

Key Industry Findings

The following section presents industry-specific highlights and areas for improvement related to the six Corporate Expectations for Valuing Water. Examples of leading company practices are provided throughout. Companies should leverage these insights in conjunction with the 12 key findings to refine and enhance their corporate water stewardship strategies. By evaluating both strengths and weaknesses within their industry, companies can pinpoint the steps needed to address a range of water-related issues as specified in the six Corporate Expectations for Valuing Water. The methodology and downloadable spreadsheet serve as invaluable tools for a deeper dive into individual company performance and the identification of areas demanding further action. Using these resources, companies can not only drive impactful change but also lead the way in responsible and sustainable water management practices, benefiting both their businesses and the global community.

Water Risk in the Beverage Industry

The beverage industry is characterized by its ubiquitous need for water at virtually every stage of production. From the cultivation of ingredients, which involve water intensive on-farm practices, to the manufacturing and processing phases, which include grain cultivation to wet milling and bottling, water is an indispensable resource. However, the industry's reliance on water can also lead to complex water-related challenges, including groundwater depletion, water stress, and environmental issues, such as eutrophication and ecotoxicity resulting from pesticide use and waste disposal. Research from the Water Footprint Network shows that a mere 16.9 ounces of soda requires 18.5 gallons of water to produce, while brewing 8.5 ounces of beer requires 19.5 gallons of water. Moreover, the beverage industry's activities result in pollutant discharges from point and non-point sources across the value chain, posing threats not only to human health but also to the fragile ecosystems we depend on.

Overall Industry Performance

Notable Highlights

- Context-based water quantity targets: Among beverage companies, 59% have established context-based targets for managing water use in their direct operations. These targets often involve "water balancing," "water positive," or "water replenishment" commitments. These approaches offer distinct environmental advantages as they extend beyond mere reductions in water withdrawals. Instead, they prioritize the replenishment of water into the local watersheds, minimizing adverse impacts on ecosystem health and hydrological balance.
- Board oversight of water risks: Most beverage companies publicly recognize the significance of water-related risks and opportunities, factoring these topics into business planning activities and financial decision-making. The most common water risks considered include water scarcity, drought, declining groundwater levels, and deteriorating water quality. Consequently, companies are prioritizing efforts to address these risks by improving water efficiency through investments in technology, adoption of water reuse and recycling practices, and improving agricultural practices within their supplier network.
- **Sustainable sourcing commitments:** Sustainable sourcing aims to select resources and raw materials in a manner that minimizes habitat destruction, promotes sustainable production, and lessens the environmental footprint of the supply chain. Over half, 59%, of beverage companies have set time-bound commitments aimed at sourcing essential commodities and raw materials sustainably.

Areas for Improvement

- Water quality targets largely missing: Only 24% of companies assessed have set targets for reducing their impact on water quality, the majority of which include wastewater treatment within direct operations. None of the companies have set water quality targets for their supply chain, which is significant because a substantial portion of potential pollution occurs during agricultural production. Additionally, while some companies acknowledge the positive impacts that regenerative agriculture, land conservation, and water replenishment projects can have on water quality, there is a notable absence of specific quantifiable metrics to monitor and measure improvements in water quality.
- **Supply chain disclosure is lacking:** While 94% of beverage companies have disclosed the quantities of water they withdraw and consume in their direct operations; the majority have not extended this disclosure to cover their supply chains. As a result, these beverage companies miss the opportunity to identify potential water risks, inefficiencies, and opportunities for water stewardship. Nonetheless, some companies are working towards tracking their water use by leveraging global data sets, supplier provided data, and modeling techniques.

• WASH targets and policies missing: Many beverage companies have not given due priority to WASH initiatives as only four have established specific time-bound targets related to access for employees and communities. Furthermore, only eight companies have a publicly available corporate policy explicitly affirming the human right to water and sanitation. Neglecting WASH issues can lead to reputational risks and operational disruptions, especially in regions where water scarcity is prevalent. Having specific targets and policies in place helps companies proactively address such risks.

Detailed Industry Performance

Across the six Corporate Expectations, beverage companies performed best on the **Water Quantity** and **Board Oversight** Expectations, with a median score of 10 in each corporate expectation (out of 15 total available points) and worst on the **Public Policy Engagement** Expectation, with a median score of two (Figure 1). Of the 17 beverage companies assessed, the average industry score was **33 out of 90** total points (Figure 2).

