NON-ALCOHOLIC BEVERAGES
Research Brief

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NON-ALCOHOLIC BEVERAGES

Research Brief

SASB’s Industry Brief provides evidence for the disclosure topics in the Non-Alcoholic Beverages industry. The brief opens with a summary of the industry, including relevant legislative and regulatory trends and sustainability risks and opportunities. Following this, evidence for each disclosure topic (in the categories of Environment, Social Capital, Human Capital, Business Model and Innovation, and Leadership and Governance) is presented. SASB’s Industry Brief can be used to understand the data underlying SASB Sustainability Accounting Standards. For accounting metrics and disclosure guidance, please see SASB’s Sustainability Accounting Standards. For information about the legal basis for SASB and SASB’s standards development process, please see the Conceptual Framework.

SASB identifies the minimum set of disclosure topics likely to constitute material information for companies within a given industry. However, the final determination of materiality is the onus of the company.

Related Documents

- Non-Alcoholic Beverages Industry Sustainability Accounting Standards
- Industry Working Group Participants
- SASB Conceptual Framework

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INTRODUCTION

Products from the Non-Alcoholic Beverages industry have long been a symbol of growth and prosperity. As consumer demands continue to shift to low-calorie options and new markets develop, companies in this industry are adapting and developing healthier alternatives. These companies will continue to be global brands that are integrated into the lifestyles of consumers around the world.

Emerging markets and shifting consumer demands present unique growth opportunities for the industry. However, the industry is likely to face increasing regulation because of the concern over the health implications of many of its products and over how these products are marketed and labeled. The industry’s reliance on energy, water, and raw ingredients and materials has led to increased pressure, given the potential for resource scarcity and rising costs.

Management (or mismanagement) of material sustainability issues, therefore, has the potential to affect company valuation through impacts on profits, assets, liabilities, and the cost of capital.

Investors will obtain a more holistic and comparable view of performance with Non-Alcoholic Beverages companies reporting metrics on the material sustainability risks and opportunities that could affect value in the near- and long-term in their regulatory filings. This includes both positive and negative externalities as well as the non-financial forms of capital that the industry relies on for value creation.

Specifically, performance on the following sustainability issues will drive competitiveness in the Non-Alcoholic Beverages industry:

- Reducing energy consumption and improving efficiency in operations and the distribution fleet;
- Managing water use, particularly in areas experiencing scarcity;
- Providing products that meet consumer demands for healthy alternatives;
- Ensuring that labeling and marketing requirements are met and practices are not deceptive;
- Improving packaging lifecycle management; and
- Managing environmental and social risks associated with multilayered supply chains.

Industry Summary

The Non-Alcoholic Beverages industry produces and bottles a range of beverages, including carbonated soft drinks, teas, juices, bottled water, and coffee.¹

1 Industry composition is based on the mapping of the Sustainable Industry Classification System (SICS™) to the Bloomberg Industry Classification System (BICS). A list of representative companies appears in Appendix I.
Companies listed on global exchanges and traded over the counter generated more than $278 billion in global revenue in 2014. Representative companies for the Non-Alcoholic Beverages industry include the Coca-Cola Company, PepsiCo, Fomento Económico Mexicano (FEMSA), Dr Pepper Snapple Group, and Keurig Green Mountain. Together these five companies generated around 17, 8, 4, 3, and 2 percent of industry revenues, respectively, or 34 percent combined. Large companies in this industry operate globally and generate a significant amount of their revenue outside the U.S. For example, the Coca-Cola Company generated more than 57 percent of its revenue outside North America in 2014, with Asia Pacific being the second largest source of revenue. Companies generate revenue through either a targeted portfolio or a broad range of beverage products, including various carbonated soft drinks, syrup concentrates, juices, energy and sport drinks, teas, coffee, and water products.

In the U.S., ready-to-drink tea and juice production generates more than $21 billion in annual revenue, followed by soft drinks, with $20.4 billion; at-home coffee production, with $11.1 billion; and bottled water, with more than $8.5 billion. The primary buyers of various juice and soft drink beverages are grocery stores, convenience stores and gas stations, and vending machine operators. According to one estimate of total juice product sales in the U.S., for example, convenience stores, grocery stores, and vending machines represented 45.2, 32.5, and 10.3 percent, respectively.

Companies such as the Coca-Cola Company and PepsiCo have varying degrees of downstream integration into bottling operations and retail distribution of their products. Typically, large operators sell concentrate and syrups to independent bottlers or bottling partners that combine the concentrate with sugar or other sweeteners and carbonated water to develop the finished product. However, both the Coca-Cola Company and PepsiCo are vertically integrated operations that bottle, sell, and distribute the finished products. Smaller beverage companies, including Dr Pepper Snapple Group, may rely on partnerships with larger competitors and independent bottlers to gain access to more distribution channels than they could otherwise achieve on their own. Typically, syrup-concentrate operations generate better gross profit margins than finished-product bottling operations but have a lower overall net operating revenue.

The global soft drink segment is largely concentrated; the top U.S.-headquartered companies, the Coca-Cola Company, Pepsi Co., and Dr Pepper Snapple Group, maintain around 48, 20, and 4 percent of the industry market share, respectively. These companies compete aggressively for market share, and often introduce similar products to maintain similar product portfolios. In recent years, large beverage companies have begun to consolidate operations in some markets by vertically integrating with bottlers to better control production and distribution. For example, in 2010, the Coca-Cola Company purchased the majority of its largest bottler, Coca-Cola Enterprises, in a deal worth nearly $12.2 billion. Through the acquisition, the company gained access to bottling operations overseas, allowing for better distribution control in Norway, Sweden, and Germany. The deal also gave the Coca-Cola Company control over 90 percent of its North America bottling operations. PepsiCo has pursued a similar strategy, acquiring Pepsi Bottling Group in a deal worth $7.8 billion. The acquisition, according to PepsiCo CEO Indra Nooyi, allows the company to “accelerate revenue growth and be more agile and flexible…”
as the industry moves from a heavy reliance on carbonated soft drinks into water, juice, teas, and other noncarbonated drinks. 16

This highlights a consumer trend toward healthier choices and a decreasing demand for high-sugar and high-calorie soft drinks. The largest contributing factor to this shift, and to the decline in soft drink sales, is the fact that more than one-third of Americans are considered obese, which adds an additional $147 billion to health care costs every year. 17 This trend is expected to continue and to increase in the future, driving growth for new segments like juice, tea, and water beverages. 18 In addition to changing consumer preference, soft drink manufacturers face an increasingly challenging operating environment as government programs to promote healthy alternatives increase.

As a result, non-alcoholic beverages companies with a historic focus on soft drinks have launched new lower-calorie alternatives to combat falling demand in their traditional product segments. For example, the Coca-Cola Company launched Coca-Cola Life, which is sweetened with stevia, a natural, low-calorie sweetener, and contains 50 percent less sugar than regular Coke. 19 PepsiCo also launched a similar low-calorie product, Pepsi Next, which contains 60 percent less sugar than regular Pepsi Cola. 20

To compensate for a decreasing demand for carbonated soft drinks, companies are also diversifying their portfolios into new and growing segments of the non-alcoholic beverage market. For example, the energy drink market has seen rapid growth in previous years. In 2014, the global energy drinks segment, led by Red Bull and Monster Energy, grew to nearly $49.9 billion, a 5 percent increase from 2013. 21 To capture growth in this market segment, companies continue to launch new products. In 2013, Pepsi Co. introduced Kickstart, a new breakfast energy drink that contains juice, vitamins, and caffeine, in an effort to drive further growth. 22

Companies are also diversifying into other non-carbonated beverage segments. In 2007, the Coca-Cola Company purchased Glacéau, the creator of Vitaminwater and Smartwater, for $4.1 billion in cash to better position itself in the enhanced-water market. 23 In May 2014, Coca-Cola announced that it had raised its stake in Keurig Green Mountain to 16 percent of outstanding shares, making it the single largest shareholder. Together the companies developed the Keurig Cold brewing system, which allows for single servings of carbonated and non-carbonated beverages, including sodas, juices, and tea. The ready-to-drink coffee and tea segment of the market is estimated at $69 billion worldwide and is expected to grow, at an annual rate of 10.9 percent, to $125 billion from 2012 to 2017. 24 These new product lines are likely to drive industry revenue in the near term, as consumers become more health-conscious and look for alternatives to carbonated beverages.

The purchase of raw materials represents the single largest expense for non-alcoholic beverage companies. For example, soft drink manufacturers spend 62.6 percent of their revenue on purchasing raw materials like sugar, high fructose corn syrup, flavorings, and packaging. 25 For coffee producers, 60 percent of their revenues are spent on purchasing coffee beans. 26

The industry is therefore susceptible to price fluctuations in raw materials. For example, changing climate conditions and disease can reduce the supply of coffee, impacting the companies engaged in coffee production. In 2010 and 2011, coffee prices jumped by as much as 40 percent when Central and Latin American
countries were hit with changing weather conditions and crop diseases that resulted in low yearly harvests. These fluctuations can directly impact profit margins if companies are unable to pass along rising costs to consumers.27

Carbonated soft drink profit margins have also been under pressure from rising input prices in packaging materials and waning customer demand. Gross margins for the soft drink industry declined from 45.4 percent in 2008 to 41.5 percent in 2012, well below prerecession levels. Net profit margins in the U.S. have actually increased as companies have laid off employees and consolidated operations to cut costs.28 From 2008 to 2013 employment in the soft drink industry in the U.S. declined by 1.4 percent annually and, according to one estimate, is expected to drop by 2.5 percent by 2019.29 Conversely, gross margins for coffee and tea have remained relatively stable, as producers have seen increasing demand despite the high volatility in raw ingredient prices. From 2008 to 2012, gross margins dropped by 0.9 percent, from 35.9 to 35 percent.30

Financial analysis of the Non-Alcoholic Beverages industry focuses on volumes of product sold, operating margins, and projected growth in volume. Attention is also given to emerging-market growth, foreign currency movements, consumer trends, and weather conditions. These factors are becoming increasingly dependent on companies’ performance on key sustainability issues. As a result, the issues and metrics identified in this brief will allow analysts to have a more complete understanding of corporate value.31

LEGISLATIVE AND REGULATORY TRENDS IN THE NON-ALCOHOLIC BEVERAGES INDUSTRY

Regulations in the U.S. and abroad represent the formal boundaries of companies’ operations and are often designed to address the social and environmental externalities that businesses can create. Beyond formal regulation, industry practices and self-regulatory efforts act as quasi-regulation and also form part of the social contract between business and society. In this section, SASB provides a brief summary of key regulations and legislative efforts related to this industry, focusing on social and environmental factors. SASB also describes self-regulatory efforts on the part of the industry, which could serve to preempt further regulation.8

The regulatory environment surrounding the Non-Alcoholic Beverages industry continues to evolve. Currently, the Food and Drug Administration (FDA) maintains jurisdiction over food and beverage labeling, ingredients, nutritional content, and health claims in the United States.32 New and proposed legislation relating to health, obesity, product labeling, and environmental concerns has the potential to shift value drivers within the industry and further emphasize the importance of performance on related sustainability issues.

