycling industries.

## Diaper Recycling

Fater, a Joint Venture of P&G and Gruppo Angelini in Italy, developed a breakthrough diaper recycling technology that recycles used absorbent hygiene products (baby diapers, fem care and adult incontinence products) to create new products and materials of added value.

The technology is now live and operational at industrial scale able to process 10,000 tons of used absorbent hygiene products per year. That corresponds to serving around one million people. The plant is unique and the first of its kind in the world. We are expanding the technology globally to more markets such as the Netherlands and India, and we are studying many more markets.

## Finding Value in Waste

Febreze, TerraCycle and Tesco partnered to give schools in the UK a chance to win a playground made from recycled plastic. Community members were encouraged to get involved and help their local schools win by voting for them in the competition. The Febreze Playground competition focused on raising awareness of the issue of waste recycling among the youngest in our society as well as their communities. By recycling waste, the project aimed to help reduce plastic litter from entering nature's playground and polluting the planet, instead creating play areas for kids to enjoy a bit of fresh air everywhere.

The competition garnered more than 65,000 votes, including a viral video campaign from one school generating more than two million media impressions. The recycled playground, built at Wooler First School,



Together with Gruppo Angelini in Italy, we developed technology capable of processing 10,000 tons per year of absorbent hygiene products to create new products.

was made mainly with parts made from recycled plastic lumber from curbside recycling waste collected in the UK. Following its success, the program is now in its second year and has been expanded in partnership with Tesco to run across the whole household category.

# Waste

## Collaborating to address Plastic Waste

### Circulate Capital

We are proud to have been a lead partner in the creation of Circulate Capital, a new kind of investment firm that leverages technology and builds infrastructure in South and Southeast Asia to prevent plastic from becoming waste in the ocean.

Led by Rob Kaplan, co-founder of Closed Loop Partners, the company evolved out of the “Closed Loop Ocean” project, following commitments made by us and others at the Our Ocean Conference in Malta in October 2017 to create financing opportunities focused on preventing plastic from flowing into the ocean.

As a lead funder, we were critical to the spin-off and acceleration of the project which we see as vital to solving the ocean plastic problem. South and Southeast Asia have seen exponential growth and development over the past 10 years that has outpaced the necessary infrastructure. Studies have shown that significant reduction in plastic leakage to the ocean can be achieved by improving waste management and recycling in the five countries where Circulate Capital is set to deploy: India, Indonesia, Vietnam, Thailand and the Philippines. We believe that this unique model will be instrumental in building the infrastructure to retain plastic in packaging and product supply chains and prevent it from entering the environment, thus supporting a truly sustainable and circular economy.

“P&G is proud to be part of Circulate Capital. Just like the Closed Loop Fund, this will address the root cause and help develop the right infrastructure to drive positive change. Working together, we believe we can halt the flow of plastic into the world’s oceans.”

– Steve Sikra, P&G Associate Director,  
Corporate R&D, Global Product Stewardship



### Association of Plastic Recyclers (APR) Demand Champions

We renewed our participation as an Association of Plastic Recyclers (APR) Demand Champion. The APR program is intended to:

- Strengthen and increase domestic demand for residential mixed plastics
- Make a public commitment to plastic recycling
- Expand plastic recycling infrastructure
- Boost a “circular economy” for plastic packaging

Along with the APR and other Demand Champions, we recognize a “demand-pull” is needed to drive a positive momentum in plastic recycling.



### World Oceans Day

P&G is a major sponsor of World Oceans Day, a global celebration officially recognized by the United Nations aimed at reaching millions of people worldwide to become more aware, educated and actively engaged in creating a healthier ocean and the waterways that connect to it. We are also a proud founding partner of Youth for the Ocean, a new collaborative initiative that will help drive youth awareness of the importance of a healthy ocean and how everyone can help, including educating youth about plastic pollution issues and solutions, driving action by mobilizing a youth constituency to prevent plastic pollution and helping clean up communities and coasts and elevating coastal and ocean health as a political priority.



