



Standards Outcome Review

CONSUMPTION 1

SASB Standards Development Team
December 12, 2014

Table of Contents

Executive Summary	4
Table I: Summary of IWG Materiality Feedback	5
I. Weak Issues – For Removal	5
1. Tobacco	6
a. Climate Change Adaptation – Remove Issue	6
II. Issues for Reconsideration.....	8
1. Agricultural Products.....	9
a. Competitive Behavior – Remove Issue.....	9
2. Household & Personal Products.....	11
a. Product Stewardship – Split Issue + remove 2 angles	11
3. Non-Alcoholic Beverages	14
b. Energy Management & Greenhouse Gas Emissions – Keep Issue, may remove GHG ..	14
4. Alcoholic Beverages	18
a. Energy Management & Greenhouse Gas Emissions – Keep Issue, may remove Energy	18
III. Strong Issues with Reservations.....	21
1. Non-Alcoholic Beverages	21
a. Packaging Lifecycle Management & Innovation – Keep Issue.....	21
2. Alcoholic Beverages	22
a. Packaging Lifecycle Management & Innovation – Keep Issue.....	22
3. Tobacco	24
a. Responsible Marketing – Keep Issue	24
b. Supply Chain Management – Keep Issue	26
IV. Suggested Additional Issues.....	28
Table II: New issues proposed by IWG members	28
1. Agricultural Products.....	29
a. Waste Management – Do not add	29
b. Energy Management – Do not add.....	29
c. Food Security – Likely do not add.....	29
d. Employee Health & Safety – Do not add. Already addressed – Labor Conditions.....	29
e. Employee Diversity – Do not add.....	30
f. Product Lifecycle Management – Do not add. Already addressed.....	30
g. Political Spending – Do not add. Already addressed in Mgt of Legal & Reg Environment.	30
2. Meat, Poultry, and Dairy	30
a. Waste Management – Do not add. Already addressed.....	30

b.	Air Quality – Likely do not add	31
c.	Energy Management – Do not add	31
d.	Working Conditions – Do not add	32
e.	Community Relations – Do not add. Already in Land Use and Eco. Impacts.....	32
f.	Food Waste – Do not add	32
3.	Processed Foods	33
a.	Waste Management – Do not add	33
b.	Labor Relations – Do not add. Partially addressed in Supply Chain Management.	33
c.	Employee Diversity – Do not add.....	34
d.	Food Waste – Do not add	34
e.	Climate Change Adaptation – Do not add. Already addressed in Supply Chain Management.	35
f.	Political Spending – Do not add.....	35
4.	Non-Alcoholic Beverages	35
a.	Ecological Impacts – Do not add. Already addressed.	35
b.	Food Safety – Do not add	35
5.	Alcoholic Beverages	36
a.	Ecological Impacts – Do not add. Already addressed in Supply Chain Management.....	36
b.	Waste Management – Do not add	36
c.	Employee Health & Safety – Do not add	36
d.	Employee Diversity – Do not add.....	36
6.	Tobacco	37
a.	Counterfeit Products – Do not add.....	37
7.	Household and Personal Products	37
a.	Energy Management & GHG Emissions – Likely do not add	37
b.	Waste Management – Do not add	38
	Appendix I: Summary of IWG Feedback on Issues	39
	Appendix II: Draft List of Disclosure Topics for Public Comment	40
	Appendix III: Sample Accounting Metrics	41

Executive Summary

This report provides a reference and framework for the SASB Standards Council Consumption 1 sector standards outcome review on December 18, 2014.

In the third quarter of 2014, SASB's Standards Development Team identified sustainability disclosure topics and related accounting metrics (herein after referred to as "issue(s)" and "metric(s)") in the seven industries in the Consumption 1 sector:

- Agricultural Products,
- Meat, Poultry, and Dairy,
- Processed Foods,
- Non-Alcoholic Beverages,
- Alcoholic Beverages,
- Tobacco,
- Household & Personal Products.

These issues and the associated metrics have subsequently been vetted by external stakeholders through the Industry Working Group (IWG). This process allowed for each issue and metric to be evaluated on the basis of materiality, investor interest, and cost-benefit analysis. Based on this feedback and additional research, SASB will open a 90-day public comment period (PCP) on accounting standards for the seven industries, starting on January 14, 2015.

This report provides the Standards Council with an update on SASB's evaluation of IWG feedback and an overview of additional evidence research, which form the basis for the revised set of issues and metrics for public comment.