The Non-Alcoholic Beverages industry is facing increased scrutiny from the U.S. government and from stakeholders over its advertising geared toward children under the age of 12. In 2006, a U.S. government task force was established to address the impacts of media on childhood obesity and to develop voluntary industry standards to reduce advertisements of unhealthy

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8 This section does not purport to contain a comprehensive review of all the regulations related to this industry, but is intended to highlight some ways in which regulatory trends are impacting the industry.
food and beverages geared toward children. The same year, the Better Business Bureau launched the Children’s Food and Beverage Advertising Initiative (CFBAI) to address similar concerns and to promote industry self-regulation. The initiative is working to ensure that food and beverage advertisements targeting children under age 12 promote healthier options. Eighteen companies, including the Coca-Cola Company, PepsiCo, and Nestlé, have pledged to CFBAI to follow five principles, including that all child-directed advertising must promote “healthier dietary choices,” that they will not advertise beverage products in elementary schools, and that they will not actively seek products placement in entertainment directed at children. In 2014, voters in Berkeley, California, passed a one-cent-per-ounce tax on the distributors of specified sugar-sweetened beverages. The tax, the first of its kind in the U.S., went into effect in March 2015. In the same month, Congresswomen Rosa DeLauro proposed the Sugar-Sweetened Beverage Tax Act of 2015. If passed, the act would “impose an excise tax on the sale or transfer of any specified sugar-sweetened beverage product by the manufacturer, producer, or importer thereof.” The act would establish a tax rate of one cent per 4.2 grams of caloric sweetener contained in such products. In January 2014, Mexico implemented a tax of one peso per liter on sugary beverages to address the country’s growing obesity problem. An increase in taxes and other legislative efforts designed to curtail sweetened beverage consumption and impose additional costs on manufacturers or distributors could impact profitability across the Non-Alcoholic Beverages industry.

Recent scrutiny over deceptive and false advertising has also led to class action lawsuits against non-alcoholic beverage manufacturers. In response, the Supreme Court issued a ruling in 2014 that allows beverage companies to sue competitors, under the Lanham Act, for making false or misleading statements that create unfair competition.

In addition to the enhanced scrutiny of advertising and labeling, several legislative bodies in the U.S. and abroad have proposed or enacted taxes on sweetened beverages in an effort to discourage overconsumption and to offset the societal costs of obesity. The industry’s carbonated soft drinks have been the target of these efforts because of their high level of sugar and amount of calories.

The industry is also facing lawsuits from consumers and municipalities for marketing energy drinks to children and for claims that the products have contributed to the deaths of beverage consumers. In 2012, the FDA initiated a review of energy drinks after claims were made that these beverages were responsible for more than 13 consumer deaths. In response to the investigation, the FDA released guidance in 2014 that is intended to “help dietary supplement and beverage manufacturers determine whether a liquid food product is properly classified as a dietary supplement or as a beverage and to remind the industry of legal requirements regarding the substances that may be added to either type of product.” This guidance may determine how energy drinks are regulated in the future.

The industry’s containers and bottles are also subject to regulations regarding the purchase and disposal of materials. Beverage container deposit laws have been implemented in many states across the U.S. to reduce the amount of packaging that enters the waste stream. These laws have been responsible for improving...
recycling rates for many container materials by making consumers pay up-front deposits for beverage containers, which are refunded when the container is returned for recycling. Bottle deposits can present a risk to profitability, as they increase the price of the product and potentially weaken demand. Outside the U.S., legislators have implemented “eco-taxes” on beverage containers that impose additional costs on manufacturers that market, sell, and distribute beverages. These extended producer-responsibility laws are aimed at improving the recycling rates for the industry’s containers.

The Non-Alcoholic Beverages industry’s manufacturing operations and high reliance on access to clean and sufficient quantities of water make it subject to numerous environmental regulations. Laws, including the U.S. Clean Air Act and the U.S. Clean Water Act (CWA), are applicable for the industry and may result in substantial fines for companies that violating them. International operations are subject to similar environmental legislation, creating particular risks in areas prone to water scarcity or stress. In India, beverage manufacturers have been forced to close down plants for failing to comply with local laws regarding pollutant limits and for extracting a significant amount of the local region’s water supply. Companies violating such laws and local standards may be susceptible to losing their license to operate in key markets.

Recognizing the risks and opportunities associated with performance on key sustainability issues, companies in the Non-Alcoholic Beverages industry have partnered with Alcoholic Beverages companies to form the Beverage Industry Environmental Roundtable (BIER). BIER is a technical coalition of leading companies, including the Coca-Cola Company, PepsiCo, Keurig Green Mountain, Danone Waters, and Ocean Spray, working together to advance sustainability in the beverage sector. The coalition works to address performance on the following key issues: water, energy and climate, beverage-container recycling, sustainable agriculture, and ecosystem services.

**SUSTAINABILITY-RELATED RISKS AND OPPORTUNITIES**

Industry drivers and recent regulations suggest that traditional value drivers will continue to impact financial performance. However, intangible assets such as social, human, and environmental capitals, company leadership and governance, and the company’s ability to innovate to address these issues are likely to increasingly contribute to financial and business value.

Broad industry trends and characteristics are driving the importance of sustainability performance in the Non-Alcoholic Beverages industry:

- **Energy and water intensity:** The industry’s relatively significant use of natural resources creates environmental and social externalities, including indirect greenhouse gas emissions, air pollution, and reduced water availability. Fluctuations in the availability and pricing of energy and water can present challenges for non-alcoholic beverages companies.

- **Health and consumer perceptions:** Increased attention on the part of consumers and legislators is driving companies to address the health impacts of their products, particularly those related to high sugar content. The industry continues to face scrutiny relating to how its products are labeled and marketed. Stakeholder and
regulatory perceptions of a company’s performance in this area can impact both its brand value and its reputation.

- **Packaging lifecycle**: The consumption of non-alcoholic beverages results in billions of containers entering the waste stream, creating a significant environmental externality. Addressing the resources needed to manufacture these containers and the way in which they are disposed can reduce costs and enhance brand value.

- **Ripple effects of global, multilayered supply chains**: Demand for ingredients and inputs from the large companies of the Non-Alcoholic Beverages industry can magnify the social and environmental externalities of their global supply chains. Management of these supply chains needs to focus on mitigating these impacts (together with mitigating the impacts of climate change); otherwise, companies risk production disruptions, community opposition, and increased costs.

As described above, the regulatory and legislative environment surrounding the Non-Alcoholic Beverages industry emphasizes the importance of sustainability management and performance. Specifically, recent trends suggest a regulatory emphasis on consumer health, which will serve to align the interests of society with those of investors.

The following section provides a brief description of each sustainability issue that is likely to have material implications for companies in the Non-Alcoholic Beverages industry. This includes an explanation of how the issue could impact valuation and evidence of actual financial impact. Further information on the nature of the value impact, based on SASB’s research and analysis, is provided in Appendix IIA and IIB.

Appendix IIA also provides a summary of the evidence of investor interest in the issues. This is based on a systematic analysis of companies’ 10-K and 20-F filings, shareholder resolutions, and other public documents, which highlights the frequency with which each topic is discussed in these documents. The evidence of interest is also based on the results of consultation with experts participating in an industry working group (IWG) convened by SASB. The IWG results represent the perspective of a balanced group of stakeholders, including corporations, investors or market participants, and public interest intermediaries.

The industry-specific sustainability disclosure topics and metrics identified in this brief are the result of a year-long standards development process, which takes into account the aforementioned evidence of interest, evidence of financial impact discussed in detail in this brief, inputs from a 90-day public comment period, and additional inputs from conversations with industry or issue experts.

A summary of the recommended disclosure framework and accounting metrics appears in Appendix III. The complete SASB standards for the industry, including technical protocols, can be downloaded from www.sasb.org. Finally, Appendix IV provides an analysis of the quality of current disclosure on these issues in SEC filings by the leading companies in the industry.

**ENVIRONMENT**

The environmental dimension of sustainability includes corporate impacts on the environment. This could be through the use of natural resources as inputs to the factors of production (e.g., water, minerals, ecosystems, and
biodiversity) or environmental externalities and harmful releases in the environment, such as air and water pollution, waste disposal, and greenhouse gas (GHG) emissions.

Companies in the Non-Alcoholic Beverages industry use large amounts of natural resources, including water and various forms of energy, to transform ingredients into finished beverage products and to transport those products. The use of these natural resources may create environmental externalities that lead to both tangible risks and opportunities for beverage producers. For example, the heavy reliance on water as a key input to value creation for the industry has led to external pressures in the form of water supply disruptions and threats to companies’ licenses to operate in water-stressed regions. Management of specific environmental capitals may provide the industry with opportunities to improve efficiency, as well as to avoid significant costs that could harm their social license to operate.

The lifecycle environmental impact of the industry’s products, namely packaging, is discussed under the Business Model and Innovation section of this brief.

Energy & Fleet Fuel Management

Companies in the Non-Alcoholic Beverages industry rely on energy as a critical input for value creation. Fossil fuel and electrical energy consumption can contribute to environmental impacts, including climate change and pollution. These impacts have the potential to indirectly affect the results of operations of non-alcoholic beverage companies. Sustainability factors—such as the growing number of GHG-emissions regulations, incentives for energy efficiency and renewable energy, and risks associated with nuclear energy and its increasingly limited license to operate—are leading to growth and volatility in the price of conventional electricity sources while making alternative sources cost-competitive. Therefore, it is becoming increasingly important for companies to manage their overall energy efficiency, their reliance on different types of energy and the associated risks, and their access to alternative energy sources.