Youth for the Ocean creates awareness about plastic pollution and how to keep oceans healthy.

# Waste

## Waste to Worth

Waste to Worth is an effort to develop an integrated, profitable and replicable waste-management business model that finds value from waste. Three key pilots are currently under development in Angeles City, Cabuyao and Dagupan in the Philippines. The goal of the pilots is to convert more than 1,000 tons per day of solid waste to value. Various business models are being explored to extract value from waste as a means of creating economically viable and thus sustainable infrastructure.

We have supported this effort with our partner, the Asian Development Bank, who co-funded feasibility studies that were critical to advancing the project. This year, the project made significant progress with signing off-take (electricity, diesel, gas) customers, permitting, engineering, investment and bidding for a construction firm to build the facilities. Ground breaking has happened in Dagupan with Angeles City and Cabuyao to follow in early 2019. The facilities are on track to deliver our goal to have operational pilots in place by 2020.

## The Recycling Partnership

We are committed to helping consumers have access to strong recycling programs through our support of The Recycling Partnership. Today, less than half of recyclables in U.S. homes are recycled. We work with The Recycling Partnership to change this by making it easier for people to recycle. How? By providing recycling carts, educating residents on what—and what not—to recycle and by delivering best practices, expert technical assistance and free online tools to help communities across the country improve their recycling programs long-term.

Through partnership, the results-driven nonprofit has invested more than \$29 million to help around 600 communities and more than 29 million households improve recycling, diverting 115 million pounds of recyclables from landfill. In 2017, the Partnership placed 182,000 recycling carts from Portland, Maine to Santa Fe, New Mexico. They also teamed up with Atlanta and Chicago to clean up the recycling stream in communities by decreasing overall contamination and joined forces with Denver to boost capture of aluminum cans by 25%. Across the country, more of our packaging is being recovered due to the activities of The Partnership.

*“P&G understands that we must all work together to transform recycling for good in communities across the U.S. Their continued support has helped us help more than 29 million households—almost a quarter of the U.S. population—recycle better. We have much more work to do, and with P&G’s help, we can create a sustainable recycling system that is good for the economy, the planet and peoples’ lives.”*

*– Keefe Harrison, CEO, The Recycling Partnership*





# The Power of the P&G People

## Coastal Clean-ups

### Singapore

In celebration of P&G's 30th anniversary in Singapore, more than 250 P&G employees set out to two locations along the eastern coast—Coney Island and Tanah Merah Ferry Terminal—to do a thorough coastal clean-up. In partnership with the National Environment Agency and Waterways Watch Society (WWS), our P&G employees cleared three kilometers of beach, collecting an outstanding 1,129 kilograms of coastal debris!

### Brussels

Employees at the Brussels Innovation Center participated in an event to help clean the Belgian coast. In 2017, about 75 employees and their families participated; in 2018 more than 100 joined up during their free Sunday and collected 5.3 tons of garbage along with other volunteers.

### Cincinnati

Nearly 100 Cincinnati employees partnered with Living Lands & Waters to clean the river banks of their hometown one steamy afternoon in September. Thanks to their efforts, nearly 19,000 pounds of trash were removed from the banks of the Ohio River, including more than 1,000 pounds of carpet, 810 pounds of random plastic, 177 tires and 150 mattresses.

### Madrid

P&G partnered with Ecoembes and SEO-Birdlife under the Libera Project to enable a volunteer collection of waste in various parks and beaches in Spain. P&G volunteers and their families from Madrid General Office and Jijona Plant joined forces to restore the natural beauty of El Pardo Natural Park and Cala Cantalar of Cabo de las Huertas in Alicante. The Libera Project collected tons of garbage while at the same time raising awareness of the issue inside and outside of P&G.

### Valencia

To increase awareness around the topic, P&G and CARREFOUR partnered with Paisaje Limpio and Ecoembes to clean the Port Saplaya Beach in Valencia. Volunteers collected hundreds of pounds of waste. In addition, a roundtable was organized with the participation of P&G, CARREFOUR, SUEZ and TerraCycle to discuss the journey behind this effort and the importance of driving responsible consumption.

