



## INDEPENDENT LIMITED ASSURANCE STATEMENT

**To: The Stakeholders of PepsiCo, Inc.**

### Introduction and objectives of work

Apex Companies, LLC (Apex) has been engaged by PepsiCo Inc. (PepsiCo) to provide limited assurance of its greenhouse gas (GHG) emissions, agricultural metrics and selected environmental and social metrics. This assurance statement applies to the Subject Matter included within the scope of work described below.

This information and its presentation are the sole responsibility of the management of PepsiCo. Our sole responsibility was to provide independent assurance on the accuracy of the Subject Matter.

### Scope of work

The scope of our work was limited to assurance over greenhouse gas (GHG) emissions, agricultural metrics and selected environmental and social metrics (the 'Subject Matter') for the period January 1, 2024 to December 31, 2024. For external reports and assurance statements, data are rounded to the nearest whole number unless otherwise noted.

### Data assured:

### Reporting Boundaries

The following are the boundaries used by PepsiCo for reporting GHG emissions covered by this verification:

- Operational control
- Worldwide operations
- Types of GHGs: CO<sub>2</sub>, CH<sub>4</sub>, N<sub>2</sub>O, HFCs

### GHG Metrics:

#### Scope 1 and 2:

- Direct GHG emissions (Scope 1) associated with manufacturing and warehouse operations, fleet operations, offices and distribution centers: **3,295,259 metric tons of CO<sub>2</sub> equivalent (tCO<sub>2</sub>e)**
- Indirect GHG emissions: (Scope 2 Location-based, reflecting average grid emissions) associated with manufacturing and warehouse operations, offices and distribution centers: **1,791,933 tCO<sub>2</sub>e**
- Indirect GHG emissions: (Scope 2 Market-based, reflecting Energy Attribute Certificates (EACs)) associated with manufacturing and warehouse operations, offices and distribution centers: **171,846 tCO<sub>2</sub>e**

- Achieve a 50% reduction in Scope 1 and 2 emissions by 2030 (measured versus a 2022 baseline)<sup>1</sup>: **18%**<sup>2</sup>

#### Energy:

- Global energy usage associated with manufacturing and warehouse operations, fleet operations, offices and distribution centers:
  - Total fuel usage: **16,891,963 MWh**
  - Total electricity usage: **4,408,503 MWh**
  - Total renewable electricity usage: **3,904,571 MWh**
  - Total renewable electricity purchased: **3,807,807 MWh**
  - Total United States of America (USA) electricity usage: **1,869,564 MWh**
  - Total USA electricity purchased: **1,794,791 MWh**
- Achieve 100% renewable electricity in company-owned operations by 2030<sup>3</sup> (i.e., manufacturing and warehouse operations, fleet operations, offices and distribution centers):
  - Total renewable electricity usage: **89%**<sup>4</sup>
  - Total renewable electricity purchased: **90%**
- Total Energy Attribute Certificates (EACs) allocated to PepsiCo associated with electric power generation from sourced renewable electricity in the USA: **1,794,791 MWh**
  - USA sourced electricity usage covered by EACs: **100%**

---

<sup>1</sup> Goal tracks Scope 1 and 2 emissions consistent with the Greenhouse Gas Protocol. See [Calculation Methodology](#) for details

<sup>2</sup> Refined goal (including 2022 baseline) announced on May 22, 2025. Past performance against the baseline calculated retroactively. For more information, see [Calculation Methodology](#)

<sup>3</sup> In working to achieve this goal, PepsiCo uses a diversified portfolio of solutions, including purchase of unbundled energy attribute certificates

<sup>4</sup> Former ambition became a pep+ goal in 2025. 2024 performance calculated retroactively. For more information, see [Calculation Methodology](#)

**Agricultural metrics:**

- Spread the adoption of regenerative agriculture, restorative, or protective practices across 10 million acres of land supporting the growth of key crops and ingredients by 2030<sup>1</sup>:
  - **More than 3.5 million acres**<sup>2</sup>
- Sustainably source 90% of key ingredients and progress volumes (10% or less) that face systemic barriers towards being sustainably sourced in accordance with PepsiCo's guidelines, by 2030<sup>3</sup>:
  - Sustainably sourced key ingredients: **~66%**<sup>2</sup>
  - Progress volumes on key ingredients that face systemic barriers (Engaged): **~1%**<sup>2</sup>

**Environmental metrics:****Water:**

- Water withdrawal (usage) associated with company-owned manufacturing operations:
  - Total water withdrawal in high water-risk areas: **17,287,432 kiloliters**
  - Total water withdrawal: **73,680,810 kiloliters**
- Reach average water-use efficiency ratios of 1.4 liters/liter of production in beverages sites and 1.7 liters/kilogram of production in convenient foods sites for 100% of high water-risk PepsiCo and franchise bottler manufacturing facilities by 2030<sup>4</sup>:
  - High water-risk beverages sites (liters/liter): **1.7**<sup>5</sup>
  - High water-risk convenient foods sites (liters/kg): **2.2**<sup>5</sup>