Water Quantity Water Quality **Ecosystem Protection** Access to Water and Sanitation **Board Oversight Public Policy** Engagement 0 1 2 3 4 5 6 7 8 10 11 12 13 14 15 **▲** Max **Total Points** whisker outlier median **▲** max

Figure 1 · Beverage Industry Performance across the Corporate Expectations

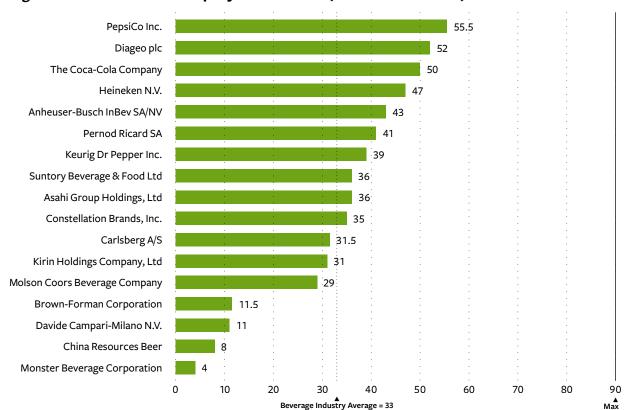


Figure 2 · Breakdown of Company Performance (Total Points Scored)

Detailed Company Performance

Water Quantity

Of the beverage companies assessed, while 88% (15 out of 17) have set water quantity-related targets to reduce their impact on water availability, 59% (10 out of 17) have implemented risk-differentiated or context-based targets. These context-based targets include commitments for "water balancing," "water positive," "water intensity," or "water replenishment." For example, **Keurig Dr Pepper** has committed to achieve net positive water impact by 2050, meaning the company's watershed returns will exceed its withdrawals. Additionally, the company has committed to improve its water use efficiency by 20% in operations by 2025 and replenish 100% of water used for its beverages in its highest water risk operating communities by 2030. As another example, **Carlsberg** has established context specific reduction targets aimed at reducing water usage by 50% in its breweries located in high water risk regions by 2030. The company has also set a goal to replenish 100% of the water it consumes in these high-risk areas by the year 2030.

Of the 10 companies with contextual targets, nine have set targets for direct operations (Anheuser-Busch, Brown-Forman, Carlsberg, Diageo, Heineken, Keurig, Molson Coors, Pernod Ricard, and Coca-Cola). Notably, PepsiCo is the only beverage company assessed with context specific targets for sustainable water use encompassing both its direct operations and select portions of its supply chain. The company has a net positive water goal, entailing a commitment to not only reduce absolute water use but also replenish more than 100% of the water utilized at

company-owned and third-party facilities situated in high water risk regions, ultimately returning it to the local watershed. Furthermore, by 2025, it aims to enhance operational water-use efficiency by 15%, and in high water risk areas by 25%. The company has also set a goal to improve the water-use efficiency within its agricultural supply chain by 15% in high water risk sourcing regions by the same year, primarily in regions associated with potato and corn sourcing.

A significant number of beverage companies, 88% (15 out of 17), are disclosing how they plan to achieve their water use targets. For instance, to increase its water use efficiency AB InBev has installed reactors and filtration systems at its breweries to capture and reuse water for various industrial processes, which has achieved substantial water savings, estimated at over 71 million gallons annually. Similarly, PepsiCo is piloting technologies for water efficiency within its potato chip manufacturing processes and has created 72 demonstration farms around the world to test water-use efficiency best practices and capacity building. The company has also adopted the Alliance for Water Stewardship (AWS) standard in regions with high water risk and forged partnerships with franchise bottlers and third-party manufacturers to elevate water efficiency standards within its supply chain manufacturing facilities.

Water Quality

Among beverage companies, only 24% (four out of 17) have established water quality-related targets for their direct operations, none of which are context based or include the supply chain.

However, some companies have applied their targets to all operational discharges. For example, **PepsiCo** has set a target to ensure that by 2025 all wastewater generated as a result of its operations adheres to high environmental protection standards as outlined in the company's Discharge of Process Wastewater Standard. Its standard is aligned with the World Bank's International Finance Council and Business for Social

Responsibility's Sustainable Water Group criteria.

Despite 76% of companies not having specific water quality-related targets, some companies recognize the positive impacts on water quality that result from water stewardship projects centered on water restoration.

For instance, Constellation
Brands has committed to
restore approximately 1.1
billion gallons (equivalent to



its water withdrawals) to local watersheds with the aim to achieve "improved" water quality as part of the goal. Nonetheless, the company does not report any associated quantitative metrics that will be used to monitor and measure the actual improvements.

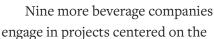
For disclosures of volumes of wastewater discharge, 82% of the companies (14 out of 17) have disclosed aggregated wastewater discharge data for all of their operations. However, most have not disclosed this information within their supply chain. Additionally, 71% (12 out of 17) have provided information regarding the pollutants of concern found in their wastewater discharges. Among the pollutants commonly reported by the beverage companies are pesticides and fertilizers, as well as phthalates and bisphenol A (BPA). Some companies have included details about the potential water quality repercussions associated with these pollutants, including issues like sediment loading, groundwater leaching, and potential impacts on drinking water for communities.

