

Second-Party Opinion

PepsiCo, Inc. Green Bond Framework



Evaluation Summary

Sustainalytics is of the opinion that the PepsiCo, Inc. ("PepsiCo") Green Bond Framework is credible and impactful and aligns with the four core components of the Green Bond Principles 2018. This assessment is based on the following:



USE OF PROCEEDS The three eligible project categories for the use of proceeds are aligned with the seven Green Bond Principles project categories – (i) Eco-efficient and/or Circular Economy Adapted Products, (ii) Renewable Energy, (iii) Energy Efficiency, (iv) Clean Transportation, (v) Green Buildings, (vi) Sustainable Water Management, and (vii) Environmentally Sustainable Management of Living Natural Resources and Land Use – are aligned with those recognized by the Green Bond Principles 2018. Sustainalytics considers the eligible categories to have positive environmental impacts and to advance the UN Sustainable Development Goals, specifically 6, 7, 9, 11, 12, and 15.



PROJECT EVALUATION / SELECTION PepsiCo's Sustainability Team will assess and determine eligible projects. The final approval will be followed by the recommendation of allocation of proceeds and provision of description of eligible projects to the PepsiCo's Finance department. This is in line with the market practice.



MANAGEMENT OF PROCEEDS PepsiCo's Finance Department will track the net use of proceeds using its internal system. Pending allocation, the net proceeds may be temporarily invested in cash, cash equivalents, short-term investments, or used to repay other borrowings. This is in line with market practice.



REPORTING PepsiCo intends to publish an annual update on its website, until full allocation. It will include the amounts allocated on category level, additional descriptions of select eligible projects, as well as relevant impact metrics, where feasible. The reporting will be accompanied by management's assertion of the amount of the net proceeds that was allocated to eligible projects, and an examination report from an independent accountant on such assertion. Sustainalytics considers this in line with market best practice.

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Issuer Location	New York, USA

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Introduction

PepsiCo, Inc. (“PepsiCo”, the “Issuer”, or the “Company”) is a global food and beverage company that owns 22 brands that generate more than USD1 billion each in estimated annual retail sales and sells products in more than 200 countries and territories. The Company is made up of six divisions, including Frito-Lay North America; Quaker Foods North America; PepsiCo Beverages North America; Latin America; Europe Sub-Saharan Africa; and Asia, Middle East and North Africa.¹

PepsiCo has developed the PepsiCo Green Bond Framework (the “Framework”) under which it intends to issue green bonds and use the proceeds to finance or refinance, in whole or in part, existing or new eligible projects. The Framework defines eligibility criteria in the areas of “Sustainable Plastics and Packaging”, “Decarbonization of Our Operations and Supply Chain”, and “Water Sustainability”, which are intended to align with the following seven eligible categories in the Green Bond Principles 2018 (GBP)²:

1. Eco-efficient and/or Circular Economy Adapted Products, Production Technologies and Processes
2. Renewable Energy
3. Energy Efficiency
4. Clean Transportation
5. Green Buildings
6. Sustainable Water and Wastewater Management
7. Environmentally Sustainable Management of Living Natural Resources and Land Use

See Appendix 2 for a mapping of PepsiCo’s eligibility criteria with the GBP categories.

PepsiCo engaged Sustainalytics to review the PepsiCo Green Bond Framework, dated October 7, 2019, and provide a second-party opinion on the Framework’s environmental credentials and its alignment with the GBP. This Framework is included in Appendix 1 of this document.

As part of this engagement, Sustainalytics held conversations with various members of PepsiCo’s management team to understand the sustainability impact of their business processes and planned use of proceeds, as well as management of proceeds and reporting aspects of PepsiCo Green Bond Framework. Sustainalytics also reviewed relevant public documents and non-public information.

This document contains Sustainalytics’ opinion of the PepsiCo Green Bond Framework and should be read in conjunction with that Framework.

¹ PepsiCo, About The Company: <https://www.pepsico.com/about/about-the-company>

² The Green Bond Principles are administered by the International Capital Market Association and are available at <https://www.icmagroup.org/green-social-and-sustainability-bonds/green-bond-principles-gbp/>

Sustainalytics' Opinion

Section 1: Sustainalytics' Opinion on the PepsiCo Green Bond Framework

Summary

Sustainalytics is of the opinion that the PepsiCo Green Bond Framework is credible and impactful, and aligns with the four core components of the GBP 2018. Sustainalytics highlights the following elements of the Framework:

- Use of Proceeds:
 - The Eco-efficient and/or Circular Economy Adapted Products category allows for the purchase of the following materials, either directly or via intermediary suppliers, to be used in product packaging: (i) recycled polyethylene terephthalate (rPET), (ii) bio-based PET, and (iii) compostable, biodegradable and/or recyclable material.
 - Sustainalytics notes that PepsiCo has committed to time-bound targets to use 25% recycled plastic content in its plastic packaging, across its package manufacturing operations, and to make 100% of its packaging recyclable, compostable or biodegradable by 2025, in line with its Global Commitment.³ Sustainalytics also notes that the combined effort of limiting the use of virgin resources across the company's portfolio of products through (i) increasing the use of low-carbon substitutes, such as sustainably produced bio-based/biodegradable plastics, and (ii) reusing/recycling materials in the supply chain will reduce negative environmental impact and contribute to a circular economy. Refer to Section 2 for PepsiCo's circular economy efforts and Section 3 for the importance of sustainable packaging.
 - Sustainalytics recognizes that the use of recycled and bio-based inputs in the manufacturing of plastic packaging plays an essential role in enabling the food and beverage industry to increase its resource efficiency and contribute to a circular economy, especially by keeping materials within a closed loop in order to retain the embodied energy in such materials, as well as by reducing the use of fossil fuels and/or virgin plastics in new packaging to the greatest extent possible.
 - Sustainalytics notes that the extent of recycling of single-use plastics is very low, with an estimated 9% of total global plastic waste having been recycled between 1950 and 2015,⁴ and further recognizes that improved recycling rates alone, even if attainable, will not fully address the holistic environmental issues associated with plastics.⁵ In order to achieve full circularity, the industry needs to take substantial measures, including an increased use of sustainably sourced bio-based plastics and alternative (low-carbon) materials that can be recycled indefinitely without a loss of quality.
 - PepsiCo has communicated to Sustainalytics that it may procure bio-based PET from third parties. In case of allocation to such projects, the Company has committed to procure bio-based PET that is sustainably sourced and whose production will result in significant greenhouse gas (GHG) emissions reduction compared to conventional

³ The New Plastics Economy Global Commitment report, led by Ellen MacArthur Foundation, presents a vision, and a new way of thinking, for plastics system. It provides a set of actions to drive the transition based on, amongst other strategies, (i) eliminating problematic or unnecessary plastic through redesign and material innovation; (ii) reducing single-use packaging; (iii) making all plastics reusable, recyclable, or compostable; (iv) decoupling the use of plastics from consumption of finite resources; and (v) improving the demand and quality of recycling. PepsiCo is a signatory to the Global Commitment. Ellen MacArthur Foundation, New Plastics Economy Global Commitment: <https://www.ellenmacarthurfoundation.org/assets/downloads/GC-Report-June19.pdf>

⁴ It is estimated that approx. 6300 million metric tons (Mt) of plastic waste had been generated between 1950 and 2015. Additionally, approx. 9% of which was recycled, 12% was incinerated, and 79% accumulated in landfills or the natural environment. Science Advances, Production, use, and fate of all plastics ever made: <https://advances.sciencemag.org/content/3/7/e1700782>

⁵ Unlike steel, glass, and aluminum, plastics can only be recycled a finite number of times before being disposed of. In addition, recycled and bio-based plastics face end-of-life management issues similar to conventional (fossil-fuel) plastics.