- **Section I: Issues with Weak Evidence of Materiality** provides SASB's review of, and response to, specific IWG feedback on weak issues. These are issues for which a majority of participants had significant reservations or did not think the issues were likely material. SASB typically removes such issues, taking into account the evidence of interest and financial impact.
- **Section II: Issues for Reconsideration** focuses on issues where a majority of IWG participants agreed that the issue was likely material, but several had significant reservations about materiality. For such issues, SASB reconsidered evidence of materiality and/or specific aspects of the issue, based on IWG feedback and additional SASB research. SASB would like to draw the attention of the Standards Council to these issues in particular, considering the IWG feedback and SASB's response.
- **Section III: Strong Issues with Reservations** focuses on issues where a majority of participants also agreed about the likely materiality, but some had reservations. For such issues, SASB evaluated the specific IWG comments and the strength of the initial evidence of financial impact to determine whether any changes were required. Issues in this section received a relatively lower amount of negative feedback and fewer potential changes are recommended for these compared to issues in Section II.
- **Section IV: Suggested Additional Issues** presents a summary of SASB's evidence research on and decision whether to include additional issues proposed by IWG participants.
- **Table I** (*next page*) shows the percent of IWG participants that agreed on the likely materiality of issues; ~79 percent of topics across all industries were deemed by over 75 percent of participants to likely be material for companies in the industry.
- **Table II** (*Section IV*) shows a list of new issues proposed by IWG members.
- **Appendix I** shows the list of issues by industry that were presented to the IWG and SASB's initial assessment and process for revising each of those issues.
- **Appendix II** contains a draft list of issues that SASB will present for public comment on January 14, 2015.
- **Appendix III** provides sample draft accounting metrics for the Household & Personal Products Industry, for reference.

In addition to this report, there are two supplemental reports, which provide detailed IWG responses and summarize the discussion of the metrics subcommittee meeting. The first supplemental report provides both a detailed materiality assessment of each disclosure topic by the IWG, as well as a list of all IWG comments on issues. The other supplementary report details the discussion topics and outcomes from the metrics subcommittee meeting held on December 2, 2014.

Table I: Summary of IWG Materiality Feedback

Industry	Completed Surveys	Average Approval	Lowest Agreement
Agricultural Products	27	88%	70%
Meat, Poultry & Dairy	26	97%	85%
Processed Foods	29	89%	83%
Non-Alcoholic Beverages	18	77%	61%
Alcoholic Beverages	16	81%	69%
Tobacco	7	68%	43%
Household & Personal Products	28	81%	75%

I. Weak Issues – For Removal

This section focuses on issues where a majority of participants had significant reservations or did not think the issues were likely material (less than 50 percent of respondents agreed that the issue is material) and where SASB reconsidered evidence of materiality based on IWG feedback and SASB research. For this sector, there is only one issue within this category. SASB first presents **evidence of interest** from SASB’s heat map and detailed IWG feedback and second, **evidence of financial impact** from existing research in industry briefs complemented by additional research. An **analysis** of both types of evidence is then provided, together with a final **recommendation** for inclusion or removal of the issue.

1. TOBACCO

a. Climate Change Adaptation – Remove Issue

Evidence of Interest

Heat Map Tests

The heat map score is 30 out of 100, which is between the second and third quartile among all sustainability issues for this industry and indicates a moderate level of interest.

IWG Feedback

Issue priority

The average priority ranking of the issue was low, ranked 4th out of a total of 4 issues.

Issue materiality

RESPONSES TO MATERIALITY OF CLIMATE CHANGE ADAPTATION IN THE TOBACCO INDUSTRY*

Materiality	Corporations	Market Participant	Public Interest & Intermediaries	Grand Total	% of Total
Yes. It is material	--	1	2	3	43%
Yes, but with reservations	--	2	--	2	29%
No. It is not material	1	1	--	2	29%
Grand Total	1	4	2	7	

*Note: This industry has a small sample size of participants

Comments from IWG respondents

The table below highlights some of the key comments received from IWG participants. As noted below, participants had reservations or disagreement about the materiality of this issue based on their opinion that tobacco is a commodity that is likely to be less affected by climate change (due to security of supply and the ability to grow it in many places). Participants that did not agree this was a material issue also noted that the pricing power that companies have (combined with the long-term decline in demand) would likely mitigate pricing pressure.

Stakeholder Type	Material?	Stakeholder Comment
Market Participant	Maybe	<i>Tobacco as a crop takes up a tiny proportion of arable land and is grown in many places thus making the security of supply as the climate changes a less pertinent concern in my view.</i>
Corporation	No	<i>Tobacco is grown across the globe, and while climate change issues such as water availability could, in the future, be an indirect factor in increasing the cost of supply, the ability to increase intensity of cultivation in areas unaffected by water shortages, together with the long term decline in demand for tobacco leaf, will likely more than mitigate this pricing pressure.</i>
Public Interest & Intermediary	No	<i>I believe that given the nature of tobacco leaf...in that it can be grown in a wide variety of locations and is a rotational but highly profitable cash crop then then reality is that climate change is unlikely to cause major issues.</i>

		Moreover leaf as a % of sales is c10% with other NTM another 10% and the industry does have pricing power so can offset cost increases.
--	--	--

Evidence of Financial Impact

Initial SASB Research (Excerpt from Industry Brief for IWGs) ¹

The cultivation of tobacco may be adversely affected by climate change. The response of cultivated crops to rising temperatures varies. By one estimate, a rise in temperature by between one and two degrees centigrade could lower average crop yields by between 10 and 15 percent globally. This is due in part to proliferation of weed and pathogen species in higher latitudes, as well as decreased soil moisture due to increased presence of perennial herbaceous plants. Other important changes are related to precipitation. Factors that decrease yields include increased days without precipitation and increased intensity of precipitation when it does occur. Less balanced precipitation can lead to drought conditions, while increased precipitation intensity can lead to flooding that may increase erosions and reduce soil nutrient content.