Companies in the industry operate large use significant quantities of purchased electricity for manufacturing, bottling, and refrigeration. In addition, they manage large fleets of vehicles that contribute to energy usage and emissions. While these companies do not face significant direct regulatory risks due to Scope 1 GHG emissions from their fleets or Scope 2 emissions from purchased electricity, they recognize the potential for increased costs and price volatility. As a result, companies are increasingly focusing on energy-efficient production processes and vehicle fuel efficiency, which can mitigate their exposure to volatile energy costs and limit their contribution to direct and indirect GHG emissions. They can also further reduce their exposure to volatile fossil fuel energy costs and improve brand value by diversifying their energy portfolio across a range of sources.

Companies that manage their overall energy use through increased manufacturing and transportation efficiencies and use of alternative energy sources can increase profitability by lowering expenses and reducing risk.

Company performance in this area can be analyzed in a cost-beneficial way through the following direct or indirect performance metrics (see Appendix III for metrics with their full detail):

- Operational energy consumed, percentage grid electricity, percentage renewable; and
• Fleet fuel consumed, percentage renewable.

Evidence

Non-alcoholic beverage companies rely heavily on purchased electricity for manufacturing products, and fuel for transporting them. According to the 2013 Annual Survey of Manufacturers, non-alcoholic beverage company production facilities in the U.S. purchased about five billion kilowatt-hours (kWh) of electricity for heat and power, or 0.6 percent of purchased electricity across all manufacturing industries. Purchased electricity accounted for about 1.2 percent of the total cost of materials for these facilities and about 1.8 percent of value-added. Given their dependence on energy, companies are directly exposed to price volatility and potential rising costs. Additionally, for some emerging market production facilities, companies may face electricity supply risks because of poor grid infrastructure.

The distribution of finished products also requires significant energy use. Although some small companies do not operate their own distribution fleet, large beverage producers own and operate large fleets of vehicles to transport their products. For example, the Coca-Cola Company operates more than 150,000 vehicles worldwide to deliver its products, representing a significant source of fuel consumption and an opportunity for the company to reduce costs.

The above risks, which are particularly pronounced if increased costs cannot be passed to customers through price increases, are acknowledged in SEC filings by companies across the industry, including the Coca-Cola Company, Dr Pepper Snapple, PepsiCo, and Keurig Green Mountain. Keurig Green Mountain reported that direct energy costs represented 3 percent of sales in 2013. In its FY2014 Form 10-K, Dr Pepper Snapple reports, “[w]e use a significant amount of energy in our business. We are significantly impacted by changes in fuel costs due to the large truck fleet we operate in our distribution businesses and our use of third-party carriers. Additionally, conversion of raw materials into our products for sale uses electricity and natural gas.”

Recognizing the risks and opportunities associated with energy management and its correlation with GHG emissions and therefore reputational risk, non-alcoholic beverage companies are focusing on increasing energy efficiency. From 2006 to 2012, the Coca-Cola Company’s total absolute energy use increased from 58.4 billion to 62.4 billion megajoules (MJ), while its total efficiency per liter improved from 0.49 to 0.43 MJ during the same period. Through energy efficiency measures, the company saved more than $200 million in energy costs in 2012, and $1 billion since 2004.

PepsiCo reported in 2013 that it spends roughly $1 billion annually on energy. Through energy efficiency initiatives, the company reduced energy intensity by 14 percent in 2012 from a 2006 baseline, resulting in energy cost savings of $70 million in 2012. This improved efficiency enabled PepsiCo to maintain 2008 levels of GHG emissions while increasing its beverage volume by 12 percent over the same time period.

To limit exposure to energy costs and to improve environmental performance, companies in the industry are also diversifying their energy-mix portfolio by investing in alternative forms of energy. The Coca-Cola Company was recently recognized by the EPA for the use of biogas at its Atlanta plant. This project, one of the largest of its kind, helped eliminate on-site yearly GHG emissions equivalent to taking 6,000 cars off the road for a year. Nestlé invested in large solar...
and wind projects in Mexico, which generate more than 85 percent of its energy needs in the country. Nestlé’s Nescafé uses spent coffee grounds from its manufacturing process to generate more than 26.7 percent of its total renewable and alternative energy mix on-site, thereby saving on operating costs. These strategies have helped the company reduce its direct GHG emissions by 16 percent between 2003 and 2012, while increasing its production volume by 56 percent during the same time period.

Since 2001, the Coca-Cola Company has explored alternative-energy vehicles. The company operates one of the largest hybrid electric fleets in North America across all industries, with more than 700 trucks as of 2012. These trucks are 30 percent more efficient than traditional diesel trucks and have a 40 percent smaller carbon footprint. A study of the performance of the hybrid electric fleet found that these trucks helped reduce total operating expenses by 24 percent when compared to the operating expenses of the traditional diesel fleet—or $0.74 per mile compared to $0.97 per mile—offering significant improvements in costs.

Companies in the industry are collaborating to reduce energy consumption and emissions and to advance sustainability industry-wide. The formation of the coalition BIER and its reducing focus on energy use demonstrate the importance of the issue across the Non-Alcoholic Beverages industry.

**Value Impact**

Energy and fleet fuel management could have ongoing impacts on company value and operating costs, either through continuing reductions in energy use, or through growth in energy consumption due to overall increases in beverage production. Given that companies cannot always pass these costs along to consumers, they are of particular concern to the industry. Further, companies that do not address this issue may experience capital expenditures in the future to retrofit manufacturing facilities.

In the face of the rising cost of electricity and fuel, non-alcoholic beverage companies that develop more energy-efficient methods of production and transportation can benefit from significant cost reductions and gain a competitive advantage. Companies can reduce the operational risks that arise from fluctuations in fossil fuel prices through increased energy efficiency and the use of alternative energy. Decisions to purchase electricity or generate it on-site can also impact a company’s exposure to reliability issues and operational risks. The probability and magnitude of impacts from the issue are likely to increase over time as greater regulatory and resource pressures lead to volatile and increasing energy prices.

Although the cost of energy and fuel is already captured in financial results, overall energy portfolio and fleet fuel consumption indicate companies’ exposure to possible increases in prices, resulting from internalizing the growing environmental impact of energy consumption. In light of volatile energy prices and supply risks, active energy management can also reduce a company’s risk profile and its cost of capital, particularly for companies with global operations that include emerging markets. The use of renewable energy indicates a company’s ability to mitigate its environmental footprint and exposure to increases in energy costs.

**Water Management**

Water management, as it relates to a company’s direct water usage and its operations in water-
scarce regions, as well as its management of wastewater, is a growing area of concern for companies in the Non-Alcoholic Beverages industry.

Water is the main ingredient in non-alcoholic beverages, as it is combined with raw ingredients to create finished beverage products. Given their heavy reliance on clean water, non-alcoholic beverage companies may be exposed to disruptions from increasing water scarcity that could significantly impact their operations and add to their costs. The importance of this issue is particularly pronounced for companies operating in water-stressed regions, where a failure to manage water use could lead to the loss of their social license to operate. Additionally, proper wastewater treatment is an important element of managing water issues in operations, since bottling plants release large quantities of effluents.

While water has typically been a freely available and abundant commodity in many parts of the world, it is becoming a scarce resource. This is due to increasing consumption from population growth and rapid urbanization, and supplies could potentially be further reduced because of climate change. Furthermore, water pollution can render water supplies unusable or expensive to treat. Based on recent trends, it is estimated that important river basins in the U.S., Mexico, Western Europe, China, India, and Africa will face severe water problems by 2025, as demand overtakes renewable supplies. Many important river basins are already considered stressed. Water scarcity can result in higher supply costs, supply disruptions, and social tensions, which may affect companies across different industries, particularly water-intensive ones.

Improving water management through increased efficiency, recycling, and proper disposal, particularly in regions with baseline water stress, can lead to lower operating costs and reputational risks.

Company performance in this area can be analyzed in a cost-beneficial way through the following direct or indirect performance metrics (see Appendix III for metrics with their full detail):

- Total water withdrawn and total water consumed, percentage of each in regions with High or Extremely High Baseline Water Stress; and
- Discussion of water management risks and description of management strategies and practices to mitigate those risks.

Evidence

According to MSCI ESG Research, soft drink producers rank ninth among industries most exposed to water risk in direct and indirect operations, behind other industries such as Independent Power, Water Utilities, Agricultural Products, Packaged Foods, and Aluminum. Companies in the Non-Alcoholic Beverages industry recognize the importance of this issue, particularly in locations subject to water scarcity and quality issues. They are working to avoid supply disruptions, reduce costs, and improve long-term operations through water efficiency and use-reduction measures. The Coca-Cola Company, Dr Pepper Snapple Group, PepsiCo, and other companies acknowledge the risk of water usage and scarcity in their Form 10-K filings.

In its FY2014 10-K filing the Coca-Cola Company reports that “as the demand for water continues..."
to increase around the world, and as water becomes scarcer and the quality of available water deteriorates, the Coca-Cola system may incur higher costs or face capacity constraints that could adversely affect our profitability or net operating revenues in the long run.”

In 2013, Dr Pepper Snapple Group used 3.2 billion gallons of water to produce 1.6 billion gallons of finished product, representing a water-use efficiency ratio (the volume of water used per volume of finished product) of 2. The company plans to improve its water use and discharge efficiency by 10 percent per gallon of finished product by the end of 2015. In 2012, the Coca-Cola Company used more than 80 billion gallons of water in its operations, enough to satisfy all of New York City’s water needs for nearly 80 days. The company maintained a water-use efficiency ratio of 2.12. It has set a new target of improving its overall water-use efficiency by 25 percent by 2020 from 2010 levels of 2.26 liters per liter of finished product. Such initiatives have helped companies achieve significant cost savings. For example, PepsiCo’s water-related initiatives saved the company more than $45 million in costs in 2011, compared with costs in 2006.