- plastics.⁶ Sustainalytics encourages PepsiCo to report on the sustainability aspects of the bio-based PET, when available, including any certifications achieved.
- Sustainalytics notes that PepsiCo may invest in R&D of sustainable packaging materials, which will create significant opportunity for the Company to reduce the use of fossil fuel-based plastics to low-carbon, environmentally benign alternatives in the long term. Sustainalytics notes that commercial production of such materials can only be considered impactful with a robust consideration of environmental and social criteria, and an understanding of processes, fuels and feedstocks. PepsiCo's exclusion of investments in commercial production of such packaging materials and commitment to report on R&D expenditures are viewed favorably by Sustainalytics.
 - The Renewable Energy category considers procurement of project-specific renewable energy. Sustainalytics considers the Company's commitment to purchase renewable energy directly tied to specific renewable energy projects, rather than unbundled renewable energy certificates, as impactful.
 - Sustainalytics recognizes that the Green Buildings category includes investments in the renovation of PepsiCo's Global R&D Hub, which will be certified with a recognized third-party green building standard such as LEED (Gold or Platinum) or an equivalent standard. Sustainalytics has conducted an evaluation of the certification scheme and considers such standards to have a positive impact (Appendix 3 provides additional details on the LEED certification scheme).
 - PepsiCo's Water Sustainability category includes investments to replenish watersheds in high water risk areas in which the Company has operations. Sustainalytics notes that PepsiCo assesses location-based water risks by conducting water stress assessments every three years, utilizing the WRI's Aqueduct tool.⁷ Additionally, PepsiCo's Chairman of the Board and Chief Executive Officer has oversight of the management of water-related issues under its Risk Management Framework. Sustainalytics believes that (i) such internal and external assessments, (ii) oversight by the Company's executive management, and (iii) time-bound targets to replenish 100% of water consumed in company-owned operations by 2025 is indicative of the priority that PepsiCo places on reducing the impact of its water use. Refer to Section 2 for further details on PepsiCo's efforts and Section 3 for the intended impact of such projects.
 - Project Evaluation and Selection:
 - PepsiCo's Sustainability Team will assess and determine eligible projects. The final approval will be followed by the recommendation of allocation of proceeds and provision of description of eligible projects to the PepsiCo's Finance department. This is in line with the market practice.
 - Management of Proceeds:
 - PepsiCo's Finance Department will track the net use of proceeds using its internal system. Pending allocation, the net proceeds may be temporarily invested in cash, cash equivalents, short-term investments, or used to repay other borrowings. This is in line with market practice.
 - Reporting:
 - PepsiCo intends to publish an annual report on its website, until full allocation. The reporting will be accompanied by management's assertion of the amount of the net proceeds that was allocated to eligible projects, and an examination report from an independent accountant on such assertion. Sustainalytics considers this in line with market best practice.
 - The allocation reporting will include the amounts allocated on category level with additional descriptions of select eligible projects.

⁶ EU Commission's "Environmental impact assessment of innovative bio-based products" estimated cradle-to-factory gate impact of biobased PET bottle. The study concludes, under several constraints and assumptions, a slight improvement in environmental performance, such as in terms of global warming potential, water use, and abiotic depletion (fossil fuels) with a limited potential to benefit in other environmental considerations, such as acidification. Since manufacturing phase accounted for nearly 75% of total negative impacts, of which most impacts came from agricultural phase of feedstock, Sustainalytics believes that considering waste or sustainably sourced feedstock will significantly reduce negative impact from agricultural phase, including reduction of direct emissions from fertilizer and pesticides application.

Publications Office of the European Union, Environmental impact assessments of innovative bio-based product:

<https://publications.europa.eu/en/publication-detail/-/publication/15bb40e3-3979-11e9-8d04-01aa75ed71a1>

⁷ PepsiCo defines "water risk" using internal expertise as well as through the utilization of World Resources Institute's Aqueduct, which is a mapping tool to assess where and how water risks are developing globally. PepsiCo, Our Goals: <https://www.pepsico.com/sustainability/performance-with-purpose/our-goals>

- The impact reporting may include quantitative indicators, where feasible, such as the proportion of packaging with rPET and/or bio-based plastics; amount of compostable/biodegradable material purchased; GHG emissions reduction achieved; water use efficiency achieved from company-owned operations and agricultural supply chain, and amount of water replenished.

Alignment with Green Bond Principles 2018

Sustainalytics has determined that the PepsiCo Green Bond Framework aligns with the four core components of the GBP 2018. For detailed information please refer to Appendix 4: Green Bond/Green Bond Programme External Review Form.

Section 2: Sustainability Performance of the Issuer

Contribution of the Framework to PepsiCo's sustainability strategy

Sustainalytics is of the opinion that PepsiCo demonstrates a commitment to integrating sustainable practices into its operations and value chain. PepsiCo's commitment to "fostering a more sustainable planet" as a part of its mission⁸ has been captured in its 2018 Sustainability Report⁹ and 2018 Performance Metrics¹⁰, which both highlight the Company's 2025 Agenda and report on its progress across several environmental areas including: (i) Packaging, (ii) Energy & Climate Change, (iii) Water, (iv) Waste, and (v) Sustainable Sourcing.

- In order to continue meeting its goals, PepsiCo has established specific targets for each of the following key areas related to reducing its environmental impact (with a baseline of 2015):
 - Recyclable Packaging: designing 100% of packaging to be recyclable, compostable or biodegradable by 2025, while striving to use 25% recycled polyethylene terephthalate (rPET), on average, in its plastic packaging around the world by 2025.¹¹ In 2019, PepsiCo announced a new targeted reduction of 35% in the amount of virgin plastic content in its bottles across its beverage portfolio by 2025. Currently, PepsiCo is one of the largest users of food-grade rPET globally, with approximately 9% rPET use across the company-owned beverage portfolio in the US. The Company estimates that, as of 2018, approximately 89% of its packaging was fully recyclable.
 - Lower Carbon Emissions: reducing absolute Scope 1, 2 and 3 greenhouse gas (GHG) emissions across the value chain by at least 20% by 2030. In 2018, PepsiCo reduced Scope 3 emissions by approximately 2.2 million metric tons, making 7% progress towards its goal. In addition, the Company decreased Scope 1 and 2 emissions by 6.4%, representing 32% progress towards its goal.
 - Zero Waste to Landfill: achieving zero waste to landfill by 2025 across all direct operations through efficient and responsible waste management. PepsiCo successfully reduced the amount of waste to landfill to approximately 4% in 2018.¹²
 - Source Sustainably: aiming to sustainably source 100% of direct agricultural raw materials by 2020 through the Company's Sustainable Farming Program (SFP)¹³. As of 2018, 51% of the company's agricultural raw materials were sustainably sourced.¹⁴
 - Positive Water Impact: improving water-use efficiency within the Company's manufacturing operations in high-water-risk¹⁵ areas by 25% by 2025. This target was set after the Company achieved improved water-use efficiency by more than 25% between 2006 and 2015. Additionally, improving water-use efficiency of direct agricultural supply chain in high water risk sourcing areas by 15% by 2025. The Company also aims to replenish 100% of the water consumed in company owned manufacturing by 2025. 13% of the target was achieved in 2018 when the Company replenished more than 1.1 billion liters of water.¹⁶

⁸ PepsiCo, Mission & Vision: <https://www.pepsico.com/about/mission-and-vision>

⁹ PepsiCo, Sustainability Report 2018: https://www.pepsico.com/docs/album/sustainability-report/2018-csr/pepsico_2018_csr.pdf

¹⁰ PepsiCo, 2018 Performance Metrics: https://www.pepsico.com/docs/album/sustainability-report/2018-csr/pepsico-2018-sustainability-performance-metrics-sheet.pdf?sfvrsn=d3ce876c_4

¹¹ PepsiCo, Packaging: <https://www.pepsico.com/sustainability/packaging>

¹² PepsiCo, Waste: https://www.pepsico.com/docs/album/esg-topics-policies/waste.pdf?sfvrsn=32345f87_6

¹³ PepsiCo, Sustainable Farming Program: https://www.pepsico.com/docs/album/esg-topics-policies/sfp-scheme-rules.pdf?sfvrsn=fb5b95cf_4

¹⁴ Percentage of volume sustainably sourced and verified by a third party.