## Philippines Tree Planting

Volunteers planted hundreds of flowering tree saplings to aid the restoration of Sitio Jordan, San Vicente, Sto. Tomas, Batangas in October during the first P&G Philippines Intersite Tree Planting Activity. In 2014, employees from the Cabuyao facility planted saplings on the same site, which are now full-grown trees. Thousands of sapling trees were planted by P&G Philippines in different locations near the Cabuyao site.







Our campaign with YH Supermarket in China generated donations to help protect more than 200 square kilometers of natural forest reserve.



# The Power of the P&G People

## P&G China Pioneer Program benefited 4,000+ future environmental protection leaders in three years

2018 is the third year of the P&G China Pioneer Program. We partner with a leading NGO in China, the China Environmental Protection Foundation, to provide funding, training and networking to student environmental protection societies in universities in China. This program is designed to grow future leaders in environmental protection.

During the three-year first phase, Pioneer Program supported 80+ university societies and 117 environmental protection projects, benefiting more than 4,000 university students from North and South China.

## P&G in the Arabian Peninsula teams with retailers to support education and sustainability

P&G in the Arabian Peninsula has partnered with both retailers and consumers for several years to support causes that impact the region's communities. This year, P&G in the Arabian Peninsula joined with Majid Al Futtaim-Carrefour to support the Year of Zayed, the centennial celebration of the birth of the country's founder through a unique shopper initiative. Named "Leave Your Mark", the campaign promoted environmental sustainability, in particular the planting of the Ghaf, the UAE's national tree. P&G in the Arabian Peninsula and Carrefour UAE planted one Ghaf seed for every P&G product purchased at Carrefour UAE stores nationwide during two weeks in July and August.

In total, 20,000 Ghaf seeds were planted by P&G and Carrefour employees and consumers. When ready, these Ghaf saplings will be planted in a new national reserve designed to educate UAE consumers about the importance of environmental sustainability.



We planted one Ghaf seed for every P&G product purchased at Carrefour UAE, totaling 20,000 seeds planted.

## Partnering with Customers to Protect Natural Reserves in China

P&G China Pioneer Program and YH Supermarket, one of the largest-scaled supermarkets in China, built a five-year partnership to help protect natural reserves and rare species. The partnership began in 2017 where we attracted 1.5 million consumers to join the "buy one P&G product, donate 1 RMB" responsible consumption campaign in 300 YH supermarkets around China. The donation contributed to help local NGOs protect more than 200 square kilometers of natural forest reserve in northwestern China, including a few rare animal and plant species living in the forest area.

# Sustainable Innovation with Suppliers

## Designing *The Good Life* with our Sustainable Partner Innovation Network

In November, P&G thought leaders and fourteen suppliers from our global Sustainable Partner Innovation Network participated in an experiential immersion where they were challenged to think about current and future sustainability issues in a new and innovative way. Participants travelled to seven unique locations across the city of Chicago in one day to experience a broad range of barriers that prevent consumers and communities from living *The Good Life*—a life filled with delightful innovation and responsible consumption. The event challenged participants to consider the imminent world—one of increased urban living and decreased resources—as an inspiration, rather than a barrier, for developing sustainable innovation for the future. As a result, our supplier ecosystem is more connected to the vision of developing future innovations that are both a force for good and a force for growth.



P&G thought leaders and suppliers met in Chicago to imagine *The Good Life*—filled with delightful innovation and responsible consumption.

# Worldwide Health, Safety and Environment Systems

## Health and Safety Policy

P&G is committed to having safe and healthy operations around the world. The goals are to protect the lives and health of our employees and the communities surrounding our operations, as well as to protect our assets, ensure business continuity and engender public trust.