The potential for their supply to be disrupted or for losing their license to operate because of competition with local water needs is of particular concern for companies with operations in water-stressed regions. For example, the Coca-Cola Company, whose operations can represent a significant proportion of total water withdrawals in certain areas, recognizes the operational risk posed by water scarcity due to the growing global demand for water. The company stated in its FY2013 Form 10-K that as a result of having access to insufficient quantities or quality of water, “the Coca-Cola system may incur higher production costs or face capacity constraints that could adversely affect [its] profitability or net operating revenues in the long run.”

In recent years, Coca-Cola has experienced pressure from local authorities and communities in India, where the company plans to invest $5 billion by 2020 to increase its presence in the expanding Indian beverage market. The Indian non-alcoholic beverage market was expected to grow by 16.5 to 19 percent, reaching at least $5.18 billion over the three years leading up to 2015, presenting significant opportunity for the industry. However, this growth may be jeopardized by inappropriately managed water-related issues. For example, authorities in India threatened to demolish a Coca-Cola bottling plant in the city of Mehdiganj because of accusations that the plant was operating illegally and extracting too much groundwater. Indian officials have since rejected a proposed expansion of the plant and, in 2014, ordered it closed entirely over water supply concerns.

To address its overall water risk, the Coca-Cola Company launched a project to assess the vulnerability of its 863 bottling plants around the world. By 2012, the company had assessed more than 788, or 91 percent, of its bottling plants and began implementing source-water protection plans in more than 587, or 70 percent, of them.

PepsiCo faced similar scrutiny for its operations in India after activists targeted beverage companies for using large quantities of scarce fresh water. In response, PepsiCo launched an initiative to achieve a “positive water balance” by 2009, meaning that for every gallon of water used in manufacturing, the company would give the same amount back to local communities through improved processes to reduce its water use and programs to provide greater access to fresh water for local communities.
In 2015, more than 135,000 people signed a petition requesting that the California’s State Water Resources Control Board shut down Nestlé’s water-bottling operations in the state. The petition followed Governor Jerry Brown’s announcement of the state’s mandatory water reductions because of the continuing drought. The company’s plan to bottle spring water from Cascade Locks, Oregon, also face opposition from stakeholders who are concerned about the selling of water rights to a company given the drought conditions in other parts of the state.

In addition to addressing their water use, companies throughout the industry are considering the impacts of their wastewater on the environment and local communities. Companies must treat and handle waste according to relevant regulations; otherwise, they could face significant fines or lose their license to operate. In 2009, American Canyon Beverages, a subsidiary of the Coca-Cola Company, was fined $7.59 million for violating wastewater laws in Napa County, California. Despite requirements to treat its wastewater prior to discharging it back into the municipal system, the company failed to remove high levels of contaminants. In 2011, the former manager of the plant was criminally convicted and sentenced to four months in federal prison after pleading guilty to violating the CWA.

Additionally, in 2010, the Coca-Cola Company faced a $50 million fine from Indian authorities in the village of Plachimada over allegations that the company contaminated groundwater and soil. While the company maintained no wrongdoing, the village council canceled the plant’s operating license and forced it to cease operations.

As part of its examination of water supply and treatment at its 863 bottling plants worldwide, the company set voluntary limits on water effluent quality that meet or exceed those required by local laws. Only 17 of its bottling plants were not in alignment with these standards in 2012, according to the company. To avoid future constraints and regulatory pressures, the company has invested more than $1 billion over the past decade to improve its wastewater treatment.

Value Impact

Non-alcoholic beverage companies face increasing risks associated with water supply shortages. Companies with operations in water-scarce and water-stressed regions may face significant disruptions that could force them to reduce or cease production, affecting market share and revenue growth. Capital expenditures on process innovation and water conservation can reduce companies’ water use and improve operational efficiency. These factors can lead to substantial cost savings for companies over time. Water contamination can also affect ongoing operating costs and cash flows through one-off capital expenditures or regulatory penalties. Further, heavy water use in regions with water scarcity can lead to social and political unrest, which can affect a company’s reputation and perhaps its license to operate, thus increasing its risk profile and, ultimately, the cost of capital.

Although water has historically been inexpensive, costs are expected to rise gradually across the globe due to increasing water scarcity. Therefore, the probability and magnitude of the impact of water management on financial results in the Non-Alcoholic Beverages industry are likely to increase in the near term. Disclosure on a company’s operation exposure to areas of water scarcity and strategies to can provide insight into a company’s risk exposure and its ability to manage this critical input for value creation.
SOCIAL CAPITAL

Social capital relates to the perceived role of business in society, or the expectation of business contribution to society in return for its license to operate. It addresses the management of relationships with key outside stakeholders, such as customers, local communities, the public, and the government. It includes issues relating to consumer health and marketing.

Consumer preferences and tastes ultimately have the largest influence over the products produced and sold by the Non-Alcoholic Beverages industry. These beverage products and their nutritional content have a direct influence on consumer health. Concerns over the health impacts and safety of specific non-alcoholic beverages are shifting consumers’ demands and their perception of the industry. If poorly managed, these concerns may lead to the erosion of a company’s brand value and social license to operate. Additionally, marketing and labeling practices that are believed to be misleading or that target young consumers can further impact a company’s value.

Health & Nutrition

The Health & Nutrition issue relates to key nutritional and health concerns, such as obesity, ingredient safety, nutritional content, and acute health impacts, resulting from the consumption of non-alcoholic beverages. Health and nutritional issues are constantly evolving and shaping much of the Non-Alcoholic Beverage industry’s competitive landscape.

Beverage manufacturers recognize the risk of consumers’ shifting preferences and their increased awareness of product health consequences. Studies suggesting the adverse health consequences of consuming high-calorie sugar-sweetened beverages—such as higher levels of cholesterol, an increased risk for heart disease, and higher levels of obesity—may affect consumers’ perceptions of the industry’s products and lead to long-term shifts in their purchasing decisions. Furthermore, efforts to reduce obesity, in the form of new regulations or taxes on sugar-sweetened beverages, can influence industry profitability and future demand. New segments of the beverage market provide opportunities to address consumers’ demand for improved nutritional value. Additionally, the potential adverse health effects of other specific ingredients, such as artificial sweeteners are a concern, and companies may face related lawsuits.

Companies that address the increasingly important concern of their products’ nutritional value and health impacts by offering healthier alternatives and ensuring product safety can capture additional market share and limit their exposure to regulation and litigation.

Company performance in this area can be analyzed in a cost-beneficial way through the following direct or indirect performance metrics (see Appendix III for metrics with their full detail):

- Revenue from zero- and low-calorie, no-added-sugar, and artificially sweetened beverages; and
- Description of the process to identify and manage products and ingredients of concern and emerging dietary preferences.

Evidence

In recent year the non-alcoholic beverages industry has seen a consumer shift away from its sugar-sweetened products, and toward healthier alternatives. This shift is largely due to health concerns and an obesity epidemic in the U.S.,
which adds an additional $147 billion\textsuperscript{86} to health care costs every year.\textsuperscript{87}

As a result of health and safety concerns expressed by consumers and regulators relating to specific non-alcoholic beverages, companies in this industry face both risk and opportunity. The beverage industry is facing increasing pressure from legislators and consumers over its role in the obesity epidemic. While there are multiple drivers for obesity in the U.S., beverage companies continue to face scrutiny, given that a shift away from high-calorie beverages is considered to be a relatively easy way of improving public health.\textsuperscript{88}

For example, a regular 20-ounce soft drink contains 227 calories, or more than 10 percent of the total recommended daily calories for an adult woman to maintain a healthy weight.\textsuperscript{89}

In recent years, “sugar taxes” have been proposed or enacted on high-calorie sweetened beverages. In 2012, New York City passed law limiting the size single-serving sugared sodas that consumers were allowed to purchase to 16 ounces.\textsuperscript{90} The ban was challenged legally before it took effect, and it was ultimately repealed by the New York Court of Appeals.\textsuperscript{91} However, this effort is indicative of the rising public and government pressure to address obesity issues.

Representative DeLauro’s proposed the Sugar-Sweetened Beverage Tax Act of 2015, which would impose an excise tax on the sale or transfer of sugar-sweetened beverages, is another example.\textsuperscript{92} Additionally, other countries struggling with high obesity rates, such as Mexico, are levying a tax on soft drinks. Effective January 1, 2014, Mexico placed a tax of one peso per liter on sugar-added beverages. According to FEMSA, an independent bottler, the tax is expected to lower sales by 5 to 7 percent.\textsuperscript{93} The company recognizes a material impact in its 20-F filings, as Mexico is the largest per-capita consumer of Coca-Cola products in the world.\textsuperscript{94} Company executives stated that they have already begun to increase prices and may be forced to close facilities because of lower sales volumes.\textsuperscript{95}

While regulations related to beverages’ nutritional content present a risk to the industry, changing consumer preferences are also affecting it—through a decline in demand. U.S. consumption of soda has been decreasing for more than nine years and is currently at its lowest level in more than two decades. Industry experts attribute this decline to the obesity epidemic and health concerns.\textsuperscript{96} Most large beverage manufacturers, including the Coca-Cola Company, PepsiCo, and Monster, recognize consumer health and obesity concerns as a risk to operations in their Form 10-K filings.\textsuperscript{97} For example, Monster Beverages stated in its FY2013 Form 10-K, “There is increasing awareness of and concern for the health consequences of obesity. This may reduce demand for our non-diet beverages, which could reduce our revenues and adversely affect our results of operations.”\textsuperscript{98}

In an effort to curb weakening demand for sugar-sweetened beverages, companies have begun introducing low- or no-calorie alternatives that contain artificial sweeteners, which in themselves can present public health concerns. Currently, Diet Coke ranks as the second-most-consumed soft drink, behind Coke Classic, and in 2013, for the first time in history, 4 out of the top 10 purchased soft drinks were diet sodas, showing the demand for low-calorie substitutes.\textsuperscript{99} A few companies provide data on the number or percentage of brands that are either calorie-free or low-calorie alternatives in their annual SEC filings. For example, FEMSA reports in its FY2014 Form 20-F that “approximately 40% of [its] brands are calorie free or low- or non-caloric beverages,” while the Coca Cola Company notes in its FY2014 Form 10-K that it has 1,100 low-
and no-calorie products, out of a portfolio of 3,600 beverage products.

