



# CLIMATE CHANGE RISKS AND OPPORTUNITIES

Given increasing stakeholder interest in climate change and the risk and opportunities it may present for companies, P&G has created this document to provide additional perspective on climate change implications that could be relevant for the Company and the steps we are taking to address them.

The development of this report was informed by the recommendations published by the Task Force on Climate-Related Financial Disclosures.



# GOVERNANCE

The following outlines the governance structure that is currently in place for climate-related issues.

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In addition to the structure to the right, P&G maintains an Enterprise Risk Management (ERM) process to identify and assess risk factors via a multi-functional team of experienced resources. Findings and recommendations made through the ERM process are reviewed with senior managers, in addition to the Company's Board of Directors and its Audit Committee, which has oversight responsibilities. Through the process, Company leaders assess significant factors that may adversely affect our business, operations, financial position or future financial performance and includes an assessment of environmental sustainability risk factors. The Vice President of Sustainability and the Chief Sustainability Officer participate in the ERM process to provide perspective on relevant sustainability topics, including climate change.

## CLIMATE COUNCIL

**Chair:** Vice President, Global Sustainability

**Participants:** Climate and energy leaders from Manufacturing, R&D, Government Relations, and Procurement

- Purpose:**
- 1 Monitor external trends and developments related to climate change via engagement with outside organizations, conferences, and monitoring external publications
  - 2 Develop and maintain the Company's overall Climate Strategy
  - 3 Monitor progress vs. climate related goals and ensure interventions are implemented when needed

**Meets:** Quarterly

**Governance Links:** The Chair of Climate Council (Vice President, Global Sustainability) is a member of the Sustainability Leadership Council and brings relevant climate related issues to the Sustainability Leadership Council for awareness, strategic guidance, alignment to proposed actions and goals, as well as discussion of budget needs.

## SUSTAINABILITY LEADERSHIP COUNCIL

**Chair:** Executive Sponsor for Sustainability  
(Currently CEO—Fabric & Home Care)

**Participants:** CEO and Chairman of the Board, Chief R&D Officer, Chief Marketing Officer, Chief Product Supply Officer, Chief Legal Officer, Chief Communications Officer, Chief Sustainability Officer, President of European Sales & Marketing Organization, Vice President of Sustainability

**Purpose:** Maintains overall oversight of sustainability efforts, including climate change. Includes monitoring progress vs. goals, providing strategic direction, alignment to proposed program objectives and goals, discussion and allocation of resource needs.

**Meets:** Quarterly. Climate Change is considered in the context of our overall sustainability efforts and agenda items are brought forward for discussion on an as-needed basis.

**Governance Links:** The CEO and Chairman of the Board sits on the SLC and can bring relevant climate-related items to the Company's Board of Directors and its Governance & Public Responsibility Committee, which has oversight of many of the Company's Corporate Citizenship efforts, including climate.

## BOARD OF DIRECTORS

### (Governance & Public Responsibility Committee)

The Governance & Public Responsibility Committee of the Board of Directors has oversight for many of the Company's Corporate Citizenship efforts, including Environmental Sustainability and related issues like Climate Change. Climate Change is not a standing agenda item at every Committee meeting, but relevant topics are brought forward for discussion on an as-needed basis. Members of this Committee are provided with periodic updates on progress of our Sustainability programs and goals, including efforts related to climate change. The Chair of the Governance & Responsibility Committee then updates the full Board as needed.

# PERSPECTIVE ON CLIMATE CHANGE RISKS

In the short to mid-term, the most relevant risks and impacts that climate change presents for our Company are:

- 1 Governments implementing policies/fees/taxes on carbon intensive energy or materials, which could result in higher costs for the Company and consumers.
- 2 Increased severity/frequency of extreme weather events. Loss or impairment of key manufacturing sites, inability to procure sufficient raw materials, disruption to transportation of raw materials or finished goods, etc. as result of an extreme weather event could disrupt our operations if the response to such an event is not effectively managed and remedied.
- 3 Chronic changes to precipitation/increasing water stress are relevant risks for our operations, supply chain, and consumer use of our products (e.g. sufficient water for laundry, dishwashing, showers, etc.).