¹⁵ PepsiCo defines "water risk" through the utilization of World Resources Institute's Aqueduct tool as well as internal and external expertise. PepsiCo, Our Goals: <https://www.pepsico.com/sustainability/performance-with-purpose/our-goals>

¹⁶ PepsiCo, Water: <https://www.pepsico.com/sustainability/water>

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- With a focus on circular economy, PepsiCo has acknowledged the need to address waste management and reduction. In collaboration with The Recycling Partnership, the Company's philanthropic arm, PepsiCo Foundation, has launched an industry-wide challenge, "All In On Recycling" in order to raise USD25 million to improve recycling feasibility for 25 million families in the US.¹⁷ In 2019, the Company announced that one of its products, LIFEWTR, will be packaged in 100% rPET, while AQUAFINA will offer aluminum can packaging in U.S. food service outlets. In line with its commitment to working towards circular economy, it is estimated that these changes will eliminate more than 8,000 metric tons of virgin plastics and approximately 11,000 metric tons of GHG emissions.¹⁸
- The Company's commitment to recyclable packaging is further highlighted through its Sustainable Plastics Vision,¹⁹ which focuses on three primary pillars: reducing the amount of plastics it uses; recycling the plastics it brings to the market; and reinventing its plastic packaging. In order to fulfill their vision while responsibly increasing the supply needed to meet its increasing packaging demands, the Company has partnered with a number of organizations, including, The Recycling Partnership, Alliance to End Plastic Waste, and World Economic Forum's Global Plastic Action Partnership (GPAP).¹⁸

Considering PepsiCo's ongoing sustainability commitments as well as its quantitative and time-bound targets, Sustainalytics is of the opinion that PepsiCo is well-positioned to issue green bonds and that the eligible categories specified under the Framework will support the Company's overall sustainability strategy.

Well positioned to address common environmental and social risks associated with the projects

While Sustainalytics recognizes that the net proceeds from PepsiCo's Framework will be directed towards eligible categories that are recognized by the GBP 2018 to have positive impact, Sustainalytics is aware that such projects create risk of negative environmental and social outcomes. Some common risks include those related to occupational health and safety, supply chain, including water-related risks, waste management and biodiversity loss. Sustainalytics is of the opinion that PepsiCo has sufficient measures to mitigate potential risks as seen through the following policies, programmes and procedures:

- The Company has implemented several policies to mandate ethical behavior and protect its workers, including its Environmental, Health and Safety (EHS) Policy,²⁰ Global Code of Conduct,²¹ and Human Rights Workplace Policy.²² The Company conducts regular health and safety audits to verify compliance.²³
- PepsiCo actively manages exposure to supply chain risk through its Global Supplier Code of Conduct (the "Supplier Code"),²⁴ of which all suppliers are expected to abide by including the compliance with all applicable environmental laws and regulations. Additionally, PepsiCo's suppliers must ensure that all land acquisitions meet International Finance Corporation (IFC)'s Performance Standards.²⁴
- PepsiCo's Board of Directors is responsible for managing the Company's Risk Management Framework, including risk assessment and mitigation procedures.²⁵ The Public Policy and Sustainability Committee of the Company's Board of Directors is responsible for reviewing key issues, including those pertaining to water scarcity and management. The Company has also established the PepsiCo Risk Committee (PRC), a cross functional group that includes PepsiCo's Chairman of the Board and Chief Executive

¹⁷ PepsiCo, The Recycling Partnership and the PepsiCo Foundation Launch Largest-Ever Industry Challenge to Boost Residential Recycling for 26 Million U.S. Families and Support a Circular Economy: <https://www.pepsico.com/news/press-release/the-recycling-partnership-and-the-pepsico-foundation-launch-largest-ever-industr07312018>

¹⁸ PepsiCo, PepsiCo Advances Circular Economy for Plastics; Announced LIFEWTR Packaging with 100% Recycled Plastic and Elimination of Plastic Bottles for bubly: <https://www.pepsico.com/news/press-release/pepsico-advances-circular-economy-for-plastics-announces-lifewtr-packaging-with-06272019>

¹⁹ PepsiCo, Plastics: <https://www.pepsico.com/plastics>

²⁰ PepsiCo, Environmental Health and Safety Policy: https://www.pepsico.com/docs/album/esg-topics-policies/pepsico-environmental-health-and-safety-policy.pdf?sfvrsn=17b7c8d_12

²¹ PepsiCo, Global Code of Conduct: https://www.pepsico.com/docs/album/global-code-of-conduct/pepsico-global-code-of-conduct/english_letter_global_code_of_conduct_booklet.pdf?sfvrsn=68014c63_20

²² PepsiCo, Global Human Rights Policy: https://www.pepsico.com/docs/album/esg-topics-policies/pepsico-global-human-rights-policy.pdf?sfvrsn=476b842a_4

²³ PepsiCo, Occupational Health & Safety Policy: http://www.pepsico.ca/en/downloads/PepsiCo_HS_Policy-English.pdf

²⁴ PepsiCo, Global Supplier Code of Conduct: https://www.pepsico.com/docs/album/supplier-code-of-conduct/pepsico-global-scoc-final_english.pdf

²⁵ PepsiCo, Water 2018, CDP: https://www.pepsico.com/docs/album/esg-topics-policies/2018-cdp-water-response.pdf?sfvrsn=c5c36f59_4

Officer, who is responsible for reporting on risk mitigation efforts, including key risks related to climate change and water scarcity.²⁵

- With a focus on environmental issues and in alignment with aforementioned Supplier Code, PepsiCo has implemented numerous policies to address the risks associated with the procurement of sourcing of materials, such as resource scarcity, soil degradation associated with the use of pesticides, and deforestation. These policies include its Global Sustainable Agriculture Policy,²⁶ Land Use Policy,²⁷ Global Sustainable Packaging Policy,²⁸ Global Policy on Sustainable Palm Oil²⁹ and Forestry Stewardship Policy.³⁰
- In line with its Sustainable Agriculture Policy, the Company has created the SFP,¹³ which aims to boost agricultural productivity, decrease GHG emissions impact and increase the availability of sustainably sourced crops. In 2018, approximately 51% of the Company's direct farmer sourced, agricultural raw materials were sustainably sourced through the SFP, an increase from 24% in 2017.³¹ The Company's procurement teams also deploy supplier scorecards in order to both evaluate and compare the performance of individual suppliers against outlined expectations.³² In addition, PepsiCo requires suppliers to operate in compliance with (or meeting) recognized standards, such as the FSC (Forest Stewardship Council) and SFI (Sustainable Forestry Initiative).³³
- As packaging represents a large portion of the Company's company-wide emission portfolio, its Packaging Advance Research (PAR) team has created a Life Cycle Analysis (LCA) tool in alignment with ISO 14040/44 and PAS 2050 standards.³⁴ The Company actively uses findings from the application of this tool to incorporate life cycle thinking in ongoing R&D decisions as they pertain to sustainable packaging.³⁴

Based on the robust policies and practices outlined above, Sustainalytics is of the opinion that PepsiCo is well-positioned to address and mitigate potential environmental and social risks associated with the eligible projects.

Section 3: Impact of Use of Proceeds

All three eligible project categories for the use of proceeds are recognized as impactful by the seven established project categories in the GBP 2018.