Rising atmospheric CO₂ levels, a consequence of human activity, may actually enhance crop growth because CO₂ is used by plants during photosynthesis. However, weeds will likewise benefit from this trend, making herbicides less effective. Furthermore, climate change is expected to increase the number and range of plant diseases and pests, while temperature extremes beyond the normal temperature ranges can affect plant health.

Climate change's altering of precipitation patterns presents a critical risk for the industry. Universal Corp. alludes to these risks in its FY2013 10-K: "The possible effects ... include changes in rainfall patterns, water shortages ... that could adversely impact our costs and business operations and the supply and demand for leaf tobacco."

As mentioned, climate change presents a long-term challenge. Reynolds America points out that "climate change is not viewed by RAI's operating subsidiaries as a significant direct economic risk to their businesses, but rather an indirect risk involving the potential for a longer-term general increase in the cost of doing business." This may pressure industry margins over time.

Extreme weather conditions in the 2012 and 2013 tobacco growing seasons in the U.S. exemplify some of the possible impacts of climate change on the cultivation of tobacco. Early season drought in 2012 nearly destroyed the unirrigated burley tobacco crop in the Kentucky region, while irrigation costs rose. In 2013, excessive rain caused root damage and severe leaf spotting. Reports estimated that an intense rain event in July 2013 caused severe damage to between five and 10 percent of the crop, although initial estimates were much higher. Climate change is anticipated to increase the frequency of these weather events in future years.

Analysis

The SASB team considered the following key questions raised by IWG participants in the continued analysis of this topic:

- *Is security of supply an issue that the major companies (or others) are concerned about? Is it a risk reported in any 10-K's?*

¹ Note – Paragraphs presented here and in similar sub-sections for issues that follow in this document, are extracts from SASB industry briefs and are provided for reference. Please refer to briefs for complete evidence and citations.

- According to 10-K's and CDP reports, security of supply is generally recognized as a risk, but is more forward looking than short term. New market opportunities are also growing to include tobacco free products.
- *How climate sensitive is tobacco compared to other crops?*
 - According to SASB's background research, tobacco is relatively less sensitive than other crops, and has the ability to grow in soil with low fertility, arid environments, and cope with volatile weather. Tobacco also has a relatively short growing season of 100-130 days, thus is less susceptible (than other multi-season commodities) to long-term risk.
- *Consider growing seasons, regions, and contracts in this industry. Do companies report on strategies for diversification in their 10-Ks?*
 - Companies, such as Phillip Morris note in their 10-K the various types, grades, and style of tobacco they purchase primarily through independent tobacco suppliers. They also contract directly with farmers in several countries including: Argentina, Brazil, Colombia, the Dominican Republic, Ecuador, Italy, Kazakhstan, Mexico, Pakistan, the Philippines, Poland, and the United States. Phillip Morris also believes there is an adequate supply of tobacco leaf in the world markets to satisfy their current and anticipated production requirements.
 - If certain high-risk countries were to partner with the FCTC study group and seek to eliminate or significantly reduce leaf tobacco production, companies could encounter difficulty in sourcing leaf tobacco to fill customer requirements, which could have an adverse effect on operations.
 - A 2012 CDP report confirmed that "Most companies in the sector try to diversify their production base and supply chains to different geographies to limit the risk of disruption".
- *Pricing power and cost increases?*
 - According to IBIS World, Tobacco profit margins are ~27% domestically and ~12% internationally, therefore there is a decent buffer if input costs increase. Data available for companies listed in the Bloomberg terminal indicate an operating margin of ~29%.
 - According to a 2008-2012 CDC study, if firms raise prices to mitigate rising tobacco leaf costs, there may be some drop in demand. However, the figures suggest that firms would be able to absorb some cost increases, but overall, as firms mention in their 10-Ks, rising input prices could materially affect their profit.

Recommendation

- **Remove issue** since this industry is at a much lower risk of climate change based on the industry structure noted above. In addition the sustainability implications of climate change adaptation by this industry are not clear. However, SASB may consider this as an emerging issue if tobacco leaf prices continue to increase and will also consider any current risks within the supply chain issue noted below.

II. Issues for Reconsideration

This section focuses on issues where a majority of IWG participants agreed that the issue was likely material, but several had significant reservations about materiality (between 50 and 75 percent of participants typically agreed that the issues were likely material). For such issues, SASB reconsidered

evidence of materiality and/or specific aspects of the issue, based on IWG feedback and SASB research. Issues are analyzed by industry, looking at (i) **evidence of interest** from SASB’s heat map and detailed IWG feedback and (ii) **evidence of financial impact** from existing research in industry briefs complemented by additional research. An **analysis** of all evidence is then provided, together with a final **recommendation** for inclusion or removal of the issue.

1. AGRICULTURAL PRODUCTS

a. Competitive Behavior – Remove Issue

Evidence of Interest

Heat Map Tests

The heat map score is 80 out of 100, which is in the top quartile among the issues for this industry and indicates a high level of interest.

IWG Feedback

Issue priority

The average priority ranking of the issue was low, ranked 9th out of a total of 9 issues.