To accomplish this, P&G will:

- Operate facilities safely and ensure that processes are safe and healthy for our employees and residents of the surrounding communities. We will accomplish this by following uniform corporate safety standards around the world. Safe operations have been a long-standing part of Company culture, reflecting the belief that our employees are our most important asset.
- Construct our facilities so as not to compromise the safety and health features designed into them.
- Monitor progress toward our objective of preventing injuries, illnesses and incidents. We will continually assess and improve our safety and health technologies and programs.
- Have every employee understand and be responsible for incorporating safe behavior in daily business activities. Every employee is trained to work in a safe and healthy manner.
- Have operating standards, practices, systems and resources in place to implement this policy.

## Worldwide Health, Safety & Environment Organization

Health, Safety & Environment (HS&E) is a global community of resources responsible for ensuring that all sites worldwide—including innovation centers, distribution centers, acquisitions and established plants—are operated safely and legally; that process hazards are minimized or eliminated; that health risks are identified and managed or eliminated; and that waste from sites is reduced as much as possible. Several thousand employees spend all or a portion of their time on HS&E management.

There are three major components to a site's HS&E organization: Environmental, Technical Safety and Industrial Hygiene & Personnel Safety. In addition, each site typically has both a Fire Protection Systems Leader and an overall HS&E Leader. The HS&E site organization also closely partners with the site Health Service or Medical leader. P&G uses a phased, detailed Risk Assessment process to evaluate the safety of processes and initiatives being introduced at our own manufacturing operations as well as at contractor manufacturing operations. The Risk Assessment process is designed to enable high-speed innovation.



P&G has verified that the HS&E program at all of our manufacturing facilities meets the intent of the Global Health and Safety Management standards OSHAS 18001 and ISO 14001. In addition to our own internal reviews, in 2006, P&G worked with Environmental Resources Management (ERM), a highly respected international consulting firm in the field of environment, health, safety and sustainability to conduct an independent equivalence study. This ERM report, and a secondary P&G internal follow-up audit in 2010, both reaffirmed we are following the overall principles defined within these standards.



# Worldwide Health, Safety and Environment Systems

## Health & Safety

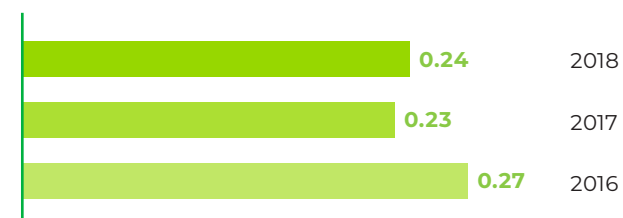
The health and safety of P&G employees and our contractor partners is a foundational expectation and directly linked to P&G core values.

- 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 loss 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 0.24 injuries per year per 100 employees (100,000 hours). 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.

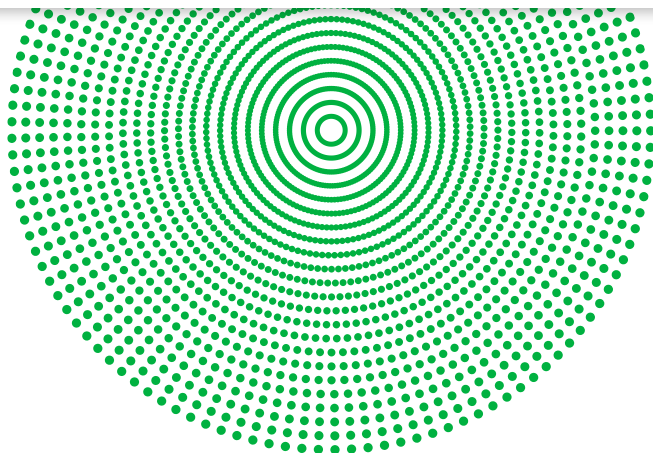
## Total Incident Rate

(Injury and illness per 100 employees)



## Total Lost Work Day Case Rate

(Lost and restricted work day cases per 100 employees)



# Worldwide Health, Safety and Environment Systems

P&G has more than 25 manufacturing plants and technical centers that are celebrating more than one million safe work hours without a lost workday injury.