Ecosystem Protection

Targets

Out of 17 beverage companies assessed, only Constellation Brands, KDP, and PepsiCo have established specific targets for ecosystem protection and restoration and participating in projects aimed at enhancing freshwater ecosystems. For instance, Constellation Brands' Nava Brewery,

situated in Coahuila, Mexico, operates within a basin that has been grappling with water availability challenges, particularly since a devastating fire occurred in 2019. The company has initiated a collaboration with Pronatura Noreste, a third-party organization focused on environmental protection, to reforest 4,943 acres of land over a span of 10 years to restore the Serranía del Burro Mountain range and replenish the natural aquifer in the region.





preservation and restoration of ecosystems critical to freshwater supplies and aquatic biodiversity, even though they have not formally set or disclosed overarching goals in this regard.

Sustainable Sourcing

Sourcing decisions and policies carry significant implications for ecosystem protection, as alterations in land use can substantially modify or destroy existing ecosystems. Over half, 59%, of companies (10 out of 17) have set sustainable sourcing commitments to protect ecosystem health. These commitments frequently revolve around the attainment of third-party certifications or adherence to established standards to ensure the procurement of commodities in a more sustainable way. These include certifications from the Rainforest Alliance, the Forest Stewardship Council (FSC), Rountable on Sustainable Palm Oil (RSPO), and the Sustainable Agriculture Initiative (SAI).

For example, in 2021 **KDP** announced its goal to responsibly source not only its coffee and packaging materials, but also 100% of its key inputs, including cocoa, apples, apple juice concentrate, and corn. The company secures certifications for its raw materials from third-party certification programs, including Fair Trade USA, Fairtrade International, Rainforest Alliance, and UTZ. Each of these certification programs mandates the adoption of water-smart agricultural practices, emphasizing the importance of water conscious farming methods. Additionally, **Carlsberg** has committed that 30% of its raw materials will be grown using regenerative agricultural practices and be sustainably sourced by 2030, with the ultimate goal of achieving 100% by 2040.

Overall, 71% of companies (12 out of 17) are engaging their suppliers through field training, pilot testing, certification, and data analysis to mitigate ecosystem impacts and help build a more sustainable and resilient agricultural supply chain. **Kirin**, for instance, provides support for farmers to acquire certification for sustainable agriculture, such as the Rainforest Alliance Certification for tea farms in Sri Lanka and coffee farms in Vietnam, along with training its growers on how to mitigate the impacts of heavy rainfall, drought, and other natural disasters caused by climate change.

Access to Water and Sanitation

82% of beverage companies (14 out of 17) have policies in place to ensure employee access to

WASH. Coca-Cola, for instance, codifies the provision of ensuring fully functioning and well-managed WASH services to all employees in its Company Operating Requirements. Additionally, the company is a member of the WASH4WORK platform and uses its Facility Water Vulnerability Assessment (a site-level internal proprietary tool) to assess potential risks related to WASH at its facilities at the watershed level. Another example is **Carlsberg** which works to ensure employee WASH by requiring

all brewery locations to annually report and track implementation of WASH services. While the presence of a policy is a fundamental step in demonstrating a company's awareness of WASH, targets offer a more tangible and quantifiable means to transform that policy into practical results. Of the companies assessed, four (Brown-Forman, Diageo, PepsiCo, and Suntory Beverage) have WASH-related targets for employees and communities. For instance,

PepsiCo has committed to WASH in the Workplace pledge and is striving to



ensure appropriate access to WASH for 100% of its manufacturing employees by 2025. In addition, the company is working to expand safe access to water for 100 million people by 2030.

In terms of ensuring WASH in the supply chain, 59% (10 out of 17) have incorporated requirements related to access to water and sanitation into their respective supplier codes of conduct. However, none of the companies assessed have specific WASH targets for the supply chain,

highlighting an area where additional focus and action are warranted. Beyond the supplier code of conduct, the analysis reveals there is limited reporting of companies' engagement with supply chain partners to ensure improved access to water and sanitation services.

In the evaluation of corporate efforts to promote WASH in broader communities, 59% of companies (10 out of 17) are actively involved in enhancing WASH services within the communities where they operate. Pernod Ricard provides water access services through Water ATMs, offering subsidized drinking water to communities in close proximity to its production facilities and vital supply chain networks. Furthermore, Coca-Cola has launched "Aliados por el Agua," a program across 18 countries in Latin America to mobilize collective action across the public and private sector to improve access to WASH services for water-stressed communities and key watersheds with the aim to benefit 2 million people by 2030.

Board Oversight

Within the beverage industry, 76% of companies (13 out of 17) brief their board on water management issues at least once annually and have sustainability-linked governance practices tied

to water. For example, Coca-Cola's board of director's ESG and public policy committee assumes the highest level of responsibility for addressing water-related issues. To reinforce board oversight of water and drive action on its sustainability goals, the board made the strategic decision in 2021 to integrate its ESG performance measures into its annual and long-term incentive programs for executives.