Issue materiality

RESPONSES TO MATERIALITY OF COMPETITIVE BEHAVIOR IN THE AGRICULTURAL PRODUCTS INDUSTRY

Materiality	Corporations	Market Participant	Public Interest & Intermediaries	Grand Total	% of Total
Yes. It is material	4	5	10	19	70%
Yes, but with reservations	2	--	2	4	15%
No. It is not material	2	--	2	4	15%
Grand Total	8	5	14	27	

Comments from IWG respondents

The table below highlights some of the key comments received from IWG participants. Overall, many people noted that this is likely to be a material topic (though the comments indicate that some participants might have misunderstood the topic name). Those participants who had reservations mentioned that the level of transparency needed to discover market manipulators would likely not be high enough and that this industry is not necessarily competitive. Participants that did not think this is a material topic felt that SASB did not provide enough evidence, that this issue was more about trade regulations (not sustainability), and that investors are not likely to care if consumers are not pushing back on it too. Furthermore, participants felt that this issue might only be relevant for a limited number of companies.

Stakeholder Type	Material?	Stakeholder Comment
Corporation	Yes	<i>For the small set of companies to which this topic applies, I agree that trading practices (and lobbying to influence regulation) should be included in the total mix of information available to the investor, given the potential impact of regulation as well as companies' violations. However, relative to other</i>

		<i>topics in this survey, I would rate this topic low in terms of importance to sustainability and to impact on financial value.</i>
Corporation	Maybe	<i>I do think its material. However, it's hard to see how we can have the level of transparency needed in order to sniff out the bad behavior of market manipulation.</i>
Corporation	No	<i>This does not appear to be material from a sustainability perspective. This is more related to market manipulation which may be material to a company but isn't appropriate as a measure of sustainability.</i>

Evidence of Financial Impact

Initial SASB Research (Excerpt from Industry Brief for IWGs)

Issue Description:

Some large agricultural products companies engage in trading of agricultural commodities. These activities are regulated by the Federal Trade Commission (FTC) and the Commodity Futures Trading Commission (CFTC) in the U.S. Regulators in the U.S. and Europe have investigated market manipulation, including price-fixing and excessive speculation, by agricultural product companies in recent years. Agricultural products companies trade both physical commodities and financial derivatives, which, under current U.S. regulations, gives companies exemptions that allow them to engage in speculative activity, including trading commodity futures. These factors may contribute to heightened risks of excessive speculation, with regulatory and social implications, especially as regulations become more stringent. Market speculation has been linked to increased food price volatility and can raise food prices and lower farmer income. Commodity price volatility may also lead to increased costs for agricultural products companies, with an influence on profits and risk profile.

Company performance in this area can be analyzed in a cost-beneficial way internally and externally through the following direct or indirect performance metrics:

- *Amount of legal and regulatory fines and settlements associated with market manipulation*

Evidence:

*Archer Daniels Midland, Bunge, Cargill, and Louis Dreyfus dominate the global trade in agricultural commodities. The Dodd-Frank Wall Street Reform and Consumer Protection Act authorized the CFTC to set **limits on the percentage of specific over-the-counter (OTC) commodity contracts** that could be held on the books of any one institution (“position limits”), an effort to place a cap on financial speculation. OTC contracts are privately negotiated and are not reported to regulators. The rule was set to go into effect on October 12, 2012. However, trade associations representing, among others, Archer Daniel Midlands and Bunge **lobbied successfully for delays to the rule.** This **regulatory exemption, which allows increased market speculation, could increase the likelihood of market distortion in order to gain profits.***

*Competitive behavior in the commodity markets is enforced with monetary sanctions. In 2011, the CFTC fined Bunge Global Markets (Bunge Ltd.’s trading arm) \$550,000 for entering large pre-market soybean futures orders that the company had no intention of executing. The orders, which were cancelled before the market opened, were placed in order to assess the support for soybean futures prices, giving Bunge’s **traders information unavailable to other market participants.***

Analysis

- Due to low priority assigned to the issue by IWG participants, the concerns that they raised in their comments, and the limited evidence of financial impact discovered in SASB's initial research, SASB re-assessed the materiality of this issue.
- SASB performed additional desk research (such as analysis of SEC filings and academic reports), and conducted interviews with several key corporate stakeholders to determine the extent to which corporations are participating in commodities hedging and the potential for market manipulation. Additional sources were also reviewed to determine if there were any major fines associated with competitive behavior as well as upcoming legislation and third party analysis.
 - No additional major fines were found to clearly attribute this issue to the major agricultural products companies.
 - Some of the major corporations reviewed had significantly lower hedge positions than their total production, and would not currently fall under additional proposed legislative scrutiny.
- The sustainability impact associated with this topic would likely be related to higher food prices, however, this claim is hard to prove and the regulatory landscape varies by commodity and region. There is also debate in academic research about the link between commodities futures activities and food prices, and no conclusive link has been established.

Recommendation

- **Remove this issue.** A key point of consideration is that no one firm on their own can manipulate food prices, and they are highly scrutinized via regulations and caps already in place. Additionally, the low hedge positions of companies in the industry and a lack of substantial fines or settlements related to market manipulation indicate that the issue is not likely to have material impacts on company value.

2. HOUSEHOLD & PERSONAL PRODUCTS

a. Product Stewardship – Split Issue + remove 2 angles

Evidence of Interest

Heat Map Tests

The heat map score is 78 out of 100, which is in the top quartile among the issues for this industry and indicates a high level of interest.