Importance of sustainable packaging

According to the World Economic Forum, it is estimated that over 322 million tons of plastics were produced globally in 2015.³⁵ Of this amount, plastic packaging was responsible for approximately 45% of the plastics produced (146 million tons).³⁶ Given its short lifetime in use (approximately 6 months or less³⁷) packaging was also the dominant generator of plastic waste in 2015 at approximately 141 million tons. From a cost perspective, the single-use nature of plastic packaging means that 95% of plastic packaging by material value, USD80-120 billion annually, is lost to the global economy, while an alarming 32% of plastic packaging leaks into the ocean and affects the ecosystem.³⁸

²⁶ PepsiCo, Global Sustainable Agriculture Policy: https://www.pepsico.com/docs/album/esg-topics-policies/pepsico-sustainable-agriculture-policy.pdf?sfvrsn=201f5573_6

²⁷ PepsiCo, Land Use Policy: https://www.pepsico.com/docs/album/esg-topics-policies/pepsico_land_policy.pdf?sfvrsn=fce24e93_8

²⁸ PepsiCo, Global Sustainable Packaging Policy: https://www.pepsico.com/docs/album/esg-topics-policies/pepsico-sustainable-packaging-policy.pdf?sfvrsn=d808643c_4

²⁹ PepsiCo, Global Policy on Sustainable Palm Oil: https://www.pepsico.com/docs/album/esg-topics-policies/global-policy-for-sustainable-palm-oil.pdf?sfvrsn=ffec838_6

³⁰ PepsiCo, Forestry Stewardship Policy: https://www.pepsico.com/docs/album/esg-topics-policies/pepsico-forestry-stewardship-policy-1.pdf?sfvrsn=e8ee0f3d_4

³¹ PepsiCo, Agriculture: <https://www.pepsico.com/sustainability/agriculture>

³² PepsiCo, Sustainable Sourcing: <https://www.pepsico.com/sustainability/sustainable-sourcing>

³³ PepsiCo, Forests 2018: https://www.pepsico.com/docs/album/esg-topics-policies/2018-cdp-forest-response.pdf?sfvrsn=719701f8_4

³⁴ CDP, PepsiCo Inc Climate Change 2018: https://www.pepsico.com/docs/album/esg-topics-policies/2018-cdp-climate-response.pdf?sfvrsn=3d7c9d36_6

³⁵ World Economic Forum, The world's plastic problem in numbers, published in 2018: <https://www.weforum.org/agenda/2018/08/the-world-of-plastics-in-numbers>

³⁶ Our World in Data, Plastic Pollution: <https://ourworldindata.org/plastic-pollution>

³⁷ Our World in Data, Mean product lifetime of plastic uses, 2015: <https://ourworldindata.org/grapher/mean-product-lifetime-plastic>

³⁸ World Economic Forum, The New Plastics Economy: http://www3.weforum.org/docs/WEF_The_New_Plastics_Economy.pdf

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PepsiCo has publicly committed to collaborating with partners and suppliers to increase consumer education, “collectively driving change in the packaging waste value chain”.¹¹ For example, PepsiCo joined the NaturALL Bottle Alliance³⁹ (“the Alliance”) in alignment with its efforts towards the Global Commitment.³ The Alliance is a multi-stakeholder consortium that works towards developing innovative packaging solutions that are made with sustainable resources, such as 100% bio-based plastics. Through such partnerships, PepsiCo aims to i) increase the use of recycled content and/or materials from bio-based sources, ii) promote the use of alternative materials that can be recycled, and iii) minimize its post-industrial waste footprint.

Sustainalytics is of the opinion that the PepsiCo’s financing of sustainable packaging projects intends to contribute to reducing its environmental footprint by using alternative, low-carbon packaging materials that aim to transition away from the production of fossil fuel-based plastics.

Importance of water stewardship for a food and beverage company

While approximately 70% of the world’s freshwater is being used for irrigated agriculture, water-use efficiency remains below 50% in many countries.⁴⁰ As pressures from urbanization, industrialization and climate change further harm water-use efficiency, diminish water resources and consequently create competition for water supply and agriculture, the sustainable management of water has become a key priority for players in the food and beverage industry whose business models and production of resources depend on it.

PepsiCo, which was one of the first global companies to formally identify water as a basic human right,¹⁶ recognizes the importance of improving water-use efficiency in its own agricultural operations and intends to use a portion of net proceeds from its green bond to enable long-term, sustainable water security in high water risk areas.⁴¹ Between 2015-2018, PepsiCo successfully improved direct agricultural water-use efficiency in high water risk areas by 3% through its Sustainable Farming Program (SFP), and have since increased their goal to improve by 15% by 2025.¹⁰ The Company’s integrated approach to watershed management aims to build on the success of SFP and increase water-use efficiency on farms and to benefit the farmers and local communities in which it operates by “improving local watershed health, improving crop productivity, and mitigating and adapting to climate changes”.¹⁶ After successfully replenishing 13% of the water consumed in 2018 in company-owned manufacturing facilities located in high risk areas, the Company has set a goal to replenish 100% of the water consumed in manufacturing operations located in high water risk areas by 2025.¹⁰

Sustainalytics is of the opinion that PepsiCo is uniquely positioned to tackle water stewardship and that the use of proceeds from this category will have a positive impact on the Company’s supply chain as it pertains to the efficient management and protection of water.

Alignment with/contribution to SDGs

The Sustainable Development Goals (SDGs) were set in September 2015 and form an agenda for achieving sustainable development by the year 2030. This green bond advances the following SDG goals and targets:

Use of Proceeds GBP Category	SDG	SDG target
Environmentally Sustainable Management of Living Natural Resources and Land Use	9. Industry, Innovation and Infrastructure	9.4 By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities.
Eco-efficient and/or Circular Economy Adapted Products, Production Technologies and Processes	12. Responsible Consumption and Production	12.2 By 2030, achieve the sustainable management and efficient use of natural resources. 12.5 By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse.
Renewable Energy	7. Affordable and Clean Energy	7.2 By 2030, increase substantially the share of renewable energy in the global energy mix.
Energy Efficiency		7.3 By 2030, double the global rate of improvement in energy efficiency.

³⁹ Nestle, Danone, Nestle Waters and Origin Materials welcome PepsiCo to the NaturAll Bottle Alliance: <https://www.nestle.com/media/news/naturall-bottle-alliance-welcomes-pepsico>

⁴⁰ International Atomic Energy Agency, Agriculture water management: <https://www.iaea.org/topics/agricultural-water-management>

⁴¹ OECD, Water and Agriculture: <https://www.oecd.org/agriculture/topics/water-and-agriculture/>

Clean Transportation Green Buildings	11. Sustainable Cities and Communities	11.2 By 2030, provide access to safe, affordable, accessible and sustainable transport systems for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons. 11.B By 2020, substantially increase the number of cities and human settlements adopting and implementing integrated policies and plans towards inclusion, resource efficiency, mitigation and adaptation to climate change, and resilience to disasters.
Sustainable Water and Wastewater Management	6. Clean Water and Sanitation 12. Responsible Consumption and Production 15. Life on Land	6.4 By 2030, substantially increase water-use efficiency across all sectors and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity. 12.4 By 2020, achieve the environmentally sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimize their adverse impacts on human health and the environment. 15.1 By 2020, ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands, in line with obligations under international agreements.

Conclusion

PepsiCo, Inc. ("PepsiCo") has developed the PepsiCo Green Bond Framework under which it intends to issue green bonds to finance or refinance, in whole or in part, existing or future projects that intends to deliver positive environmental outcomes. Sustainalytics believes that the Framework is aligned with its overall sustainability strategy and efforts, and that the eligible categories contribute to the advancement of UN Sustainable Development Goals 6, 7, 9, 11, 12, and 15. Additionally, Sustainalytics believes that PepsiCo is well positioned to identify, manage and mitigate environmental and social risks commonly associated with the eligible projects to be funded by the use of proceeds.

Based on the above, Sustainalytics is confident that PepsiCo is well-positioned to issue green bonds, and that the PepsiCo Green Bond Framework is robust, transparent, and in alignment with the Green Bond Principles 2018.