To better inform our identification of relevant risks and impacts, P&G's Climate Council reviewed transitional and physical risks identified in the Task Force for Climate Related Disclosure Guidelines and conducted a qualitative scenario analysis for two different scenarios:

## 2° Scenario

Informed by IPCC AR5 RCP 2.6, this scenario presumed CO<sub>2</sub> emissions peak in 2020 and decrease while global temperature increases by up to 2° C. Under this scenario, we assumed regulatory and policy interventions by governments successfully controlled GHG emissions and that the impacts of physical risks (e.g. extreme weather) were not significant. In this scenario the primary impacts were higher costs for carbon intensive fuels, operations, and goods.

## 4° Scenario

Informed by IPCC AR5 RCP 8.5, this scenario presumed the carbon budget is exhausted by 2045 and global temperature rises by up to 4.8°C by 2100. Under this scenario we assumed widespread policy failure to limit GHG emissions and lack of investment in low carbon technologies. In this scenario, the physical risks from climate change were much more relevant (e.g., frequency and intensity of extreme weather events, water scarcity and food shortages impacting the stable functioning of consumer markets and the ability of consumers to use/buy our products).

The analysis of climate-related risks and impacts support the conclusion that, without any action, climate change could present risks to the business—primarily from regulatory/policy actions that could increase the costs of energy and the potential for increased frequency/severity of extreme weather events disrupting operations or supply chain. Scenario analysis also reinforced our belief that effective policy action will be key to limiting global temperature increase to well below 2°C. We believe the most likely impact in the short to mid-term is policy action that places a price on carbon. Given the broad array of policy actions that could be implemented globally, it is difficult to assess with any certainty what the collective impacts of future policy actions could be. However, one theoretical approach to model potential impacts would be to place a dollar/ton fee to P&G's Scope 1 GHG emissions. For the fiscal year ending June 30, 2019, P&G reported ~2,210,000 tons of Scope 1 emissions. Presuming that all of P&G's Scope 1 emissions were in scope for a global, uniform fee per ton of Scope 1 emissions, one can model impacts by multiplying Scope 1 emissions by the projected fee (\$/ton).

# PERSPECTIVE ON CLIMATE CHANGE RISKS

This is a very conservative approach as it is unlikely that all Scope 1 emissions would be in scope but if one were to assume a carbon price of \$40/ton it would yield a total fee of ~\$88 million. While using different carbon prices in modeling such as this can provide a range of potential impacts from policy action, we believe the comprehensive actions we are already taking (see Strategy & Risk Management section below) will serve to limit the impacts of short- and mid-term risks posed by climate change.

Modeling of long-term impacts (e.g. 2100) is a helpful tool for scenario analysis. For example, under a 4° scenario, long term impacts on food production, water scarcity, forced migrations, and flooding of coastal areas could impact the stable functioning of consumer markets and the ability of consumers to use or buy our products. These would be broad, societal impacts and not unique to P&G. As noted below, effective policy actions that limit GHG emissions and limit temperature increase to well below 2°C serve to mitigate these risks, and we are supporting efforts to advance effective climate policies.

We will continue to monitor the latest science and data related to short-, mid-, and long-term impacts of climate change and adjust our strategy accordingly.

# STRATEGY & RISK MANAGEMENT

**P&G's Climate Council assesses climate-related risks and develops risk mitigation strategies. We currently have a comprehensive strategy in place that includes the following elements:**

## **Reducing our energy consumption and GHG emissions**

By reducing energy consumption and GHG emissions, we are not only doing our part to help reduce GHG emissions to the atmosphere but are also helping to mitigate potential impacts from policy or regulatory actions that could put an increased price on carbon emissions. The actions we are taking include:

- 1** We are reducing scope 1 and 2 GHG emissions. We have a goal to reduce GHG by 50% on an absolute basis by 2030 (vs. 2010 baseline). This target has been approved by the Science Based Target Initiative as being consistent with well below 2°C.

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- 2** We are increasing our use of renewable energy. Currently, we purchase 100% renewable electricity for operations in the United States, Canada, and Western Europe. We have a goal to purchase 100% renewable electricity globally by 2030.

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- 3** We are reducing overall energy consumption. We have a goal to reduce energy by 20% per unit of production by 2020 (vs. 2010 baseline). To date, our energy conservation efforts have resulted in a savings of ~\$500 million.

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- 4** In addition to our goal to reduce Scope 1 and 2 emissions by 50%, P&G has committed to advance a portfolio of natural climate solutions that will deliver a carbon benefit equal to our projected cumulative GHG emissions for the period of July 1, 2020 through June 30, 2030—effectively making our operations carbon neutral for the decade. We took this action in large part in response to recent data, which reinforced the need for urgent action on climate change and identified the next decade as a critical window to accelerate efforts on climate change.