IWG Feedback

Issue priority

The average priority ranking of the issue was high, ranked 1st out of a total of 4 issues.

Issue materiality

RESPONSES TO MATERIALITY OF PRODUCT STEWARDSHIP IN THE HOUSEHOLD & PERSONAL PRODUCTS INDUSTRY

Materiality	Corporations	Market Participant	Public Interest & Intermediaries	Grand Total	% of Total
Yes. It is material	4	7	10	21	75%
Yes, but with reservations	4	1	2	7	25%

No. It is not material	--	--	--	--	0%
Grand Total	8	8	12	28	

Comments from IWG respondents

The table below highlights some of the key comments received from IWG participants. Overall, there was general agreement on the materiality of this topic, however, some participants suggested separating out the different aspects of the issue a little more since some (such as hazardous chemicals and consumer safety) might be more relevant/material than others (such as EPR) and water use might belong in its own category. Other participants with reservations noted that there is a high degree of variability amongst products in this industry which makes it hard to generalize/compare. There is also some discrepancy about the extent to which a producer is responsible for products after sale and what the associated costs might be.

Stakeholder Type	Material?	Stakeholder Comment
Corporation	Yes	<i>Concern over health and wellness of humans and protection of the biological components in the environment continue to increase demands on transparency about constituents of concern. This will only increase financial risks associated with ingredients of concern in formulations sold by this sector.</i>
Corporation	Maybe	<i>Any aspect of the management of a business is material if it has impact on the financial performance of a company AND circumstances external to the company create an increased level of risk. Product stewardship programs demonstrate that a company is exercising a reasonable level of care in the management of products, including sourcing of materials, worker safety, and consumer communication. Emerging science suggests conventional product stewardship may not be adequate, and companies may face increased risk from environmental, worker, and consumer hazards inherent in company operations and products. These can have a material impact on company financial risk.</i>
Corporation	Maybe	<i>The relative materiality is highly category specific and dependent on mix in any individual organization. High degree of product/material/chemical variability in the sector makes this difficult to generalize.</i>

Evidence of Financial Impact

Initial SASB Research (Excerpt from Industry Brief for IWGs)

*While there is little threat of material punitive fines for **using certain chemicals, the cost of reformulation of products as legislation gets stricter can be high**. Colgate-Palmolive, in their FY2013 10-K, acknowledged that a ban on triclosan and benzalkonium chloride could “adversely affect [their] business.” According to an FDA analysis, manufacturers will likely have to spend between \$112 million and \$369 million to reformulate and relabel the affected products. This additional cost will mostly fall on manufacturers. Firms that actively invest in alternatives to chemicals threatened by legislation will be in a position to profit by charging a premium for beating other firms to market.*

California implemented the Safer Consumer Products Law in 2013, which lists chemicals that the state believes have safer alternatives and that the state is likely to place a regulatory ban on in the future. While not yet binding, the size of the consumer base of California will mean that firms that

proactively react to these proposed regulations with the necessary planning and capital expenditures stand to gain market share.

Jeff Rice, Walmart's Director of Sustainability, has said that their "new purchasing framework opens the door for suppliers with commitment to sustainability...It's one of the criteria we use to make buying decisions now." Walmart's business is crucial for firms in this industry, and those firms that are most prepared to offer products without the banned ingredients will stand to profit. Though this comes from the industry itself, Walmart's buying power gives these directives similar weight to legislation.

Firms are under scrutiny if they make any claims that a product can have a drug-like effect. A major cosmetics firm that claimed some of its facial creams could "boost the activity of genes" received an official warning that threatened financial sanctions from the FDA if they did not either demonstrate the veracity of the claim to the FDA or change their advertising.

*Unilever found that **50 percent of the water use associated with a wide sample of their products was water used in tandem with their products by consumers in water-scarce countries.** With this knowledge, the company intends to develop products that will help 400 million customers worldwide lower their water usage in their personal hygiene practices by 2020. For example, they have been working on designing products aimed to reduce water usage in laundry products. Their "One Rinse" products, which can reduce the water needed in the laundry process in half, have been a successful line for Unilever. They have been used in 1.7 billion washes in 31 million households worldwide, a 78 percent increase between 2010 and 2013. In regions like Vietnam that are facing water scarcity this product accounts for 40 percent of the detergent market, showing the demand for these types of goods. In water stressed regions, around 38 percent of domestic water is used for cleaning clothing, making these types of efficiencies an easily marketable way for firms to gain market share.*

Walmart and PG made a commitment to a 25 percent reduction in water per dose for all liquid laundry detergent. This type of strategy cuts down on packaging costs, consumer water costs, and gives a competitive advantage to firms that gain market share among customers willing to pay a premium to lessen their environmental impact. Similarly, by switching to a concentrated bleach product, Clorox has saved 196 million gallons of water per year.

These types of products could engender goodwill with the public and allow firms to make a higher margin on their products as they save their consumers money. Firms that are able to successfully target those in water scarce regions will have a competitive advantage moving forward.