Appendices

Appendix 1: PepsiCo Green Bond Framework

PEPSICO Green Bond Framework

1. PREFACE

PepsiCo, Inc. (“PepsiCo” or “the Company”) has created this document (the “Framework”) to help guide potential future issuance(s) of Green Bonds. Any Green Bonds that PepsiCo issues pursuant to this Framework will focus on one or more of several key environmental sustainability initiatives within PepsiCo’s sustainability agenda, including, but not limited to, (A) the expanded use of recycled and biodegradable materials in PepsiCo’s product packaging (such as Recycled polyethylene terephthalate, or “rPET”), (B) investments and program spend directed towards mitigating the climate impact of PepsiCo’s operations, facilities, and agricultural supply chain, and (C) water sustainability initiatives.

In addition, PepsiCo plans to generally align its Green Bond eligible project categories with the United Nations Sustainable Development Goals (“SDGs”). As a member of the UN Global Compact, PepsiCo is a supporter of the SDGs and believes that aligning Green Bond eligible projects (“Eligible Projects”) with them is an important step towards the accomplishment of the SDGs.

PepsiCo will seek to engage Sustainalytics, a global leader in ESG and Corporate Governance research and ratings, to ensure this framework is in general alignment with the International Capital Markets Association (“ICMA”) Green Bond Principles 2018 and provide an opinion with respect to the Green Bonds.

2. INTRODUCTION AND BACKGROUND

Established in 1965 and headquartered in Purchase, New York, PepsiCo is one of the world’s leading food and beverage companies. Today, PepsiCo sells products in more than 200 countries and territories, including across 22 brands that generate more than \$1 billion each in estimated annual retail sales.

2.1 Corporate Responsibility at PepsiCo

Given PepsiCo’s significant influence across its value chain, the Company has implemented a strategic focus designed to deliver top-tier financial performance by improving the products we sell, operating responsibly to protect our planet and empowering people around the world. This vision, initially known as “Performance with Purpose,” was launched in 2006 to position PepsiCo for long-term success and ingrain sustainability into daily business operations. In 2016, PepsiCo furthered this commitment by introducing the “2025 Agenda”, a framework expanding on our initial sustainability agenda that is closely mapped to the SDGs.

PepsiCo’s sustainability agenda is organized around six goals:

1. Circular Future for Packaging;
2. Climate Change Mitigation;
3. Next Generation Agriculture;
4. Positive Water Impact;
5. Improved Choices Across Our Portfolio; and
6. People & Prosperity

Of these six goals, more than half of them are oriented around making an environmental impact: those around climate, packaging, agriculture, and water. PepsiCo strives to use its global scale, expertise and resources to influence positive change across the Company’s value chain — from the way ingredients are grown and sourced, to when a product is purchased and consumed, to how its packaging is discarded.

2.2 Climate

In pursuit of its climate goals, PepsiCo works collaboratively with suppliers, business partners and customers towards a goal of reducing absolute greenhouse gas (“GHG”) emissions across our value chain by at least 20% by 2030. To that end, PepsiCo is working to reduce GHG emissions associated with agriculture, operations, packaging, and transportation, among other initiatives. The Company is also incorporating environmental considerations into its product innovation process through a program called “Sustainable from the Start” and reducing fossil fuel consumption through increased energy efficiency throughout its operations.

2.3 Packaging

As a critically important aspect of its environmental strategy, PepsiCo is focused on finding better, more responsible ways to package products to reduce both materials used and waste produced, and is already one of the largest users of food-grade rPET in the world. PepsiCo’s sustainable plastics vision is rooted in three pillars: Reducing the amount of plastics used, Boosting recycling rates, and Reinventing plastic packaging. The Company’s publicly-announced packaging goals by 2025 include: make 100% of its packaging recyclable, compostable, or biodegradable; increase its use of recycled content in plastics packaging to 25%; and reduce 35% of virgin plastic content across its beverage portfolio.

In 2019, the Company announced several initiatives in the pursuit of a circular economy for plastics. In June, the company announced ([link](#)) initiatives across several key brands, such as plans for 100% rPET packaging for LIFEWTR, the elimination of plastic packaging for *bubly*, and an offering of aluminium can packaging of the AQUAFINA® water brand, while the brand tests the move in retail. When announced, the changes were expected to eliminate more than 8,000 metric tons of virgin plastic and approximately 11,000 metric tons of greenhouse gas emissions once implemented.

Subsequently, the Company announced in September ([link](#)) its latest target to reduce 35% of virgin plastic content across its beverage portfolio by 2025, an estimated elimination of 2.5 million metric tons of cumulative virgin plastic. In addition to increased use of recycled content and alternative packaging materials for its beverage brands, the expansion of PepsiCo’s SodaStream® business, an estimated 67 billion plastic bottles will be avoided through 2025.

In addition, the Company is also working to help reliably increase the supply of recycled material needed to meet its packaging goals. In tandem with current suppliers and partners like The Recycling Partnership, Loop Industries, Alliance to End Plastic Waste, and World Economic Forum’s Global Plastic Action Partnership, PepsiCo is aiming to both increase recycling rates and improve the plastic recycling infrastructure.

2.4 Agriculture

PepsiCo views sustainable agriculture as critically important to the continued growth of its business, food safety and crop resilience for continued and localized supply. Through its Sustainable Farming Program (SFP), PepsiCo helps farmers and farming communities improve livelihoods, preserve the environment and support the sustainable growth of PepsiCo’s brands. Through the SFP, PepsiCo engages with farmers around the world to provide training for on-field agronomy, resource-efficient use of fertilizers and irrigation, plant protection techniques, workers’ rights and other issues. By the end of 2018, 99% of the volume of agricultural raw materials the Company sourced directly were grown by farmers engaged in the SFP, representing an increase from 79% in 2017.

Importantly, a key aspect of the SFP is targeting the reduction of GHG and ozone depleting substance emissions associated with farming operations. As part of this goal, PepsiCo helps farmers to conduct GHG assessments of farm operations so they can manage ozone depleting substances to minimize their effect on the atmosphere while adhering to all relevant legal requirements, including national and international treaties. Through on-farm practices related to managing soil health, PepsiCo is helping farmers to reduce GHG emissions that can improve the climate impact of their farm and can have a positive effect on the ecosystem. In addition, the SFP also promotes reducing overall farm energy consumption and reliance on fossil fuels. To this end, PepsiCo encourages farmers to use tools that aid in energy assessment of farm operations, to increase the use of renewable sources of energy while decreasing the use of non-renewable energy sources and to keep records of fuel and energy use on their farms.

2.5 Water

PepsiCo is also working to enable long-term, sustainable water security. The Company's goal to achieve Positive Water Impact by 2025 includes aiming to improve water-use efficiency in its farmer-sourced agricultural supply chain in high-water-risk areas by 15% from 2015 levels, replenishing as much water as it consumes in PepsiCo-owned manufacturing sites in high-water-risk areas by returning it back to the same watershed from which it was extracted, and adopting the Alliance for Water Stewardship standard as our vehicle for water advocacy. Moreover, the SFP also directs PepsiCo resources towards farmer training and equipment to facilitate the adoption of drip irrigation to maximize yield and minimize negative effects on water sources at the farmer level.

2.6 UN Sustainable Development Goals

In September 2015, the UN General Assembly announced 17 SDGs to address global challenges and set a blueprint for action to achieve the goals by 2030. The SDGs provide an important inspiration for our priorities. PepsiCo's sustainability goals, which were informed by some of the world's leading experts and institutions, are aligned with the SDGs so that we can have the greatest collective impact.

3. PEPSICO'S GREEN BOND FRAMEWORK

For the potential future Green Bonds that PepsiCo may issue pursuant to this Framework, the following guidelines have been created that follow the four core components of the ICMA's Green Bond Principles 2018. With any future issuance of Green Bonds, PepsiCo will aim to finance or refinance projects that seek to promote environmental sustainability across its value chain, from the production of raw materials through the manufacturing, packaging, and marketing of its consumer products. The following section summarizes this Framework, including the expected use of proceeds, process for project evaluation and selection, management of proceeds, and reporting.