Despite the growing abundance of new low-calorie drinks, total U.S. soft drink consumption volumes declined by 3.2 percent year over year during 2013. This was led by a 7 percent decline in diet soda consumption during the year, as health concerns about sugar substitutes reduced consumer demand.¹⁰⁰

Six artificial sweeteners are currently tested and approved by the FDA: acesulfame, advantame, aspartame, saccharin, sucralose, and neotame. The FDA has also approved the use of stevia, a sugar substitute processed from the naturally growing stevia plant.¹⁰¹ While these substitutes provide zero-calorie alternatives to sugar, and are considered a safe alternative by the FDA, studies have found conflicting results regarding their health implications. A University of Maryland study on the acute, subacute, and chronic toxicity effects of aspartame found no evidence of adverse health effects or any links to cancer.¹⁰² However, a University of Minnesota study found that those who regularly consumed diet soda had an increased risk of metabolic syndrome (which is linked to obesity, high blood pressure, and heart disease) and type 2 diabetes, when compared with non-consumers.¹⁰³ Health concerns over artificial sweeteners have likely contributed to the decline in diet soda sales.

Companies have launched new lower-sugar products in an attempt to address the health concerns of high sugar and artificial sweeteners. Both the Coca-Cola Company and PepsiCo have launched new versions of their traditional colas (Coke Life and Pepsi Next) that contain up to 60 percent less sugar. These alternatives, which are balanced with the natural sweetener stevia, contain up to half the calories of regular soda. According to the Coca-Cola Company, Coke Life has been successful in generating incremental volumes in sales in Argentina and Chile and was introduced in the U.S. and other markets in 2014.¹⁰⁴

Along with artificial sweeteners, other ingredients in non-alcoholic beverages may present concerns. Studies have shown that brown soft drinks contain quantities of a cancer-causing chemical known as 4-methylimidazole (4-MEI), a by-product of creating caramel-brown food coloring, which is required to be labeled on beverages sold in California.¹⁰⁵ The Coca-Cola Company¹⁰⁶ and PepsiCo¹⁰⁷ have since directed their suppliers to limit the levels of 4-MEI in their caramel coloring to curb consumer concerns.

To further address the weakening demand for carbonated soft drinks, large competitors have diversified their beverage product portfolios to address the shift in consumer tastes toward healthier alternatives. While carbonated soft drink sales have declined, other beverage categories such as water, juices, tea, sports and energy drinks, and coffee have been growing steadily over the past several years.

The Coca-Cola Company’s tea segment, including Gold Peak, Honest Tea, and Fuze Tea, grew by 11 percent in 2013. Consumers consider ready-to-drink teas as a healthy option, as these beverages include natural ingredients and antioxidants with perceived health benefits. The ready-to-drink tea industry is expected to grow by 6 percent annually until 2018.¹⁰⁸ Other non-carbonated beverage segments, including juice, ready-to-drink coffee, bottled water, sports drinks, and energy drinks, have remained strong and have grown at an annualized rate of 1.4, 2.5, 3.2, and 7.5 percent, respectively.¹⁰⁹

The newest and fastest-growing segment of the beverage market is energy drinks, which have high levels of caffeine and other ingredients...
intended to give consumers energy. This new beverage segment has been subject to FDA complaints, which cite that they are responsible for numerous health risks as a result of the added caffeine. Some beverages have been found to contain more than 215 milligrams of caffeine; for comparison, a regular cup of coffee contains 100 to 150 milligrams of caffeine. Energy drinks have been alleged to contribute to life-threatening health complications, including heart attacks, as well as death, leading to lawsuits for energy drink manufacturers.\textsuperscript{110}

Living Essentials, the manufacturer of 5-Hour Energy shots, faced a $150 million civil lawsuit in the death of a man who had a heart attack and died after consuming the small drink.\textsuperscript{111} Monster Energy has also been subject to litigation regarding complications stemming from the consumption of its popular 24-ounce energy beverages.\textsuperscript{112} Even if they maintain their products are safe and meet appropriate FDA standards for caffeinated beverages and dietary supplements, companies may benefit from addressing these concerns through appropriate warning labels relating to the beverages' potential health implications or by reducing the amounts of caffeine they contain.

**Value Impact**

Addressing the health concerns associated with specific products may provide companies with opportunities to enhance brand reputation, thereby strengthening their long-term sales prospects. If beverage companies fail to address these public health concerns voluntarily, regulators may impose bans or taxes, which can present material harm to sales volumes and profitability. Additionally, opportunities exist for companies to capture shifting consumer trends by offering healthier beverage alternatives. Non-alcoholic beverage companies that are able to satisfy this demand will likely experience stronger pricing power in the short to medium term and capture new markets. Furthermore, litigation stemming from adverse health effects of product consumption may result in costly one-off settlements or liabilities that can tarnish a brand’s reputation, affecting future sales.

Disclosure on revenue from different products, including zero calorie and low-calorie beverages, can demonstrate how a company is prepared to meet the risks and opportunities associated with shifting consumer demand and regulation. Further, discussion of how ingredients or products that present health concerns are managed will allow for a more thorough understanding of a company’s ability to address the potential for negative impacts.

**Product Labeling & Marketing**

In their advertising and marketing practices, companies in the Non-Alcoholic Beverages industry routinely make claims that may be misleading or untruthful regarding the health benefits of specific ingredients and products. This trend is likely to increase as the market for healthier beverages continues to expand. Such health-benefit claims can result in litigation that may impact operations and company reputations. In the U.S., the FDA and the Federal Trade Commission (FTC) oversee the truthfulness of advertising in the Non-Alcoholic Beverage industry, which includes holding advertisers accountable.

Additionally, new laws and regulations surrounding the use and labeling of genetically modified organisms (GMOs) may play an increasing role in Non-Alcoholic Beverages industry. Although the health and environmental impacts of GMOs remain a topic of debate and scientific inquiry, they will likely still influence customer purchasing decisions as some of the
ingredients in non-alcoholic beverages may be genetically modified.

As noted, companies in the industry are subject to criticism and regulation surrounding marketing geared toward children, especially in the U.S., where childhood obesity is rapidly increasing. Industry participants have launched new initiatives such as CFBAI to voluntarily monitor and control advertising to children, which is changing industry marketing dynamics.

Product mislabeling and marketing present a substantial risk to the industry, as companies may be subject to litigation resulting in significant costs. Companies may also face criticism over misleading statements, insufficiently labeling GMO content, and advertising to children. Labeling and marketing issues, therefore, can have a long-term impact on brand value and revenue growth.

Companies can improve performance on this issue by developing internal policies and controls on marketing and improving traceability in supply chains to determine exposure to GMOs.

Company performance in this area can be analyzed in a cost-beneficial way through the following direct or indirect performance metrics (see Appendix III for metrics with their full detail):

- Number of child advertising impressions made, percentage promoting products meeting the CFBAI Uniform Nutrition Criteria;
- Revenue from products labeled as (1) containing GMOs and (2) non-GMO;
- Notices of violations received for non-conformance with regulatory labeling and/or marketing codes; and
- Amount of legal and regulatory fines and settlements associated with labeling and/or marketing practices.

**Evidence**

Non-alcoholic beverage manufacturers have been subject to multiple lawsuits resulting from allegedly deceptive product advertisements. For example, between 2007 and 2013, the labeling of PepsiCo’s Naked Juice indicated that the product was “100% Juice,” “All Natural,” and “Non-GMO.” These claims were the subject of a class action lawsuit against Naked Juice after consumers said the labeling was deceptive and untrue. This lawsuit resulted in a $9 million settlement and led the company to remove some “natural” claims from its packaging.113

In a similar case, the Coca-Cola Company was sued by POM Wonderful after its Minute Maid brand produced a juice product labeled as “Pomegranate Blueberry.” The product’s labeling was believed to be misleading because the beverage contained only 0.3 percent pomegranate juice and 0.2 percent blueberry juice, with the remaining 99.4 percent being apple juice. POM sued the Coca-Cola Company under the Lanham Act for making misleading claims. The Coca-Cola Company’s defense argued that its product’s claims were legal under FDA regulation. Lower-level courts dismissed POM’s claim on lack of standing, but POM appealed the decision to the Supreme Court, which unanimously decided in 2014 that POM was within its right to sue over the misleading statements. This decision may open up further lawsuits against beverage manufacturers for making false or misleading claims.114

In 2014, Vermont became the third state to pass a law requiring companies to label food and beverage products that contain GMOs. Maine and Connecticut previously passed similar laws; however, these states require that a sufficient number of other states pass similar legislation before the laws take effect. Efforts to enact labeling requirements for GMOs across the
country have been strongly opposed by companies in the Non-Alcoholic Beverages industry, as many of the industry’s products contain ingredients linked to GMOs, including corn used in corn syrup. The Coca-Cola Company and PepsiCo spent $1.5 million and $2.4 million, respectively, to combat new legislation in Washington state requiring products to be labeled as “genetically engineered” or “produced with genetic engineering.”115 In addition to emerging labeling requirements in the U.S., companies must address restrictions or bans on GMOs in other countries.116 These new legislative proposals and bans present a significant challenge for the Non-Alcoholic Beverages industry given the traceability of certain ingredients within the supply chain, the expense of identifying these ingredients, and the impact that labeling could have on sales.