---

<sup>1</sup> See PepsiCo's [Regenerative Agriculture Guidelines](#) for additional information, including details on key crops and regeneration, restoration and protection criteria. Results reflect total acreage meeting these criteria within the annual reporting period

<sup>2</sup> Refined goal announced on May 22, 2025. 2024 performance calculated retroactively. For more information, see [Calculation Methodology](#)

<sup>3</sup> Sustainably sourced refers to in-scope ingredient volumes that meet the established criteria outlined in PepsiCo's [Sustainable Sourcing Guidelines](#). Sustainable Sourcing practices can help manage risks, but challenges like deforestation or social issues can persist in some regions

<sup>4</sup> Contract manufacturers and co-packers are excluded. Our progress toward this goal relies in part on water-use efficiency at high water-risk franchise bottler manufacturing facilities. PepsiCo is working to integrate their data into future calculations

<sup>5</sup> Refined goal announced on May 22, 2025. 2024 performance calculated. For more information, see [Calculation Methodology](#). Reported performance does not include data from franchise bottler manufacturing facilities but work is underway to obtain it for inclusion in future years

- Water Replenishment:
  - Achieve 100% water replenishment at company-owned manufacturing facilities designated in high water-risk areas by 2025<sup>1</sup>: **86%**
  - Replenish back into the watershed 100% of the water used in high water-risk PepsiCo and franchise bottler manufacturing facilities by 2030<sup>2</sup>: **75%**<sup>3</sup>
  - Global water replenished toward 2025 target: **12,367,822 kiloliters**
  - Global water replenished toward 2030 target: **13,003,402 kiloliters**
  - Total project replenishment in 2024: **24,055,685 kiloliters**
- Adopting the Alliance for Water Stewardship (AWS) Standard in high water-risk manufacturing facilities by 2025:
  - Sites completed adoption of standard: **73**
  - Sites in process of adopting standard: **28**

---

<sup>1</sup> World Resource Institute's Aqueduct water stress assessment tool is used to reconfirm high water-risk areas every three years. We continue to measure progress against our original 2025 goal and our extended 2030 goal. In 2022, an updated water risk assessment identified additional company-owned high water-risk facilities, which are in-scope for calculating progress against our 2030 goal only. The reported replenishment volumes for company-owned facilities are currently being capped at 100% per location. Once we achieve 100% for each company-owned location, we will start to then report progress of more than 100% replenishment at sites as applicable

<sup>2</sup> Contract manufacturers and co-packers are excluded. Our progress toward this goal relies in part on replenishment associated with high water-risk franchise bottler manufacturing facilities. We are working to integrate their data into future calculations

<sup>3</sup> Refined 2030 goal announced on May 22, 2025. 2024 performance calculated retroactively. We continue to measure progress against our original 2025 goal and our extended 2030 goal. In addition to internal site-specific data, World Resource Institute's Aqueduct water stress assessment tool is used to reconfirm high water-risk areas every three years. In 2022, an updated water risk assessment identified additional company-owned high water-risk facilities, which are in-scope for calculating progress against our 2030 goal only. Reported performance does not include data from franchise bottler manufacturing facilities but work is underway to obtain it for inclusion in future years. For more information, see [Calculation Methodology](#)

**Packaging:**

- Primary plastic packaging in PepsiCo's key packaging markets:
  - Achieve an average of 2% year-over-year reduction in absolute tonnage of virgin plastics through 2030<sup>1</sup>: **5%**<sup>2</sup>
  - Use 40% or greater recycled content in plastic packaging by 2035 or sooner<sup>1</sup>: **15%**<sup>2</sup>
- Primary and secondary packaging in PepsiCo's key packaging markets:
  - Achieve 97% or greater reusable, recyclable, or compostable (RRC) packaging by design by 2030 in our primary and secondary packaging in our key packaging markets<sup>3</sup>: **93%**<sup>2</sup>

**Production:**

- Production associated with company-owned manufacturing operations:
  - Convenient Foods:
    - Total production in high water-risk areas: **3,781,339,064 kilograms**
    - Total production: **9,323,483,716 kilograms**
  - Beverages:
    - Total production in high water-risk areas: **5,222,942 kiloliters**
    - Total production: **20,756,077 kiloliters**

**Social Metrics:**

- Reach 100 million people with safe water access<sup>4</sup>: **More than 96 million**<sup>5</sup>
- Partner with communities to advance food security and make nutritious food accessible to 50 million people<sup>6</sup>: **More than 62 million**

Data and information supporting Scope 1 and Scope 2 GHG emissions, energy, water, packaging and production were primarily historical in nature. Data and information supporting agriculture and social metrics, were in many cases historical in nature, though in some cases estimated.

---

<sup>1</sup> Goal tracks primary plastic packaging in PepsiCo's key packaging markets. This scope represents more than 80% of PepsiCo's 2024 global plastic packaging footprint (by weight).