3.1 Use of Proceeds

The net proceeds of future Green Bonds issued pursuant to this Framework may be allocated towards refinancing existing and/or financing new Eligible Projects, with a maximum three-year lookback period for refinancing projects.

In addition, each category of Eligible Projects has been identified as aligning with the most applicable SDGs, as indicated in each section.

3.1.1 Eligibility Criteria

PepsiCo expects to allocate an amount equivalent to the net proceeds from potential future Green Bond issuances among a number of potential Eligible Projects, as detailed in this section. In addition, to be eligible for the Green Bond proceeds, the projects funded must fall in the respective categories, per ICMA's Green Bond Principles 2018, as noted in each section.

Eligible Projects include the following. PepsiCo reserves the right to add additional Eligible Projects consistent with the principles articulated in this Framework

CATEGORY 1: SUSTAINABLE PLASTICS AND PACKAGING

Context: As noted above, PepsiCo continues to work to increase its use of recycled, compostable/biodegradable and bio-based (e.g. plant-based) product packaging in the pursuit of more responsible ways to package products and to reduce both materials used and waste produced, and in support of a circular economy model for packaging. PepsiCo is already one of the largest users of food-grade rPET in the world, and one of the Company's key 2025 Agenda goals is to strive to use 25% recycled plastic content in its plastic packaging. PepsiCo is also actively collaborating with outside firms to develop next-generation packaging, such as truly biodegradable film resins that break down in any end-of-life environment.

Use of Proceeds: Proceeds from Green Bond issuance may be allocated to

- i. Purchases, directly or via our intermediary suppliers, of:

- rPET for use in product packaging;
- Bio-based PET (Bio-PET) for use in product packaging;
- Compostable, biodegradable and/or recyclable material for use in product packaging; and
- ii. Investments in projects for sustainable product packaging such as Bio-PET bottles and compostable and biodegradable snacks flex films

Green Bond Principles Category: *Eco-efficient and/or circular economy adapted products, production technologies and processes*

UN SDG Alignment: *SDG 9 – Industry, Innovation and Infrastructure, and SDG 12 - Responsible Consumption and Production*

CATEGORY 2: DECARBONIZATION OF OUR OPERATIONS AND SUPPLY CHAIN

Context: PepsiCo has continued to reduce GHG emissions across Scopes 1, 2 and 3, and has been actively investing in capabilities and upgrading facilities and equipment to more efficient and low carbon options. Doing so has enabled PepsiCo to deliver 32% progress against our goal across Scopes 1 and 2 GHG emissions, and 7% progress against our goal across Scope 3 GHG emissions, as of year-end 2018. Initiatives to further these goals range from investments in the manufacturing and distribution of the Company's operations in reducing Scope 1 and 2 GHG emissions, to sustainable agriculture and the Company's SFP, which among other goals aims to decrease Scope 3 GHG emissions during the sourcing of raw materials.

Use of proceeds: Proceeds from Green Bond issuance may be allocated to:

- i. Expenditures to improve the energy efficiency and/or reduce GHG emissions of PepsiCo's operations, such as waste biomass energy conversion, solar installations, lighting upgrades, variable speed drives on equipment, improvements to air compressors, and upgrading vending and cooling equipment;
- ii. Procurement of project specific renewable energy;
- iii. Cleaner transportation, such as replacement of fossil fuel-powered cars with electric vehicles;
- iv. Green buildings that receive a third-party verified certification, such as LEED Platinum or LEED Gold, such as investments in the renovation of PepsiCo's Global R&D Hub to significantly improve its energy efficiency; and
- v. Investments towards reducing the GHG footprint of our agricultural supply chain, such as spending via PepsiCo's SFP directed towards farmer training around improving soil health through using cover crops and/or conservation tillage practices and reducing agricultural chemical applications

Green Bond Principles Categories: *Energy efficiency; Renewable energy; Clean transportation; and Green buildings; Environmentally sustainable management of living natural resources and land use*

UN SDG Alignment: *SDG 7 – Affordable and Clean Energy, and SDG 11 Sustainable Cities and Communities*

CATEGORY 3: WATER SUSTAINABILITY

Context: PepsiCo has raised the bar for what it means to be a responsible corporate water steward, and is working to enable long-term, sustainable water security in high water risk areas. To this end, PepsiCo achieved a 25% water-use efficiency improvement between 2006 and 2015 in its legacy operations, and in 2012 earned the prestigious Stockholm Industry Water Award for leadership in water stewardship. Among the Company's 2025 Agenda goals, it seeks to replenish 100% of the water consumed in company-owned manufacturing operations located in high water risk areas in the same watershed where the water was extracted, and improve water-use efficiency in the Company's farmer-sourced agricultural supply chain in high water risk areas by 15%.

Use of proceeds: Proceeds from Green Bond issuance may be allocated to:

- i. Investments linked to improving water-use efficiency at PepsiCo locations, including water recycling and reuse projects, and improvements in Clean-In-Place systems and other operational processes;
- ii. Investments to replenish watersheds where PepsiCo operates in high water risk areas, potentially including tree plantings, rainwater harvesting, aquifer recharge, wetlands rehabilitation, alternative crop rotations, improved grazing programs and education and awareness building;
- iii. Working with small holder farmers on access to drip irrigation or other water savings technologies

Green Bond Principles Category: *Sustainable Water and Wastewater Management; and Terrestrial and aquatic biodiversity conservation (including the protection of coastal, marine and watershed environments)*

UN SDG Alignment: *SDG 6 - Clean Water and Sanitation, SDG 12 – Responsible Consumption and Production, and SDG 15 – Life on Land*

3.2 Process for Project Evaluation and Selection

Members of the PepsiCo Sustainability Team will assess and determine project eligibility based on the criteria described in Section 3.1 and will recommend an allocation of proceeds among Eligible Projects to the PepsiCo Finance department, also providing them with project descriptions. The Finance department will track the allocation of proceeds to such projects.

3.3 Management of Proceeds

An amount equivalent to the net proceeds from Green Bond issuances will be allocated and managed by PepsiCo's Finance department. The Finance department will internally track actual spend on the projects receiving allocations from Green Bond proceeds. Pending the allocation to Eligible Projects, net proceeds from Green Bond issuances may be temporarily invested or otherwise maintained in cash, cash equivalents, short-term investments, or used to repay other borrowings. Payment of principal and interest on the Green Bonds will be made from the Company's general funds and will not be directly linked to the performance of any Eligible Projects.

PepsiCo expects to allocate the majority of the proceeds from a particular Green Bond issuance within three years of the date of such issuance.

3.4 Reporting

3.4.1 Allocation reporting

Throughout the term of the Green Bonds and until the proceeds have been fully allocated to Eligible Projects, PepsiCo plans to publish an annual update of the allocation of the proceeds, including, subject to any confidentiality considerations, additional descriptions of select projects funded with Green Bond proceeds. The annual update will be reported publicly on the PepsiCo website. These allocation reports will be accompanied by:

- An assertion by PepsiCo management that amounts equivalent to the net proceeds of the Green Bond offering were allocated to Eligible Projects; and
- An assurance report from a nationally recognized firm registered with the Public Company Accounting Oversight Board in respect of its examination of PepsiCo management's assertion conducted in accordance with attestation standards established by the American Institute of Certified Public Accountants.

3.4.2 Impact reporting

To the extent possible, in addition to its allocation reporting, PepsiCo intends to demonstrate the environmental impacts of the projects to which Green Bond proceeds have been allocated. Where relevant, PepsiCo plans to report on the Key Performance Indicators (KPIs) in aggregate for Green Bond projects, together with the aforementioned allocation status in future "Use of Proceeds" report(s). Examples of such KPI's include:

- Sustainable Plastics and Packaging
 - % of packaging produced with rPET and/or Bio-PET
 - Pounds of rPET, compostable/biodegradable packaging material and/or Bio-PET purchased
- Decarbonization of our Operations and Supply Chain
 - % reduction in GHG emissions

- Water Sustainability
 - % improvement in operational water use efficiency in high water risk company-owned manufacturing operations
 - % improvement in water-use efficiency in high water risk farmer sourced agricultural supply chain
 - Liters of water replenished

Finally, PepsiCo will seek to include anecdotal narrative reporting, to the extent possible, on the positive environmental impacts from select Eligible Projects receiving allocations from Green Bond proceeds.