## Audit Programs

P&G's 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 at facilities 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 99% of the sites were assessed.

## Sites Conducting Annual Audits

(Percentage)



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

Manufacturing Site	Safe Hours*	GBU	Region
Ibadan	11,900,000	Fabric and Home Care	IMEA
Shiga	7,200,000	Beauty	Asia
Takasaki	6,600,000	Fabric and Home Care	Asia
Xiqing	4,900,000	Beauty	Asia
Huangpu	4,600,000	Beauty	Asia

\*Rounded down to the nearest 100,000

Technical Center	Safe Hours*	GBU	Region
London Innovation Center	2,700,000	Technical Center	Europe
Kobe Innovation Center	670,000	Technical Center	Asia
Brussels Innovation Center	550,000	Technical Center	Europe
Singapore Innovation Center	450,000	Technical Center	Asia
Kronberg Innovation Center	330,000	Technical Center	Europe



# Worldwide Health, Safety and Environment Systems

## 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 P&G's 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 FY 14/15. Note, several fines are still under review but are included in the total numbers.

Year	Number	Fines
2018	17	\$249,430
2017	24	\$102,804
2016	29	\$46,250

A breakdown of NOVs is provided below:

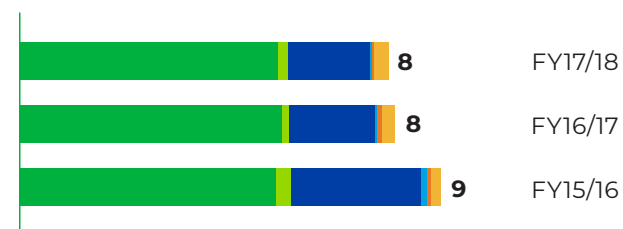
Violation	Number of NOVs	Fines
Water-Based	7	\$15,908
Air-Based	4	\$229,500
Solid-Waste-Based	1	\$0
Paperwork	4	\$3,622
Transportation-Based	0	\$0
Other	1	\$400
Worker Safety	0	\$0
Total	17	\$249,430

## 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.

### Air Emissions by GBU

Thousands of metric tons



- Baby, Feminine & Family Care
- Beauty
- Fabric & Home Care
- Grooming
- Health Care
- Other

# Awards & Recognitions



## Environmental Excellence

We were one of only five organizations nationwide to receive an EPA Green Power Partnership Leadership Award for direct project engagement. The program recognizes organizations that distinguish themselves through direct project engagement with on- and off-site projects to access renewable energy certificate (REC)-based green power.

In addition, we rank as number 9 on EPA's Fortune 500® Partners list and as number 14 on EPA's National Top 100 Partners list. Each list highlights EPA Green Power Partners using the most renewable energy annually as of July 2018. EPA updates its Top Partner Rankings quarterly.

Our Alce Blanco toothbrushes and floss plant in Mexico received a recognition granted to less than 1% of the manufacturing sites in the country called Clean Industry Level II. They also received an award for Environmental Excellence by the Environmental Ministry. This award is given to sites that have demonstrated best practices in environmental sustainability such as zero water consumption in the manufacturing process, clean energy and zero waste to landfill. The Alce Blanco plant has made significant progress recently, including LED lighting, solar heaters, reforestation, and process and machinery efficiency projects that translate into less water and energy consumption while reducing GHG.

Our diaper recycling technology that we worked in partnership with Fater to bring to scale, received the Eco-Innovation award from the European Commission.



The Arbor Day Foundation recognized P&G as a friend of the forest for our commitment to responsible forest sourcing.

According to the EPA, our green power use of more than 743 million kWh at our U.S. facilities is equivalent to the electricity use of almost 70,000 average American homes annually.

## Arbor Day Foundation 2018 Friend of the Forest Award

We were honored to be recognized by the Arbor Day Foundation as their 2018 Friend of the Forest Award recipient. The award was granted for our dedication to responsible forest sourcing by partnering with organizations and landowners that support responsible forest management.