*Vermont recently passed an **EPR law**, the first of its kind in the U.S., specifically aimed at another Household and Personal Products Industry product, single-use batteries. It will require all manufacturers that sell single-use batteries in their states to develop and implement a plan to recycle their alkaline, zinc carbon, lithium primary silver oxide, and zinc air batteries by 2016.*

After the passing of the battery recycling law in Vermont, the advocacy group behind it, the Product Stewardship Institute, wants to push similar regulations nationwide. If this happens, the cost of doing business will rise for the companies in the sector. Energizer, a producer of single use batteries, admits in its FY2013 10-K that, "certain regulations have been enacted or are being considered in North America and certain European and Latin American countries with respect to battery recycling programs. As such economies develop, it is possible that new regulations may increase the risk and expense of doing business in such countries." If these regulations spread nationwide, they will result in significant compliance costs for firms that will be responsible for developing and implementing these programs at their own cost.

Analysis

- Despite strong evidence of interest and financial impact for the overall issue, SASB evaluated reservations from IWG participants, which indicated that the issue may need to be more clearly defined.
- This issue had three main angles: chemical safety, water intensity in the use phase, and EPR laws surrounding batteries. The IWG feedback indicated some general confusion about the combination of these issue angles into one broad issue. Separating the angles to focus on the stronger ones under different topic headings could bring greater clarity.
 - Further review and evaluation by SASB indicated that the angle of chemical safety (as it relates to product formulation) is the strongest angle. This issue was also discussed as part of the metrics subcommittee meeting on December 2 (see supplemental report for additional details).
 - Water in the use phase was the second angle, which had several factors SASB considered:
 - Scope – Some of the biggest impacts (water and energy) and thus opportunity for reduction actually occur upstream. The choice to remove phosphates from detergent, for example, has a bigger lifecycle GHG reduction than anything in the manufacturing phase or use phase.
 - Market – Some new products such as dry shampoo (sprays that require no water) seem very limited in their market size, though they may appeal to certain consumers.
 - Control – Many of the benefits, no matter how the product is designed, still require significant behavioral changes from consumers that are ultimately beyond the control of the company (e.g. shorter showers, using shorter laundry washing cycles, use cold water washing in place of hot). Furthermore, some are technology dependent, such as high efficiency washing machines.
 - Battery EPR relates just to a smaller sub-segment of this industry.

Recommendation

- **Split Issue and rename:** Chemical safety is a strong issue that can stand on its own whereas the others should be removed.
 - Chemical safety issue should be renamed to “Safety of Product Formulations”. This aspect received good feedback from IWG members. See Appendix III for a proposed version of standards for this industry.
 - The “Water Intensity in the Use Phase” aspect will be considered as an emerging issue based on the factors noted above. However, its materiality will be reconsidered if increasing challenges with water prices and availability lead to greater demand for household and personal products that reduce water intensity in use.
 - Battery EPR laws was a weak angle about a relatively minor sub-segment of the industry and should be dropped since it is not applicable to the broader group of companies.

3. NON-ALCOHOLIC BEVERAGES

b. Energy Management & Greenhouse Gas Emissions – Keep Issue, may remove GHG

Evidence of Interest

Heat Map Tests

The heat map score is 45 out of 100, which falls in the interquartile range among the issues for this industry and indicates a moderate level of interest.

IWG Feedback

Issue priority

The average priority ranking of the issue was moderately low, ranked 5th out of a total of 6 issues.

Issue materiality

RESPONSES TO MATERIALITY OF ENERGY MANAGEMENT & GHG EMISSIONS IN THE NON-ALCOHOLIC BEVERAGES INDUSTRY

Materiality	Corporations	Market Participant	Public Interest & Intermediaries	Grand Total	% of Total
Yes. It is material	3	3	6	12	67%
Yes, but with reservations	1	1	2	4	22%
No. It is not material	--	1	1	2	11%
Grand Total	4	5	9	18	

Comments from IWG respondents

The table below highlights some of the key comments received from IWG participants. Overall, there was some discrepancy in comments as to how much energy this industry uses as compared to others. Some participants felt this industry uses significant amounts of energy and that companies are also starting to differentiate themselves for the use of clean energy. Other participants did not think that the industry was a large user of energy, that the data would not provide comparable results, or that it would not be material without stronger carbon legislation in the US and/or longer investment time horizons.

Stakeholder Type	Material?	Stakeholder Comment
Corporation	Yes	<i>Companies in this sector can have significant energy footprints with respect to the energy required for sterilisation or for injection blow moulding of bottles.</i>
Public Interest & Intermediary	Maybe	<i>Lacking "carbon" legislation in the US this is not as material as it once was or is perceived to be. for me the issue of materiality relates to volatility of fuel/energy costs</i>
Market Participant	No	<i>Although an important piece of information for investors, I cannot see how the information can be collected in a way that it can be compared against a benchmark or peers.</i>

Evidence of Financial Impact

Initial SASB Research (Excerpt from Industry Brief for IWGs)

Companies in the industry utilize large amounts of energy and generate large portions of overall GHG emission. According to 2006 EPA data, the Food & Beverage industry, including non-alcoholic beverages, ranks 4th in both total energy used and GHG emissions within U.S. manufacturing sectors, presenting high-value, high-impact opportunities for energy efficiency and carbon emission programs. The beverage industry as a whole, through the Beverage Industry Environmental Roundtable, has launched an initiative to establish a common framework for GHG emissions reporting to better reduce the industry's environmental impact and influence on climate change. Members include Pepsi, Coca-Cola, Nestlé Waters, Heineken, and other beverage manufacturers. The industry guidance hopes to develop unified beverage industry compliance that will allow the beverage industry to better account for its GHG emissions and stay ahead of future regulation. This highlights the importance for individual companies to comply with and adopt collective industry frameworks to address potential regulatory hurdles in the future.