In addition to board oversight, across the industry 59% of companies (10 out of 17) consider water risks



and opportunities, integrating them into strategic planning and financial decisions for both direct operations and supply chains. Suntory Beverage, for example, considers water stewardship as a means to enhance its brand value and has taken action accordingly. In collaboration with its parent company, Suntory Group, the company is involved in nurturing Suntory Natural Water Sanctuaries, essentially forested areas that play a crucial role in replenishing twice the amount of water used by its factories in Japan. The company anticipates that these actions could lead to a 1% boost in sales in Japan, equivalent to a value of \$48.4 million, attributable to the enhanced brand value associated with its commitment to water stewardship in the region.

Within the supply chain, efforts to enhance agricultural practices and bolster supply chain resilience have frequently been initiated to mitigate water-related risks. In fact, 13 beverage companies have identified opportunities for improving water efficiency as a strategic approach to addressing risks within their operations and/or supply chain. For instance, Diageo has recognized

the significance of water resiliency and efficiency in its Nairobi, Kenya operation, where a projected 60% water demand deficit is anticipated in the next five years. To capitalize on the opportunity to reduce water costs, reduce dependence on water, and promote resilience to future regulatory changes, the company has implemented recovery and reuse technologies. This has not only halved water withdrawals but is also expected to yield substantial cost savings, ranging from \$6.1 million to \$30.5 million over the next five years. Additionally, **Molson Coors** is funding research and development focused on non-GMO barley cultivars and has integrated it into the company's financial planning

process as it is expected that the non-GMO cultivars will increase yields while enhancing water efficiency.

Public Policy Engagement

Nearly half of the beverage companies assessed, 47%, (eight out of 17), are actively engaged in advocacy efforts around water-related issues. Among these companies, three (Diageo, Heineken, and PepsiCo) are focusing their advocacy initiatives in areas of high water stress. This group includes



companies that are advocating as signatories or active participants through coalitions and policy-oriented bodies, focused on advancing corporate water stewardship and galvanizing collective action. Examples of these platforms include the CEO Water Mandate, the 2030 Water Resources Group, and Beverage Industry Environmental Roundtable (BIER).

An illustrative example of advocacy efforts can be found with **Diageo**, which is a founding signatory of the Glasgow Declaration for Fair Water Footprints for climate-resilience. This declaration calls on businesses encompassing their operations, services, and supply chains to show their commitment to achieving a fair water footprint by 2030. Additionally, the company has worked to advance efforts for more equitable access to water by providing financial support for the "Gender Guidance for WASH", in collaboration with WaterAid and **Coca-Cola**. This initiative is designed to provide businesses and NGOs with the knowledge and tools necessary to ensure that women have equal access to and control over the provisions of WASH within their projects.

Another example is **Heineken**, which in collaboration with six other multinational companies, local government, NGOs, and communities, formed the Indonesia Water Coalition. The coalition is dedicated to advancing water security in Indonesia, with a specific focus on accelerating the Brantas and Cisadane Rivers' watersheds. Furthermore, in Egypt, **Heineken** is partnering with GIZ (Deutsche Gesellschaft für Internationale Zusammenarbeit) and the national government to strengthen water infrastructure. The program targets fixing leaks throughout public piping infrastructure and is already estimated to save 158.5 million gallons of water lost annually.

Beverage companies are also contributing to the shared body of knowledge around water by expanding the adoption of best practices and fostering greater alignment among peers in the realm

of corporate water stewardship. For example, Heineken is working with BIER to establish industry aligned 'Water Circularity Guidance,' which defines clear examples of water circularity, including the recovery, recycling, and reuse of water. Diageo, Kirin, PepsiCo, Pernod Ricard, Suntory Holdings Limited (parent of Suntory Beverage), and Coca-Cola are part of the Corporate Engagement Group for water for the Science Based Targets Network, which is piloting draft methodology for setting science-based targets for water. Additionally, AB InBev, Asahi, Diageo, Kirin, and Suntory Holdings Limited (parent of Suntory Beverage) are members of the Taskforce on Nature-related Financial Disclosures Forum, participating in a pilot program to support the development of a framework for financial disclosure of nature-related information, including water.

In terms of lobbying, only 18% beverage companies (3 out of 17) (Diageo, PepsiCo, and Coca-Cola) have taken measures to ensure their lobbying activities are aligned with their respective water policies and initiatives. They do so by having a commitment or position statement and establishing a process to address any misalignment. Diageo has committed to integrating water issues into public policy planning in its water strategy, with a focus on improving water governance and management. The company states that it will support water-related public policy, particularly in water-stressed regions where it conducts its operations.