# Awards & Recognitions

## Business Intelligence Group 2018 Sustainability Leadership Award and Sustainability Initiative of the Year Award

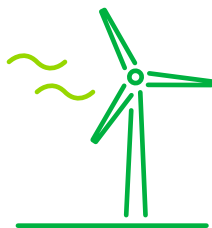
The Business Intelligence Group (BIG) announced P&G as a 2018 Sustainability Leadership Award recipient in recognition of our efforts to make sustainability an integral part of our business practice.

And our Family Care business was separately awarded BIG's 2018 Sustainability Initiative of the Year Award.

## FSC 2017 Leadership Award

We were awarded the Forest Stewardship Council United States 2017 Leadership Award in recognition for making our iconic Charmin and Puffs tissue products FSC-certified and for working with partners to add 500,000 acres of FSC-certified forest in the Southeastern U.S.

Our Milenio Blades & Razors Plant in Irapuato, Mexico continues to be a leading example of applying innovative sustainable manufacturing practices. The plant, which started operations seven years ago, is LEED Silver certified, sends zero manufacturing waste to landfill, reuses treated wastewater and utilizes 100% wind electricity. The plant won first place in the Energy Efficiency State Award for the third consecutive year, recognizing improvements in the evaporation plant, reducing consumption within lighting, heating, ventilation and air conditioning (HVAC). Two key highlights were the use of outdoor air in the winter which saved 360,945 KWh and upgrading to LED illumination in the quality assurance labs saving an additional 5,820KWh.



Our plant in Irapuato, Mexico uses 100% wind energy.

We were awarded the United Nations' Momentum for Change Award for our H&S beach plastics bottle.

Our Binh Duong facility received the Green Book Award from the government in 2016-2017 for its energy and water reduction efforts.



The Forest Stewardship Council recognized P&G for making Charmin and Puffs FSC-certified.

Photo Credit:  
Ebersole Photography

# Awards & Recognitions

## LEED

We are committed to “designing in” sustainability within our facilities, including pursuing LEED certification for all new facilities. We now have 30 sites with LEED Silver or Gold certification.

Location	Gold	Silver
Ben Cat, Vietnam		2
Box Elder, UT, U.S.		2*
Cabuyao, Philippines	1	
Cincinnati, OH, U.S.		2
Cruz, Brazil		1
Greensboro, NC, U.S.		1
Budapest / Gyongyos, Hungary		3
Guangzhou, China	1	1
Hyderabad, India	1	2
Jakarta, Indonesia		4
Lagos, Nigeria		2
Singapore		1
Tabler Station, WV, U.S.		2
Taicang, China	1	3
<b>Total</b>	<b>4</b>	<b>26</b>



\*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

	Totals (absolute units x 1,000)			2017 Global Business Unit Detail <sup>1</sup> (absolute units x 1,000)					
	2018	2017	2016	Baby, Feminine and Family Care	Beauty	Fabric and Home Care	Grooming	Health Care	Other
<b>Production</b> (metric tons)									
Product Shipped <sup>2</sup>	25,642	30,007	25,758	5,737	1,983	16,897	634	391	N/A
Raw Materials from Recycled Sources <sup>3</sup>	633	676	632						
<b>Waste</b> (metric tons)									
Generated Waste	727	670	612	285	70	204	38	35	96
Percent Recycled/Reused Waste	90%	88%	87%	91%	89%	84%	99%	95%	96%
<b>Disposed Waste</b> (metric tons)									
Waste Disposed	71	78	82	25.84	7.44	31.85	0.41	1.65	4.00
Solid Waste—Non-Hazardous	40	47	46	15.31	3.60	17.09	0.00	0.35	3.30
Solid Waste—Hazardous	2	3	8	0.01	0.11	2.03	0.00	0.01	0.00
Effluents (excluding water) <sup>4</sup>	21	19	18	4.71	3.50	10.90	0.36	1.22	0.37
Air Emissions <sup>5</sup>	8	8	9	5.81	0.23	1.83	0.05	0.07	0.33
<b>Energy and Greenhouse Gas</b> (GHG)									
Energy Consumption (gigajoules)	60,891	60,488	59,263	39,504	2,994	11,147	2,469	1,813	2,963
Total GHG Emissions (metric tons) <sup>6</sup>	4,298	4,663	4,669	2,682	260	690	230	191	244
Scope 1—Direct GHG Emissions (metric tons)	2,138	2,118	2,030	1,566	81	318	61	42	70
Scope 2—Indirect GHG Emissions (metric tons) <sup>7</sup>	2,160	2,545	2,639	1,117	179	373	169	148	174
Biogenic GHG Emissions (metric tons)	68	89	177	68	N/A	N/A	N/A	N/A	N/A
<b>Water</b> (Cubic meters)									
Water Consumption	63,419	61,927	63,219	39,515	4,865	14,163	1,102	1,571	2,202