<sup>2</sup> Refined goal announced on May 22, 2025. 2024 performance calculated retroactively. For more information, see [Calculation Methodology](#)

<sup>3</sup> Goal tracks primary and secondary packaging in PepsiCo's key packaging markets. This scope represents more than 85% of PepsiCo's 2024 global packaging footprint (by weight). Reusable packaging must also be designed to be recyclable or compostable

<sup>4</sup> Metric counts the cumulative number of people provided with access to safe water since 2010

<sup>5</sup> Cumulative results include current year performance and performance in prior years which were adjusted to reflect the availability of improved data

<sup>6</sup> Results represent the cumulative sum of people reached with nutritious food per annual reporting period through programs funded through charitable contributions, as well as through commercial efforts that are intended to provide nutritious food. For more information, see [Calculation Methodology](#)

**Reporting Criteria**

The Subject Matter needs to be read and understood together with the World Resources Institute (WRI)/World Business Council for Sustainable Development (WBCSD) Greenhouse Gas (GHG) Protocol Corporate Accounting and Reporting Standard (Scope 1 and 2)

**Limitations and Exclusions**

Excluded from the scope of our work is any assurance of information relating to:

- Activities outside the defined assurance period;
- Material outside the scope of work.

This limited assurance engagement relies on a risk based selected sample of the GHG emissions data and the associated limitations that this entails. The reliability of the reported data is dependent on the accuracy of metering and other production measurement arrangements employed at site level, not addressed as part of this assurance. This independent statement should not be relied upon to detect all errors, omissions or misstatements that may exist.

**Responsibilities**

This preparation and presentation of the Subject Matter are the sole responsibility of the management of PepsiCo.

Apex was not involved in the development of the Subject Matter or Reporting Criteria. Our responsibilities were to:

- obtain limited assurance about whether the Subject Matter has been prepared in accordance with the Reporting Criteria;
- form an independent conclusion based on the assurance procedures performed and evidence obtained; and
- report our conclusions to the Stakeholders of PepsiCo.

**Assessment Standards**

- We performed our work in accordance with Apex's standard procedures and guidelines for external Assurance of Sustainability Reports and International Standard on Assurance Engagements (ISAE) 3000 Revised, Assurance Engagements Other than Audits or Reviews of Historical Financial Information (effective for assurance reports dated on or after Dec. 15, 2015), issued by the International Auditing and Assurance Standards Board. This assurance used a materiality threshold of  $\pm 5\%$  for aggregate errors in sampled data for the above indicators.

**Summary of Work Performed**

As part of our independent assurance, our work included:

1. Interviews with relevant personnel of PepsiCo;
2. Reviewing documentary evidence provided by PepsiCo;
3. Reviewing documentary evidence, data and information systems and methodology for collection, aggregation, analysis and review of information used to determine selected environmental, social, and agricultural sustainability metrics data and information via web-based meetings with representatives of PepsiCo's Global Sustainability Office and twelve (12) PepsiCo global locations including Amreya, Egypt; Beloit, Wisconsin, United States



(US); Carrigaline, Ireland; Fábrica Petrolina, Brazil; Isando, South Africa; Izmir, Turkey; Leycroft Road, United Kingdom; Oakland Gatorade, California, US; Riverside, California, US; Songjiang, China; Suyana, Ecuador; and Wiri, New Zealand; and

4. Review of PepsiCo's data and information systems and methodology for collection, aggregation, analysis and review of information used to determine the Subject Matter; and
5. Audit of sample of data used by PepsiCo to determine the Subject Matter.

## Conclusion

On the basis of our methodology and the activities described above:

- Nothing has come to our attention to indicate that the Subject Matter is not fairly stated in all material respects; and
- It is our opinion that PepsiCo has established appropriate systems for the collection, aggregation and analysis of quantitative data for determination of the GHG emissions for the stated period and boundaries.

## Statement of Independence, Integrity and Competence

Apex is an independent professional services company that specializes in Health, Safety, Social and Environmental management services including assurance with over 30 years history in providing these services.

Apex has implemented a Code of Ethics across the business to maintain high ethical standards among staff in their day-to-day business activities.

No member of the assurance team has a business relationship with PepsiCo, its Directors or Managers beyond that required of this assignment. We have conducted this assurance independently, and there has been no conflict of interest.

The assurance team has extensive experience in conducting assurance over environmental, social, ethical and health and safety information, systems and processes, and has over 20 years combined experience in this field and an excellent understanding of Apex's standard methodology for the verification of greenhouse gas emissions data.

## Attestation

Sincerely,

A handwritten signature in blue ink, appearing to read 'Scott Johnston'.

Scott Johnston, Lead Assuror  
ESG Principal Consultant  
Apex Companies, LLC  
Doral, Florida

A handwritten signature in blue ink, appearing to read 'Trevor Donaghu'.

Trevor Donaghu, Technical Reviewer  
ESG Director  
Apex Companies, LLC  
Pleasant Hill, California

August 27, 2025

*This assurance opinion declaration, including the opinion expressed herein, is provided to PepsiCo, Inc. and is solely for the benefit of PepsiCo, Inc. in accordance with the terms of our agreement. We consent to the release of this declaration by you to the public and other organizations in order to satisfy the terms of public disclosure requirements but without accepting or assuming any responsibility or liability on our part to any other party who may have access to this declaration.*