Labeling requirements and bans on GMOs in certain markets have led many companies, including the Coca-Cola Company, to introduce non-GMO versions of their beverages.117 The market for non-GMO food and beverages is expected to reach $800 billion in sales by 2017, double the $400 billion recorded in 2012, indicating a significant opportunity for beverage manufacturers to capitalize on a new market segment.118

As part of the scrutiny the industry is facing over how its products are marketed to children, city attorneys in San Francisco filed lawsuits against Monster Energy for marketing its highly caffeinated energy drinks to children as young as six years old.119 Monster Energy unsuccessfully attempted to have the case dismissed by a California judge, and the case is pending.120 Multiple states and cities in the U.S. currently have proposed legislation to ban the sale and marketing of energy drinks to minors, presenting a risk to this fast-growing segment of the non-alcoholic beverage market.121

Obesity rates in children between ages 2 and 19 have tripled over the past three decades and researchers have conducted studies suggesting that children’s daily consumption of soft drinks contributes to excess weight gain, leading to obesity.122 The industry-led CFBAI was created to address the growing concern about food and beverage advertising to children and aims to advertise healthier options to children under the age of 12. It currently has 18 members, including the Coca-Cola Company, PepsiCo, and Nestlé.123 Independent third parties have conducted audits to verify companies’ compliance with responsible marketing standards adopted by the industry. Audits found that Coca-Cola and Pepsi maintained a 95 percent compliance rate in television advertising and a 100 percent compliance rate in print and online advertising. To help ensure performance in this area, Coca-Cola has developed responsible marketing policies that prohibit the company from buying advertising slots in programs where more than 35 percent of viewers are children under the age of 12.124

**Value Impact**

Producing false or deceptive information in product marketing could lead to additional regulatory oversight and litigation, generating higher extraordinary expenses and reduced profitability or contingent liabilities. Government and legal actions against companies with poor performance on this issue are likely to have a negative impact on reputation and lead to a long-term deterioration of intangible assets. This deterioration could result in a loss of market share, as consumers may prefer brands that have better marketing and labeling practices and that align with their health and nutrition goals.
GMO labeling regulation could also present reputational harm for beverage manufacturers, as consumers may be less likely to purchase products with genetically engineered ingredients. Further bans on GMOs could present supply chain risks that may result in ingredient shortages, leading to an increased cost of revenue and lowered profitability. Additionally, responsible marketing policies present opportunities for companies to build a stronger brand reputation while avoiding negative regulation and litigation.

Disclosure on advertising impressions, notices of violations for non-conformance with industry codes, fines, and the percentage of product portfolio labeled as GMO will demonstrate exposure to regulation and litigation, and management’s ability to address these concerns and to limit social externalities.

BUSINESS MODEL AND INNOVATION

This dimension of sustainability is concerned with the impact of environmental and social factors on innovation and business models. It addresses the integration of environmental and social factors in the value-creation process of companies, including resource efficiency and other innovation in the production process. It also includes product innovation and efficiency and responsibility in the design, use-phase, and disposal of products. It includes management of environmental and social impacts on tangible and financial assets—either a company’s own or those it manages as the fiduciary for others.

Emerging environmental and social trends, along with higher regulatory requirements and scrutiny toward the disposal of beverage containers and packaging, are creating new innovations and business opportunities for the beverage industry. The industry produces billions of disposable containers that end up in landfills, creating environmental externalities. Industry participants are utilizing multiple opportunities and innovative solutions to address the lifecycle impacts of their packaging, which can improve operating efficiency and long-term brand value.

Packaging Lifecycle Management

Packaging lifecycle impacts present risks and opportunities that are likely to be material for non-alcoholic beverage companies. Although the majority of companies in the industry do not manufacture their own bottles and packaging, they still face the reputational risks associated with the negative externalities that their products’ containers can create. Companies are also directly impacted by legislation regarding the end-of-life management of beverage containers, particularly given extended producer responsibility laws. Non-alcoholic beverage companies therefore have an incentive to work with packaging manufacturers to improve the environmental characteristics of their products.

In the design phase, the choice of materials can reduce packaging costs and help drive consumer demand, while lowering environmental impacts and mitigating containers’ end-of-life regulation risk. Further, efforts to reduce the weight and materials used in packaging can lower transportation costs, reduce exposure to supply and price volatility, and reduce the amounts of virgin materials extracted. In the end-of-life phase, take-back and recycling programs and partnerships can preempt regulation, help achieve cost savings, and reduce environmental impact.

Company performance in this area can be analyzed in a cost-beneficial way through the...
following direct or indirect performance metrics (see Appendix III for metrics with their full detail):

- Total weight of packaging, percentage made from recycled or renewable materials, and percentage that is recyclable or compostable; and
- Description of strategies to reduce the environmental impact of packaging throughout its lifecycle.

**Evidence**

Non-alcoholic beverages are sold in different types of containers, with the materials used in such packaging having relevance for the nature of environmental impacts and recycling rates. It is estimated that 37 percent of the nearly 243 billion beverage containers sold in the U.S. annually are recycled and diverted from landfills.\(^\text{125}\) As of 2011, aluminum cans, glass containers, and plastic bottles were recycled at rates of 54.5, 34.2, and 29.2 percent (percentage of weight by total weight generated), respectively, in the U.S.\(^\text{126}\) Although these rates have increased over time, the need to produce new beverage packaging results in a significant amount of energy consumption, greenhouse gas emissions, pollution to marine and land ecosystems, and billions of dollars in wasted material.\(^\text{127}\)

In an effort to reduce these negative externalities, several states, including California and New York, have established container-deposit legislation. Container deposits increase recycling rates by requiring consumers to pay a small deposit for each beverage container, which is refunded when the container is returned for recycling. Companies recognize that this type of legislation or other forms of extended producer responsibility laws could impact their financial performance.

The Coca-Cola Company is one of many companies to indicate this issue as a risk factor in its FY2013 Form 10-K. The company reports that “[c]hanges in laws and regulations relating to beverage containers and packaging could increase our costs and reduce demand for our products.” Further, it indicates that shifting consumer concerns over environmental responsibility and the amount of solid waste in landfills may increase the adoption of similar legislation across major markets, presenting a growing risk for the industry.\(^\text{128}\)

To address this issue, companies across the industry, including The Coca-Cola Company, PepsiCo, and Nestlé have introduced recycling goals for their beverage containers. For example, PepsiCo set a goal in 2010 of recycling 50 percent of its plastic, glass, and aluminum cans by 2018.\(^\text{129}\) In 2012, the Coca-Cola Company estimated that 39 percent of its bottles and cans introduced into the market were recycled by either its own system or third-party programs, up from 36 percent in 2009.\(^\text{130}\) A 2014 proposal by Dr Pepper Snapple Group shareholders urging the company to implement a similar recycling goal received more than 30 percent support, representing a significant number of shareholders and highlighting investor concern.\(^\text{131}\)

Companies are also taking advantage of innovations in packaging technology to reduce the environmental impact of their packaging lifecycle and to increase brand value with consumers; this can also help them manage risk related to the price volatility of fossil fuel–based packaging. Both the Coca-Cola Company and PepsiCo have developed their own plant-based plastic bottles, which are recyclable.\(^\text{132}\) The companies plan to replace the majority of their fossil fuel–based plastic bottles with these alternatives.
In describing the costs of new packaging and the rationale for a $150 million investment in new packaging technology, the Coca-Cola Company reported, "[w]e’re seeing a lot of variance in pricing because the price of petroleum is so volatile. Over the long term, we believe the cost of material made from plants will be more stable than the cost of petroleum. That’s why we’re building out our supply chain to efficiently use materials made from plants in our packaging." 133

In 2011, the Coca-Cola Company’s package profile consisted of 54 percent plastic, 12 percent aluminum, and 10 percent glass.134 Currently, the company utilizes its PlantBottle technology for 8 percent of its plastic bottles and has distributed more than 15 billion of these bottles since 2009. The company has licensed this technology to others, and it was used in more than 200 million Heinz plastic ketchup bottles in 2011, presenting opportunities for alternative revenue streams for the company.135

Given that packaging represents a significant cost for the industry (Pepsi spends more than $6.9 billion annually, or 10.5 percent of its revenue), innovations in lightweight packaging present a significant opportunity for cost savings in materials and improved transportation efficiency.136 For example, the Coca-Cola Company has been able to reduce the packaging weight of its standard plastic bottles and aluminum cans by 25 and 30 percent, respectively. These lightweighting efforts helped the company save more than $180 million over a two-year period.137 Similarly, Dr Pepper Snapple Group saved more than $38 million between 2012 and 2013 after a lightweighting and redesign of its packaging.138

Value Impact

Companies that improve and account for the environmental impacts of their product containers across their lifecycles will be better positioned to avoid or effectively deal with burdensome end-of-life or recycling legislation, which can lead to increased product prices, decreased competitiveness, and higher cost of revenue.

Collaborating with packaging partners to develop innovations in materials technology and lightweight products can provide beverage producers with opportunities to address environmental concerns. These innovations could simultaneously capture cost savings by reducing materials usage and improving transportation efficiencies, increasing operating margins and thus profitability. Through such innovations and business model improvements, companies can also reduce their exposure to volatile prices and supplies of commodity materials used in packaging, which could lower their cost of capital.

As regulations become more stringent and the public becomes increasingly concerned about environmental issues, the probability and magnitude of material impacts on companies are likely to increase.

The magnitude of these impacts and the degree to which companies are proactively managing the associated risks and opportunities can be understood by analyzing current sourcing practices and efforts to reduce the associated environmental impacts.

LEADERSHIP AND GOVERNANCE

As applied to sustainability, governance involves the management of issues that are inherent to the business model or common practice in the industry and are in potential conflict with the interest of broader stakeholder groups (government, community, customers, and employees). They therefore create a potential
liability, or worse, a limitation or removal of license to operate. This includes regulatory compliance, lobbying, and political contributions. It also includes risk management, safety management, supply chain and resource management, conflict of interest, anti-competitive behavior, and corruption and bribery.

Non-alcoholic beverage companies recognize the value of their supply chains and are focusing on efforts to ensure that the raw ingredients and the people who produce them are protected from environmental and social concerns. Specifically, companies are engaging with suppliers to address water scarcity, climate change, threats to specific crops, and labor standards. By engaging with suppliers, companies will limit their exposure to potential price fluctuations and disruptions in the supply of raw ingredients. Companies managing their global and multilayered supply chains to improve the availability of key raw ingredients can gain a competitive advantage over the long term by mitigating operational and reputational risks.

Environmental & Social Impacts of Ingredient Supply Chains

Environmental and social impacts can occur within the ingredient supply chains of non-alcoholic beverage companies. Companies rely on numerous ingredients—including corn, sugarcane, and various fruits—that are highly susceptible to price volatility, largely due to environmental factors such as shifting weather patterns, droughts, and crop disease. As the impacts of climate change and water scarcity continue to increase in frequency and severity, shifts in the price and availability of these key ingredients are likely to rise. Further, the environmental impacts that the supply of these ingredients can create, including pollution, soil erosion, and deforestation, are likely to lead to additional price and supply volatility.

The potential for supply shortages or disruptions due to social considerations, including labor violations, child labor, fair wages, and food shortages present further risk to a company’s long-term ability to source key materials and ingredients. Such considerations could also present reputational impacts for companies, with a potential to influence consumer demand.