4. ADDITIONAL INFORMATION

No Impact on Covenants, Etc.

Nothing in this Framework is intended to modify or add to any covenant or other contractual obligation undertaken by PepsiCo in any Green Bonds that may be issued in accordance with this Framework. This Framework does not create any legally enforceable obligations against PepsiCo; any such legally enforceable obligations relating to any Green Bonds are limited to those expressly set forth in the indenture and notes governing such Green Bonds.


Cautionary Statement

This Framework contains statements reflecting our views about our future performance that constitute “forward-looking statements” within the meaning of the Private Securities Litigation Reform Act of 1995. Forward-looking statements are generally identified through the inclusion of words such as “aim,” “anticipate,” “believe,” “drive,” “estimate,” “expect,” “goal,” “intend,” “may,” “plan,” “project,” “strategy,” “target” and “will” or similar statements or variations of such terms and other similar expressions. Forward-looking statements inherently involve risks and uncertainties that could cause actual results to differ materially from those predicted in such statements. Such risks and uncertainties include, but are not limited to: changes in demand for PepsiCo’s products, as a result of changes in consumer preferences or otherwise; changes in laws related to the use or disposal of plastics or other packaging of PepsiCo’s products; changes in, or failure to comply with, applicable laws and regulations; imposition or proposed imposition of new or increased taxes aimed at PepsiCo’s products; imposition of labelling or warning requirements on PepsiCo’s products; PepsiCo’s ability to compete effectively; political conditions, civil unrest or other developments and risks in the markets where PepsiCo’s products are made, manufactured, distributed or sold; the ability to protect information systems against, or effectively respond to, a cybersecurity incident or other disruption; increased costs, disruption of supply or shortages of raw materials and other supplies; business disruptions; damage to PepsiCo’s reputation or brand image; loss of, or a significant reduction in sales to, any key customer; disruption to the retail landscape, including rapid growth in hard discounters and the e-commerce channel; climate change or water scarcity, or legal, regulatory or market measures to address climate change or water scarcity; and other factors that may adversely affect the price of PepsiCo’s publicly traded securities and financial performance. For additional information on these and other factors that could cause PepsiCo’s actual results to materially differ from those set forth herein, please see PepsiCo’s filings with the Securities and Exchange Commission, including its most recent annual report on Form 10-K and subsequent reports on Forms 10-Q and 8-K. Investors are cautioned not to place undue reliance on any such forward-looking statements, which speak only as of the date they are made. PepsiCo undertakes no obligation to update any forward-looking statements, whether as a result of new information, future events or otherwise.

Appendix 2: List of Projects by Eligible Category

PepsiCo's Project Category	Eligible Category under GBP 2018	Project Description
Sustainable Plastics and Packaging	Eco-efficient and/or Circular Economy Adapted Products	<ul style="list-style-type: none"> Purchases, directly or via our intermediary suppliers, of: <ul style="list-style-type: none"> rPET for use in product packaging; Bio-based PET (Bio-PET) for use in product packaging; Compostable, biodegradable and/or recyclable material for use in product packaging; and Investments in projects for sustainable product packaging such as bio-based PET bottles and compostable and biodegradable snacks flex films.
Decarbonization of Operations and Supply Chain	Renewable Energy	<ul style="list-style-type: none"> Procurement of project-specific renewable energy, excluding unbundled Renewable Energy Certificates.
	Energy Efficiency	<ul style="list-style-type: none"> Expenditures to improve the energy efficiency and/or reduce GHG emissions of PepsiCo's operations, such as waste biomass energy conversion, solar installations, lighting upgrades, variable speed drives on equipment, improvements to air compressors, and upgrading vending and cooling equipment.
	Clean Transportation	<ul style="list-style-type: none"> Cleaner transportation, such as replacement of fossil fuel-powered cars with electric vehicles.
	Green Buildings	<ul style="list-style-type: none"> Green buildings that receive a third-party verified certification, such as investments in the renovation of PepsiCo's Global R&D Hub to significantly improve its energy efficiency.
	Environmentally sustainable management of living natural resources and land use	<ul style="list-style-type: none"> Investments towards reducing the greenhouse gas footprint of our agricultural supply chain, such as spending via our sustainable farming program directed towards farmer training around improving soil health through using cover crops, conservation tillage practices, and reducing agricultural chemical applications
Water Sustainability	Sustainable Water Management	<ul style="list-style-type: none"> Investments linked to improving water-use efficiency at PepsiCo locations, including water recycling and reuse projects, and improvements in Clean-In-Place systems and other operational processes. Working with small holder farmers on access to drip irrigation or other water savings technologies.
	Environmentally Sustainable Management of Living Natural Resources and Land Use	<ul style="list-style-type: none"> Investments to replenish watersheds where PepsiCo operates in high water risk areas, potentially including tree plantings, rainwater harvesting, aquifer recharge, wetlands rehabilitation, alternative crop rotations, improved grazing programs and education and awareness building.

Appendix 3: LEED Certification Scheme

	LEED⁴²
Background	Leadership in Energy and Environmental Design (LEED) is a US Certification System for residential and commercial buildings used worldwide. LEED was developed by the non-profit U.S. Green Building Council (USGBC) and covers the design, construction, maintenance and operation of buildings.
Certification levels	Certified Silver Gold Platinum
Areas of Assessment	<ul style="list-style-type: none"> • Energy and atmosphere • Sustainable Sites • Location and Transportation • Materials and resources • Water efficiency • Indoor environmental quality • Innovation in Design • Regional Priority
Requirements	<p>Prerequisites (independent of level of certification) + Credits with associated points</p> <p>These points are then added together to obtain the LEED level of certification</p> <p>There are several different rating systems within LEED. Each rating system is designed to apply to a specific sector (e.g. New Construction, Major Renovation, Core and Shell Development, Schools-/Retail-/Healthcare New Construction and Major Renovations, Existing Buildings: Operation and Maintenance).</p>
Performance display	

⁴² USGBC, LEED: <http://www.usgbc.org/LEED>

Appendix 4: Green Bond / Green Bond Programme - External Review Form

Section 1. Basic Information

Issuer name:	PepsiCo, Inc.
Green Bond ISIN or Issuer Green Bond Framework Name, if applicable: <i>[specify as appropriate]</i>	PepsiCo Green Bond Framework
Review provider's name:	Sustainalytics
Completion date of this form:	October 2019
Publication date of review publication: <i>[where appropriate, specify if it is an update and add reference to earlier relevant review]</i>	

Section 2. Review overview

SCOPE OF REVIEW

The following may be used or adapted, where appropriate, to summarise the scope of the review.

The review assessed the following elements and confirmed their alignment with the GBPs:

- | | |
|--|--|
| <input checked="" type="checkbox"/> Use of Proceeds | <input checked="" type="checkbox"/> Process for Project Evaluation and Selection |
| <input checked="" type="checkbox"/> Management of Proceeds | <input checked="" type="checkbox"/> Reporting |

ROLE(S) OF REVIEW PROVIDER

- | | |
|---|--|
| <input checked="" type="checkbox"/> Consultancy (incl. 2 nd opinion) | <input type="checkbox"/> Certification |
| <input type="checkbox"/> Verification | <input type="checkbox"/> Rating |
| <input type="checkbox"/> Other <i>(please specify)</i> : | |

Note: In case of multiple reviews / different providers, please provide separate forms for each review.

EXECUTIVE SUMMARY OF REVIEW and/or LINK TO FULL REVIEW *(if applicable)*

Please refer to Evaluation Summary above.