Energy outlays are a significant cost for non-alcoholic beverage companies. For Keurig Green Mountain Coffee, direct energy costs represented three percent of sales in 2013. Large companies including Coke, Dr. Pepper Snapple, Pepsi, and Keurig Green Mountain recognize the risk to profitability of increasing energy costs, especially if they cannot pass on these costs to customers through price increases.

Companies have begun focusing on energy use efficiency and GHG emissions as measures to reduce costs and carbon emissions. From 2006 to 2012, Coke's total absolute energy use increased from 58.4 billion to 62.4 billion megajoules, while total efficiency per liter improved from .49 megajoules per liter to .43 during the same period. By improving the company's energy use intensity, Coke avoided over \$200 million in energy costs in 2012 and a cumulative \$1 billion since 2004. While the company was able to improve energy use, its overall carbon emissions increased 3 percent from 2011 levels and remain 15 percent higher than 2004 baseline levels, well off the company's goal of improving its carbon emissions by 2015. Coca-Cola Enterprises, a large independent bottler, implemented energy efficiency programs that allowed the company to improve its overall energy use per volume of product by 50 percent from 267.4 kWh (kilowatt hours) per 1,000 liters in 2005 to 116.3 kWh per 1,000 liters of bottled water in 2011. The company maintains compliance with ISO 50001, a strict energy management certification that requires companies to document and set targets for energy efficiency programs.

Currently Pepsi spends about \$1 billion annually on various sources of energy. Through its energy efficiency initiatives, the company lowered its energy intensity by 14 percent in 2012 from 2006 baseline levels. This represented a cost savings of over \$70 million in 2012 alone. The company was able to maintain carbon emission on par with 2008 levels while still growing beverage volume by 12 percent over the same period, representing an improvement in carbon emission intensity.

Companies in the industry are diversifying their energy mix portfolio by investing in alternative forms of energy. Coke was recently recognized by the EPA for its use of alternative bio-gas at an Atlanta-based plant. The project was one of the largest of its kind and helped eliminate on-site carbon emissions equivalent to 6,000 cars a year. As part of Nestlé's operations in Mexico, the company invested in large solar and wind projects, which now generate over 85 percent of the company's energy needs in Mexico, in an effort to achieve its goal of zero CO₂ emissions. The company's Nescafe coffee operations utilize spent coffee grounds from manufacturing to generate over 26.7 percent of their total renewable energy mix, utilizing waste from operations as a valuable energy source. These efforts are partially responsible for the company's ability to reduce direct GHG emissions by 16 percent between 2003 and 2012, while production volume during the same period has increased 56 percent.

Beverage distribution generates a significant source of a company's direct GHG emissions. While some smaller companies may not directly operate their own distribution fleet, large beverage producers own and operate large fleets of vehicles to transport products. Fleet emissions represented over 45 percent of Coke's 2012 total scope 1 and scope 2 CO₂ emissions. The company currently operates over 200,000 vehicles worldwide to deliver its products, representing a significant source of fuel consumption and GHG emissions, which is a main reason the company is looking for methods to improve fuel efficiency and reduce costs in the long term. Since 2001, Coca-Cola has explored alternative energy vehicles. The company now maintains the largest hybrid electric fleet in North America with over 700 trucks in 2012. Compared to traditional diesel trucks, these trucks are currently 30 percent more efficient, with a carbon footprint reduced by 40 percent. A study of the performance of the hybrid fleet found that they helped reduce total operating expenses by 24 percent compared to the traditional diesel group, or \$0.74 compared to \$0.97 per mile, offering significant improvements in costs and carbon emissions.

Analysis

- IWG feedback and heat map scores indicate a moderate level of interest in this issue, while SASB's initial research suggests there may be relatively significant financial impacts associated with it. SASB conducted additional research to determine the relative size of GHG emissions and energy consumption by this industry, as well as to assess industry norms and potential regulatory risk.
- A number of different data sets (including Bloomberg, CDP, TruCost, etc.) were used to analyze the quantity and intensity of Scope 1 and 2 emissions across this industry. Data from the U.S. annual survey of manufacturers was also used to assess the cost of purchased fuels and electricity as % of total costs. This data was compared to other industries and sectors to review the relative differences in scale. Furthermore, additional considerations such as industry profit margins, regulatory exposure, and product-specific operations were also taken into consideration.
 - Various data sources reviewed for Scope 1 and 2 emissions offer conflicting results about which is higher. However, both Scope 1 and Scope 2 emissions seem to be equally relevant. Nonetheless, the total level of emissions is relatively low compared to other manufacturing industries covered in the past.
 - The Annual Survey of Manufacturers (ASM) data for purchased fuels and electricity costs for different segments of the industry indicates that these costs are relatively low as a % of total cost of materials (<2%). However, the % costs of fuel and electricity were considered in the context that this industry has relatively low margins (~5.3% according to Bloomberg data) and therefore a relatively small change in energy prices would be harder to absorb for this industry as compared to others.
- Additional background research was performed to assess industry norms and potential regulatory risks.
 - Company 10-K's (such as Coca Cola) note energy as a risk for them indicating that "increase in the cost, disruption of supply or shortage of energy or fuels could affect our

profitability". Other companies provided verbal confirmation that energy and fuel was an important cost in their operations.