While many of these companies do not have direct control over farming practices, they have the ability to influence and improve agricultural conditions by engaging with suppliers and farmers and implementing innovations in agricultural technology. These efforts can help companies address issues such as climate change impacts and water scarcity in their supply chain.

Company performance in this area can be analyzed in a cost-beneficial way through the following direct or indirect performance metrics (see Appendix III for metrics with their full detail):

- Percentage of beverage ingredients sourced from regions with High or Extremely High Baseline Water Stress;
- Suppliers’ social and environmental responsibility audit conformance: major non-conformance rate and associated corrective action rate and minor non-conformance rate and associated corrective action rate; and
- List of priority beverage ingredients and discussion of sourcing risks due to environmental and social considerations.
Evidence

Corn, a commonly used ingredient in the beverage industry, provides a clear example of how supply chain costs can shift as a result of environmental factors. In the U.S., 87 percent of corn is grown in areas of high or extremely high water stress, presenting challenges and potential supply disruptions for industries that depend on the crop. The price of corn in the U.S. has risen dramatically over the past 10 years, increasing from $2 a bushel in 2005 to roughly $4 a bushel in 2007, and rising again in 2012 to an all-time high of $8 per bushel after a severe drought. The price of corn has since stabilized after a record harvest in 2013, pushing prices down to between $4 and $5 a bushel. However, drought concerns will contribute to price volatility in the future.

Companies including the Coca-Cola Company, Dr Pepper Snapple Group, PepsiCo, and Keurig Green Mountain recognize in their FY2013 Form 10-K filings the risks to their supply chains caused by climate change and water scarcity, which can result in increased raw materials costs and directly impact profitability. Keurig Green Mountain stated in its FY2013 Form 10-K that, “Increased frequency or duration of extreme weather conditions could also impair production capabilities, disrupt our supply chain, or impact demand for our products. As a result, the effects of climate change could have a long-term adverse impact on our business and results of operations.”

Dr Pepper Snapple Group reported to the CDP that the risk to its current cost of sales was $2.5 billion from increased prices as a result of water scarcity, weather, and climate change. While, PepsiCo, including its snack food segment, spends more than $12 billion, or 18 percent of revenue, on agriculture-based ingredients that are susceptible to changes in crop prices.

Rising coffee prices in 2014 provide another example of how climate change and water scarcity can affect the industry’s supply chains. Arabica coffee prices increased by 90 percent in 2014 given the poor outlook for the Brazilian harvest due to drought concerns. Large coffee manufacturers Kraft and the J.M. Smucker Company raised product prices by between 9 and 10 percent as a result of the spike in wholesale prices.

In an effort to address these growing concerns around sourcing agricultural inputs, companies have begun engaging with suppliers to improve farming techniques. Companies are seeking to create more resilient supply chains capable of providing a long-term source of key ingredients. For example, the Coca-Cola Company has partnered with the World Wildlife Fund to improve the agricultural techniques of sugarcane farmers in countries such as Australia, Brazil, South Africa, and Honduras, in order to address growing environmental concerns such as water scarcity.

Furthermore, the Coca-Cola Company launched pilot programs with partners in China to assess the efficacy of drip irrigation in a region that is susceptible to droughts and responsible for 60 percent of China’s sugar supply. The Guangxi Sustainable Sugarcane Initiative converted traditional flood irrigation to drip irrigation techniques and demonstrated that utilizing drip irrigation provided 90 percent water-use efficiency, compared with the 25 percent efficiency of flood irrigation. Implementing drip irrigation not only helped increase yields, reduce flooding, and reduce vulnerability to droughts and climate change but also provided direct social and economic benefits to the sugarcane farmers. Strategic initiatives such as these can help companies maintain a long-term supply of key ingredients in high-risk regions.
Greater engagement with suppliers can include maintaining direct contact with farmers and providing them with technical assistance, which helps improve farmers’ incomes as well as their productivity, thus strengthening the supplies of key ingredients. In 2013, Keurig Green Mountain purchased approximately 68 percent of its coffee from “farm-identified” sources, giving the company opportunities to engage directly with farmers on topics such as water stewardship that improve quality and ensure a long-term supply of coffee. The company views this as a direct competitive advantage and plans to engage with more than a million farmers and suppliers to improve their livelihoods and to strengthen its agriculture and manufacturing supply chains.

A Nestlé spokeswoman stated that the company was looking to double the amount of coffee it purchases directly from growers so it can “track where it comes from and give technical assistance [to farmers]” in order to “build long-term trust.”

The Non-Alcoholic Beverages industry is also beginning to recognize the risks of failing to implement ethical sourcing practices in its supply chain as well as the opportunities to capture customer demand for ethically sourced products that pay farmers fair wages and limit the use of child labor.

According to the International Labour Organization, there are 168 million children between the ages of 5 and 17 engaged in child labor. Of these, nearly 59 percent are involved in the agricultural sector. Among the agricultural products associated with child labor are cocoa and sugar, both found in certain alcoholic beverages. As consumer awareness of child labor continues to increase, companies in this industry may be subject to scrutiny. For example, Nestlé responded to stakeholder pressure relating to its supply chain by establishing a child labor monitoring and remediation system for its cocoa supply chain.

Coffee manufacturers are also striving to source materials from either independently certified fair trade sources or directly from farmers to ensure the highest quality of coffee and fair treatment of farmers. Keurig Green Mountain sourced 31 percent of its coffee from responsibly certified sources in 2013. The company views these certifications as a source of differentiation from competitors and as a competitive advantage, as mentioned in its FY2013 Form 10-K.

Fair trade principles aim to provide farmers with a minimum price for their products, allowing them to maintain operations and provide for their families while also combating crop diseases that can affect future supply and coffee prices, presenting value for coffee manufacturers. Although fair trade labeling can lead to added costs, research has shown that by labeling coffee as fair trade, bulk coffee sales can be boosted by 10 percent, creating opportunities for coffee producers.

In addition to third-party certifications, companies have adopted their own ethical sourcing code of conduct to ensure that their operations, including those of their suppliers and vendors, follow a strict set of guidelines. Dr Pepper Snapple Group established guidelines for addressing child labor, safe working conditions, fair wages, working hours, discrimination, and worker treatment throughout its supply chain. The company has assessed its supply chain and labeled its suppliers as low, medium, or high risk in order to better address compliance with its ethical sourcing code of conduct. In 2013, Dr Pepper Snapple Group stated in its Corporate Responsibility report that it had reduced the number of suppliers in its high-risk segment by 50 percent compared with the previous year by...
transitioning suppliers to lower-risk segments. The company also reported that 100 percent of its high-risk segment has adopted its ethical sourcing code of conduct to improve their operations and avoid risk to the company.\textsuperscript{160}

**Value Impact**

Failure to effectively manage environmental and social risks in company supply chains has the potential to result in price increases or supply constraints of key inputs and lost revenue due to disruptions in production, impacting operational efficiency and profitability. In the long term, supply chain constraints negatively affect a company’s risk profile and, therefore, its cost of capital.

While many of the companies in this industry do not have direct control over farming practices, they do have the ability to influence and improve agricultural conditions by engaging with farmers to implement innovations in agricultural technology. These efforts can help companies address issues like climate change and water scarcity, which can affect the availability of key raw ingredients and impact a company’s cost of sales in the medium to long term.

Managing responsible sourcing programs and certifications may provide beverage manufacturers with opportunities to improve the long-term supply of ingredients while also capturing reputational benefits and customer demand for ethically sourced beverages. Further, as stakeholders continue to raise awareness of environmental and social issues in company supply chains, performance in this area is increasingly important for preserving and developing brand reputation and value.

Since the impacts of climate change and water scarcity are likely to increase in severity and frequency in the medium and long-term, the measurement of exposure to these issues and a discussion of strategies to mitigate them can help determine which companies are best positioned to protect the availability of key ingredients, and to maintain steady cost of sales. Specifically, disclosure on the percentage of ingredients sourced from water-stressed regions can help identify the level of risk within a supply chain, and a company’s ability to withstand environmental changes. Further discussion of other environmental and social issues in the supply chain can help determine additional challenges that could affect the price and availability of key ingredients, in addition to how reputational risks are managed.
**APPENDIX I**

**FIVE REPRESENTATIVE NON-ALCOHOLIC BEVERAGES COMPANIES**

<table>
<thead>
<tr>
<th>COMPANY NAME (TICKER SYMBOL)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>The Coca-Cola Company (KO)</td>
<td></td>
</tr>
<tr>
<td>PepsiCo (PEP)</td>
<td></td>
</tr>
<tr>
<td>Fomento Económico Mexicano, S.A.B. de C.V (FMX)</td>
<td></td>
</tr>
<tr>
<td>Keurig Green Mountain (GMCR)</td>
<td></td>
</tr>
<tr>
<td>Dr Pepper Snapple Group (DPS)</td>
<td></td>
</tr>
</tbody>
</table>

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This list includes five companies representative of the Non-Alcoholic Beverages industry and its activities. This includes only companies for which the Non-Alcoholic Beverages industry is the primary industry, companies that are U.S.-listed but are not primarily traded over the counter, and for which at least 20 percent of revenue is generated by activities in this industry, according to the latest information available on Bloomberg Professional Services. Retrieved on April 14, 2015.
APPENDIX IIA
EVIDENCE FOR SUSTAINABILITY DISCLOSURE TOPICS

<table>
<thead>
<tr>
<th>Sustainability Disclosure Topics</th>
<th>EVIDENCE OF INTEREST</th>
<th>EVIDENCE OF FINANCIAL IMPACT</th>
<th>FORWARD-LOOKING IMPACT</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>HM (1-100)</td>
<td>IWGs %</td>
<td>Priority</td>
</tr>
<tr>
<td>Energy &amp; Fleet Fuel Management</td>
<td>46</td>
<td>67</td>
<td>4</td>
</tr>
<tr>
<td>Water Management</td>
<td>79*</td>
<td>89</td>
<td>1</td>
</tr>
<tr>
<td>Health &amp; Nutrition</td>
<td>92*</td>
<td>83</td>
<td>2t</td>
</tr>
<tr>
<td>Product Labeling &amp; Marketing</td>
<td>92*</td>
<td>78</td>
<td>5</td>
</tr>
<tr>
<td>Packaging Lifecycle Management</td>
<td>19</td>
<td>61</td>
<td>3</td>
</tr>
<tr>
<td>Environmental &amp; Social Impacts of Ingredient Supply Chains</td>
<td>50</td>
<td>83</td>
<td>2t</td>
</tr>
</tbody>
</table>

**HM:** Heat Map, a score out of 100 indicating the relative importance of the topic among SASB’s initial list of 43 generic sustainability issues. Asterisks indicate “top issues.” The score is based on the frequency of relevant keywords in documents (i.e., 10-Ks, 20-Fs, shareholder resolutions, legal news, news articles, and corporate sustainability reports) that are available on the Bloomberg terminal for the industry’s publicly listed companies. Issues for which keyword frequency is in the top quartile are “top issues.”