Section 3. Detailed review

Reviewers are encouraged to provide the information below to the extent possible and use the comment section to explain the scope of their review.

1. USE OF PROCEEDS

Overall comment on section *(if applicable)*:

The three eligible project categories for the use of proceeds are aligned with the seven Green Bond Principles project categories – (i) Eco-efficient and/or Circular Economy Adapted Products, (ii) Renewable Energy, (iii) Energy Efficiency, (iv) Clean Transportation, (v) Green Buildings, (vi) Sustainable Water Management, and (vii) Environmentally Sustainable Management of Living Natural Resources and Land Use – are aligned with those recognized by the Green Bond Principles 2018. Sustainalytics considers the eligible categories to have positive environmental impacts and to advance the UN Sustainable Development Goals, specifically 6, 7, 9, 11, 12, and 15.

Use of proceeds categories as per GBP:

- | | |
|--|---|
| <input checked="" type="checkbox"/> Renewable energy | <input checked="" type="checkbox"/> Energy efficiency |
| <input type="checkbox"/> Pollution prevention and control | <input checked="" type="checkbox"/> Environmentally sustainable management of living natural resources and land use |
| <input type="checkbox"/> Terrestrial and aquatic biodiversity conservation | <input checked="" type="checkbox"/> Clean transportation |
| <input checked="" type="checkbox"/> Sustainable water and wastewater management | <input type="checkbox"/> Climate change adaptation |
| <input checked="" type="checkbox"/> Eco-efficient and/or circular economy adapted products, production technologies and processes | <input checked="" type="checkbox"/> Green buildings |
| <input type="checkbox"/> Unknown at issuance but currently expected to conform with GBP categories, or other eligible areas not yet stated in GBPs | <input type="checkbox"/> Other <i>(please specify)</i> : |

If applicable please specify the environmental taxonomy, if other than GBPs:

2. PROCESS FOR PROJECT EVALUATION AND SELECTION

Overall comment on section *(if applicable)*:

PepsiCo's Sustainability Team will assess and determine eligible projects. The final approval will be followed by the recommendation of allocation of proceeds and provision of description of eligible projects to the PepsiCo's Finance department. This is in line with the market practice.

Evaluation and selection

- | | |
|--|--|
| <input checked="" type="checkbox"/> Credentials on the issuer's environmental sustainability objectives | <input checked="" type="checkbox"/> Documented process to determine that projects fit within defined categories |
| <input checked="" type="checkbox"/> Defined and transparent criteria for projects eligible for Green Bond proceeds | <input type="checkbox"/> Documented process to identify and manage potential ESG risks associated with the project |
| <input type="checkbox"/> Summary criteria for project evaluation and selection publicly available | <input type="checkbox"/> Other <i>(please specify)</i> : |

Information on Responsibilities and Accountability

- ☒ Evaluation / Selection criteria subject to external advice or verification
- ☐ In-house assessment
- ☐ Other (please specify):

3. MANAGEMENT OF PROCEEDS

Overall comment on section *(if applicable)*:

PepsiCo's Finance Department will track the net use of proceeds using its internal system. Pending allocation, the net proceeds may be temporarily invested in cash, cash equivalents, short-term investments, or used to repay other borrowings. This is in line with market practice.

Tracking of proceeds:

- ☒ Green Bond proceeds segregated or tracked by the issuer in an appropriate manner
- ☒ Disclosure of intended types of temporary investment instruments for unallocated proceeds
- ☐ Other *(please specify)*:

Additional disclosure:

- ☐ Allocations to future investments only
- ☒ Allocations to both existing and future investments
- ☐ Allocation to individual disbursements
- ☐ Allocation to a portfolio of disbursements
- ☐ Disclosure of portfolio balance of unallocated proceeds
- ☐ Other *(please specify)*:

4. REPORTING

Overall comment on section *(if applicable)*:

PepsiCo intends to publish an annual update on its website, until full allocation. It will include the amounts allocated on category level, additional descriptions of select eligible projects, as well as relevant impact metrics, where feasible. The reporting will be accompanied by management's assertion of the amount of the net proceeds that was allocated to eligible projects, and an examination report from an independent accountant on such assertion. Sustainalytics considers this in line with market best practice.

Use of proceeds reporting:

- ☐ Project-by-project
- ☒ On a project portfolio basis
- ☐ Linkage to individual bond(s)
- ☐ Other *(please specify)*:

Information reported:

- ☒ Allocated amounts ☐ Green Bond financed share of total investment

☐ Other (please specify):

Frequency:

- ☒ Annual ☐ Semi-annual
- ☐ Other (please specify):

Impact reporting:

- ☐ Project-by-project ☒ On a project portfolio basis
- ☐ Linkage to individual bond(s) ☐ Other (please specify):

Frequency:

- ☒ Annual ☐ Semi-annual
- ☐ Other (please specify):

Information reported (expected or ex-post):

- ☒ GHG Emissions / Savings ☐ Energy Savings
- ☒ Decrease in water use ☒ Other ESG indicators (please specify): the proportion of packaging with rPET and/or bio-based plastics; amount of compostable/biodegradable material purchased; GHG emissions reduction achieved; water use efficiency achieved from company-owned operations and agricultural supply chain, and amount of water replenished.

Means of Disclosure

- ☐ Information published in financial report ☐ Information published in sustainability report
- ☐ Information published in ad hoc documents ☒ Other (please specify): corporate website
- ☐ Reporting reviewed (if yes, please specify which parts of the reporting are subject to external review):

Where appropriate, please specify name and date of publication in the useful links section.

USEFUL LINKS (e.g. to review provider methodology or credentials, to issuer's documentation, etc.)

SPECIFY OTHER EXTERNAL REVIEWS AVAILABLE, IF APPROPRIATE

Type(s) of Review provided:

- | | |
|--|--|
| <input type="checkbox"/> Consultancy (incl. 2 nd opinion) | <input type="checkbox"/> Certification |
| <input type="checkbox"/> Verification / Audit | <input type="checkbox"/> Rating |
| <input type="checkbox"/> Other (<i>please specify</i>): | |

Review provider(s):

Date of publication:

ABOUT ROLE(S) OF INDEPENDENT REVIEW PROVIDERS AS DEFINED BY THE GBP

- i. Second Party Opinion: An institution with environmental expertise, that is independent from the issuer may issue a Second Party Opinion. The institution should be independent from the issuer's adviser for its Green Bond framework, or appropriate procedures, such as information barriers, will have been implemented within the institution to ensure the independence of the Second Party Opinion. It normally entails an assessment of the alignment with the Green Bond Principles. In particular, it can include an assessment of the issuer's overarching objectives, strategy, policy and/or processes relating to environmental sustainability, and an evaluation of the environmental features of the type of projects intended for the Use of Proceeds.
- ii. Verification: An issuer can obtain independent verification against a designated set of criteria, typically pertaining to business processes and/or environmental criteria. Verification may focus on alignment with internal or external standards or claims made by the issuer. Also, evaluation of the environmentally sustainable features of underlying assets may be termed verification and may reference external criteria. Assurance or attestation regarding an issuer's internal tracking method for use of proceeds, allocation of funds from Green Bond proceeds, statement of environmental impact or alignment of reporting with the GBP, may also be termed verification.
- iii. Certification: An issuer can have its Green Bond or associated Green Bond framework or Use of Proceeds certified against a recognised external green standard or label. A standard or label defines specific criteria, and alignment with such criteria is normally tested by qualified, accredited third parties, which may verify consistency with the certification criteria.
- iv. Green Bond Scoring/Rating: An issuer can have its Green Bond, associated Green Bond framework or a key feature such as Use of Proceeds evaluated or assessed by qualified third parties, such as specialised research providers or rating agencies, according to an established scoring/rating methodology. The output may include a focus on environmental performance data, the process relative to the GBP, or another benchmark, such as a 2-degree climate change scenario. Such scoring/rating is distinct from credit ratings, which may nonetheless reflect material environmental risks.

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