1 metric ton = 1,000 kg = 2,205 lbs.

(1) For 2018, 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, our largest distribution facilities, and corporate entities such as our manufacturing operations in Venezuela. Numbers do not include production from contract manufacturing operations.

(2) Estimated from shipment figures. Data was estimated using FY17/18 production volumes and FY15/16 conversion factors.

(3) Data is tracked at a corporate level.

(4) Wastewater chemical oxygen demand (COD).

(5) Air emissions include particulates, SO<sub>2</sub>, NO<sub>x</sub>, 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 2018 were 2,598,621 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 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- 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 that provide outstanding performance in low-energy cycles. We have included the following cycles in our tracking: Traditional Cold, HE Warm and Cold, with

HE including both Top Loading and Front Loading HE Machines. Our benchmark for qualifying low-energy cycles has been 0.4KWh per wash cycle. Based on our continuing monitoring of machine performance, we now recognize that Top Loading HE machines consume more than 0.4KWh/wash cycle but still represent a significant energy savings vs. loads run in traditional warm cycles. In addition, we expect total energy for these types of machines to decrease further over time based on continued innovation and regulation. Given our objective is to drive consumers to low-energy cycles, and since HE Top Load machines represent a significant energy savings, we will continue to count top load HE machine Warm and Cold as low-energy cycles. Net, there is no change in the scope of our tracking but we are modifying our approach to simply list the cycles that we now track. For clarity they are cold cycles in traditional top load machines and cold and warm cycles in all HE machines.

### 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 that have the biggest impact on packaging.



# 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 geography, we do not require a minimum percent access or recovery rate per package in every country or market where a package may be sold 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 P&G 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
- Net water via purchased steam
- Ground water from site wells
- Surface water – non-brackish as rivers, lakes, creeks, etc., at any quality they deliver

### Palm Oil: We are seeking to increase our use of RSPO SG palm oil

RSPO SG palm oil means that RSPO certified oil is physically segregated from non-certified oil. Given increasing stakeholder concerns over palm oil production practices of third-party suppliers, moving to RSPO SG oil for palm oil and derivatives provides a higher level of verification that the oil we procure is originating from RSPO-certified sources. It also, by definition, allows us to trace oil to the source plantation and implement additional verification efforts should they be deemed necessary. There are challenges with moving to RSPO SG palm oil, including both available supply and increased costs, but we are working with suppliers to try and overcome both of these challenges as we work towards our goal of having 100% of PO and POD be RSPO SG.



### Baseline Restatement

This year, P&G 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/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 5,422,275 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 64,081,270 gigajoules. Original water baseline was 77,049,114 cubic meters. It is now 75,201,959 cubic meters. Original waste disposed was 354,563 metric tons. It is now 339,306 metric tons. The baseline year remains the same: P&G's FY09/10.



### ABOUT OUR CITIZENSHIP REPORT

Data in this report covers the period of July 1, 2017 to June 30, 2018. Financial information is given in U.S. dollars.

Questions related to this report can be directed to [mediateam.im@pg.com](mailto:mediateam.im@pg.com). This report references GRI 102:

General Disclosures 2016. A GRI Content Index for this report can be found [here](#).