**IWGs:** SASB Industry Working Groups.

**%:** The percentage of IWG participants that found the disclosure topic likely to constitute material information for companies in the industry. (-) denotes that the issue was added after the IWG was convened.

**Priority:** Average ranking of the issue in terms of importance. 1 denotes the most important issue. (-) denotes that the issue was added after the IWG was convened.

**EI:** Evidence of Interest, a subjective assessment based on quantitative and qualitative findings.

**EFI:** Evidence of Financial Impact, a subjective assessment based on quantitative and qualitative findings.

**FLI:** Forward-looking Impact, a subjective assessment of the presence of a material forward-looking impact.

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**INDUSTRY BRIEF | NON-ALCOHOLIC BEVERAGES | 28**
# APPENDIX IIB

## EVIDENCE OF FINANCIAL IMPACT FOR SUSTAINABILITY DISCLOSURE TOPICS

<table>
<thead>
<tr>
<th>Evidence of Financial Impact</th>
<th>REVENUE &amp; EXPENSES</th>
<th>ASSETS &amp; LIABILITIES</th>
<th>RISK PROFILE</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Revenue</td>
<td>Operating Expenses</td>
<td>Non-operating Expenses</td>
</tr>
<tr>
<td></td>
<td>Market Share</td>
<td>New Markets</td>
<td>Pricing Power</td>
</tr>
<tr>
<td>Energy &amp; Fleet Fuel Management</td>
<td>•</td>
<td>•</td>
<td></td>
</tr>
<tr>
<td>Water Management</td>
<td>•</td>
<td>•</td>
<td></td>
</tr>
<tr>
<td>Health &amp; Nutrition</td>
<td>•</td>
<td>•</td>
<td>•</td>
</tr>
<tr>
<td>Product Labeling &amp; Marketing</td>
<td>•</td>
<td>•</td>
<td></td>
</tr>
<tr>
<td>Packaging Lifecycle Management</td>
<td>•</td>
<td>•</td>
<td></td>
</tr>
<tr>
<td>Environmental &amp; Social Impacts of Ingredient Supply Chains</td>
<td>•</td>
<td>•</td>
<td>•</td>
</tr>
</tbody>
</table>

*MEDIUM IMPACT*  
*HIGH IMPACT*
## APPENDIX III

### SUSTAINABILITY ACCOUNTING METRICS | NON-ALCOHOLIC BEVERAGES INDUSTRY

<table>
<thead>
<tr>
<th>TOPIC</th>
<th>ACCOUNTING METRIC</th>
<th>CATEGORY</th>
<th>UNIT OF MEASURE</th>
<th>CODE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Energy &amp; Fleet</td>
<td>Operational energy consumed, percentage grid electricity, percentage renewable</td>
<td>Quantitative</td>
<td>Gigajoules (GJ), Percentage (%)</td>
<td>CN0201-01</td>
</tr>
<tr>
<td>Fuel Management</td>
<td>Fleet fuel consumed, percentage renewable</td>
<td>Quantitative</td>
<td>Gigajoules (GJ), Percentage (%)</td>
<td>CN0201-02</td>
</tr>
<tr>
<td>Water Management</td>
<td>(1) Total water withdrawn and (2) total water consumed, percentage of each in regions with High or Extremely High Baseline Water Stress</td>
<td>Quantitative</td>
<td>Cubic meters (m³), Percentage (%)</td>
<td>CN0201-03</td>
</tr>
<tr>
<td></td>
<td>Discussion of water management risks and description of management strategies and practices to mitigate those risks</td>
<td>Discussion and Analysis</td>
<td>n/a</td>
<td>CN0201-04</td>
</tr>
<tr>
<td>Health &amp; Nutrition</td>
<td>Revenue from (1) zero- and low-calorie, (2) no-added-sugar, and (3) artificially sweetened beverages</td>
<td>Quantitative</td>
<td>U.S. Dollars ($)</td>
<td>CN0201-05</td>
</tr>
<tr>
<td></td>
<td>Description of the process to identify and manage products and ingredients of concern and emerging dietary preferences</td>
<td>Discussion and Analysis</td>
<td>n/a</td>
<td>CN0201-06</td>
</tr>
<tr>
<td>Product Labeling &amp; Marketing</td>
<td>Number of child advertising impressions made, percentage promoting products meeting the Children’s Food and Beverage Initiative (CFBAI) Uniform Nutrition Criteria</td>
<td>Quantitative</td>
<td>Number, Percentage (%)</td>
<td>CN0201-07</td>
</tr>
<tr>
<td></td>
<td>Revenue from products labeled as (1) containing genetically modified organisms (GMOs) and (2) non-GMO</td>
<td>Quantitative</td>
<td>U.S. Dollars ($)</td>
<td>CN0201-08</td>
</tr>
<tr>
<td></td>
<td>Notices of violations received for non-conformance with regulatory labeling and/or marketing codes</td>
<td>Quantitative</td>
<td>Number, Percentage (%)</td>
<td>CN0201-09</td>
</tr>
<tr>
<td></td>
<td>Amount of legal and regulatory fines and settlements associated with labeling and/or marketing practices*</td>
<td>Quantitative</td>
<td>U.S. Dollars ($)</td>
<td>CN0201-10</td>
</tr>
</tbody>
</table>

* Note to **CN0201-10**—Disclosure shall include a description of fines and settlements and corrective actions implemented in response to events.
SUSTAINABILITY ACCOUNTING METRICS | NON-ALCOHOLIC BEVERAGES INDUSTRY (CONTINUED)

<table>
<thead>
<tr>
<th>TOPIC</th>
<th>ACCOUNTING METRIC</th>
<th>CATEGORY</th>
<th>UNIT OF MEASURE</th>
<th>CODE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Packaging Lifecycle Management</td>
<td>(1) Total weight of packaging, (2) percentage made from recycled or renewable materials, and (3) percentage that is recyclable or compostable</td>
<td>Quantitative</td>
<td>Metric tons (t), Percentage (%)</td>
<td>CN0201-11</td>
</tr>
<tr>
<td></td>
<td>Description of strategies to reduce the environmental impact of packaging throughout its lifecycle</td>
<td>Discussion and Analysis</td>
<td>n/a</td>
<td>CN0201-12</td>
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<tr>
<td></td>
<td>Percentage of beverage ingredients sourced from regions with High or Extremely High Baseline Water Stress</td>
<td>Quantitative</td>
<td>Percentage (%) by spend</td>
<td>CN0201-13</td>
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<tr>
<td></td>
<td>Suppliers’ social and environmental responsibility audit conformance: (1) major non-conformance rate and associated corrective action rate and (2) minor non-conformance rate and associated corrective action rate</td>
<td>Quantitative</td>
<td>Rate</td>
<td>CN0201-14</td>
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<td>List of priority beverage ingredients and discussion of sourcing risks due to environmental and social considerations</td>
<td>Discussion &amp; Analysis</td>
<td>n/a</td>
<td>CN0201-15</td>
</tr>
</tbody>
</table>
APPENDIX IV: Analysis of SEC Disclosures | Non-Alcoholic Beverages

The following graph demonstrates an aggregate assessment of how representative U.S.-listed Non-Alcoholic Beverages companies are currently reporting on sustainability topics in their SEC annual filings.

<table>
<thead>
<tr>
<th>Non-Alcoholic Beverages</th>
<th>0%</th>
<th>10%</th>
<th>20%</th>
<th>30%</th>
<th>40%</th>
<th>50%</th>
<th>60%</th>
<th>70%</th>
<th>80%</th>
<th>90%</th>
<th>100%</th>
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</thead>
<tbody>
<tr>
<td>Energy &amp; Fleet Fuel Management</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>67%</td>
<td></td>
</tr>
<tr>
<td>Water Management</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>89%</td>
<td></td>
</tr>
<tr>
<td>Health &amp; Nutrition</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>83%</td>
<td></td>
</tr>
<tr>
<td>Product Labeling &amp; Marketing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>78%</td>
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</tr>
<tr>
<td>Packaging Lifecycle Management</td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>61%</td>
<td></td>
</tr>
<tr>
<td>Environmental &amp; Social Impacts of Ingredient Supply Chains</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>83%</td>
<td></td>
</tr>
</tbody>
</table>

IWG Feedback*

*Percentage of IWG participants that agreed topic was likely to constitute material information for companies in the industry.
REFERENCES

1 Bloomberg Professional service, accessed April 14, 2015, using the BICS <GO> command. The data represents global revenues of companies listed on global exchanges and traded over-the-counter (OTC) from the Non-Alcoholic Beverages industry, using Levels 3 and 4 of the Bloomberg Industry Classification System.

2 Author's calculation based on data from Bloomberg Professional service, accessed on April 14, 2015, using Equity Screen (EQS) for U.S.-listed companies and those traded primarily OTC that generate at least 20 percent of revenue from their Non-Alcoholic Beverages segment and for which Non-Alcoholic Beverages is a primary SICS industry.


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30 Bloomberg Professional service, accessed June 20, 2014, using the BI BEVG <GO> command.
31 Based on a SASB internal review of sell-side research.
41 Ibid.


Guthrie, “Mexico Soda Tax Dents Coke Bottler’s Sales.”

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“Diet Soda Slump to Lower Coca-Cola’s Volumes; Still Beverages Could Offset This Decline,” *Forbes*.


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158 Clark, “Fair Trade Proving Anything But in Growing $6 Billion Market.”


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