## **Helping Consumers reduce their GHG Emissions**

To understand which product categories had the highest GHG emissions during the consumer use phase, we conducted a comprehensive, lifecycle-based carbon footprint analysis for our product portfolio. Based on this we know the greatest impact is associated with the use phase of our products that have traditionally used hot water during the consumer use phase (laundry, dish, hair care). As a result, we have put a sustained focus on cold water washing for laundry, developing detergents that deliver outstanding performance in cold water and launching education campaigns to encourage consumers to switch to cold. We have seen the percentage of loads done in low energy cycles increase from ~38% to ~70% since 2010. Given the performance of our detergents in cold water, we believe this represents an opportunity to better meet consumer needs. The performance of our HE detergents also helps optimize performance of HE machines, helping consumers realize the savings in both energy and water that HE machines can deliver. Similarly, our auto-dish business is helping consumers understand that depending on the size of the load, it can be more resource efficient to use an automatic dishwashing machine vs. washing by hand ([Cascade YouTube Video](#)).

## **Policy Engagement**

Existing carbon pricing schemes have had relatively little impact on our operations as most of our operations are not energy intensive. The U.S. represents one market that has not implemented a national policy on carbon pricing. To help ensure that any future US Policy efforts provide business the needed certainty, predictability, and transparency, P&G joined the Climate Leadership Council (CLC). CLC is an organization that advocates for a Carbon Dividends Program in the US as the best policy mechanism to drive greenhouse gas emissions reductions commensurate with a 2° C target.

# STRATEGY & RISK MANAGEMENT

We believe that if the US moves forward with a national carbon pricing policy effort, this type of an approach would provide the greatest transparency and certainty for business. P&G also works with our various business trade associations to help educate and enroll them in taking proactive steps to address climate change.

## Business Continuity Planning

Extreme weather events represent a potential risk. Loss or impairment of key manufacturing sites, inability to procure sufficient raw materials, disruption to transportation of raw materials or finished goods, etc. could disrupt our operations if they are not effectively managed and remedied. We have over 100 sites globally and a broad supplier network. This provides some level of flexibility to adjust production and sourcing. In addition, each site has a business continuity plan, which is regularly reviewed and updated. These plans include considerations for disruptions caused by extreme weather events.

## Proactively assessing and mitigating water related risks

Chronic changes to precipitation/increasing water stress are relevant risks for our operations, supply chain, and our consumer markets (e.g. water for laundry, dishwashing, showers, etc.). We are advancing the following efforts to manage relevant water-related risks:

- All manufacturing sites are covered by our water risk assessment process. This is a tiered risk assessment. We have screened all sites and identified sites that fall into Tier III (sites most at risk for water stress). These sites will need to develop site-specific water stewardship plans to mitigate potential risks.
- We have conducted risk assessment for key consumer markets and combined with data on manufacturing sites and supplier locations, we are identifying priority basins around the world where we will implement collaborative efforts to improve water security in those regions.
- We have a 2020 goal to provide 1 billion consumers access to water efficient products. These are products that offer a significant reduction of water use during the consumer use phase. By providing access to WEPS, we can better serve consumer needs in areas experiencing water stress.

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## METRICS

P&G has established the following goals and metrics related to climate change. We report progress publicly each year as part of our annual citizenship report:

- **30% absolute reduction** in Scope 1 and 2 GHG emissions by 2020 (baseline 2010)
- **50% absolute reduction** in Scope 1 and 2 GHG emissions by 2030 (baseline 2010)
- Purchase **100% renewable** electricity by 2030
- **20% reduction** in energy consumption, per unit of production, by 2020 (baseline 2010)
- **20% reduction** in truck km per unit of production by 2020 (baseline 2010)
- **70%** of machine washing loads done in low energy cycles (by 2020)

In addition to reporting progress vs. these goals, P&G also publishes the following data on an annual basis in our Citizenship Report (available at [www.pg.com](http://www.pg.com)): Energy consumption (gigajoules), Scope 1 GHG emissions (metric tons), Scope 2 GHG emissions (metric tons), and estimates of relevant Scope 3 GHG emission categories (metric tons). We have had 3rd party assurance of our GHG emissions inventory for Fiscal Years 17/18, 18/19 and intend to maintain that practice going forward.