- The Beverage Industry Environmental Roundtable (BIER) is a technical coalition of leading global beverage companies working to advance sustainability solutions industry-wide. BIER has benchmarked energy efficiencies as a key issue in different industry sub-segments.
- No evidence was found to suggest entities in this industry currently face regulations related to GHG emissions in regions where such regulations exist.

Recommendation

- **Keep this issue**, but consider removing GHG emissions and only focusing on energy usage.
 - While there is some discrepancy in data as to the extent of energy companies in the industry consume, there is general interest in this topic industry wide from a corporate and an investment perspective. Lower margins in this industry also indicate that smaller price changes in energy could affect these companies more. SASB's initial research demonstrates significant cost savings that companies have achieved as a result of energy and GHG reduction initiatives.
 - Activity level metrics will be considered that allow for a MJ/L comparison (or something similar) to address concerns of comparability among companies and align with current roundtable comparisons.
 - There is less of a regulatory risk of GHG emissions for this industry. None of them are currently listed as part of the CA Cap and Trade program (which could be based just on regional operations) and it is unclear if they are part of additional regulatory caps, but SASB will continue to research this.

4. ALCOHOLIC BEVERAGES

a. Energy Management & Greenhouse Gas Emissions – Keep Issue, may remove Energy

Evidence of Interest

Heat Map Tests

The heat map score is 35 out of 100, which falls in the interquartile range among the issues for this industry and indicates a moderate level of interest.

IWG Feedback

Issue priority

The average priority ranking of the issue was moderately low, ranked 4th out of a total of 5 issues.

Issue materiality

RESPONSES TO MATERIALITY OF ENERGY MANAGEMENT & GREENHOUSE GAS EMISSIONS IN THE ALCOHOLIC BEVERAGES INDUSTRY

Materiality	Corporations	Market Participant	Public Interest & Intermediaries	Grand Total	% of Total
Yes. It is material	5	2	5	12	75%
Yes, but with reservations	--	--	2	2	13%
No. It is not material	--	2	--	2	13%

Grand Total	5	4	7	16	
--------------------	----------	----------	----------	-----------	--

Comments from IWG respondents

The table below highlights some of the key comments received from IWG participants. The majority of respondents agreed with this topic. The two public interest groups that had hesitations noted that there was significant variability within the sub-segments (beer, wine and spirits) and that this issue might not be of interest to investors who are interested in a short time horizon. The two corporations that indicated that this was not a material issue did not think that alcoholic beverage industries (particularly wineries) were large users of energy or contributors to GHG, and that this was not a big proportion of their costs. It was noted that some larger companies in industry segments such as beer may have to participate in California’s Cap and Trade program, but that this is not currently a universal requirement.

Stakeholder Type	Material?	Stakeholder Comment
Public Interest & Intermediary	Maybe	<i>Energy & GHG varies significantly varies across the alcoholic sector product category fairly significantly, spirits, beer and wine have markedly different levels of materiality.</i>
Corporation	No	Managing energy is part of our daily business management and cost savings. We always strive to cut costs and drive efficiencies in our business, which is standard for the industry. But even if we didn’t manage our energy costs, it is unlikely that increasing fuel costs would be a material issue. As stated in our 2014 CDP Investor Questionnaire, “We have identified risks that affect the cost of energy/fuel, and to a lesser extent our supply chain. To put this in perspective financially, our cost of energy/fuel is about 1% of our total cost of operations, so the risk is considered low even without taking action. If the cost of energy/fuel was to increase by 15% and we did not manage this risk, then our operational cost could increase by \$2.4 million USD. ”

Evidence of Financial Impact

Initial SASB Research (Excerpt from Industry Brief for IWGs)

The Alcoholic Beverages industry is split between direct Scope 1 and indirect purchased Scope 2 emissions. Larger companies generate a greater portion of their own energy needs, resulting in higher Scope 1 emissions. The majority of scope 1 emissions are created by burning natural gas from co-generated sources. Natural gas is the primary fuel used to generate energy for AB InBev’s operations. According to 2006 EPA data, the Food and Beverage industry, which includes alcoholic beverages, ranks 4th in both total energy used and GHG emissions within U.S. manufacturing sectors, presenting high value, high impact opportunities for energy efficiency and carbon emission programs. As a result of generating a significant portion of its own energy from fossil fuel sources, the industry may face pressure from future [and current] carbon legislation. The beverage industry as a whole, through the Beverage Industry Environmental Roundtable, has launched an initiative to establish a common framework for GHG emissions reporting and reduction efforts. Members include Brown-Forman, Heineken, Carlsberg Group, and AB InBev. The industry guidance hopes to ensure consistent beverage industry compliance with the Greenhouse Gas Protocol, a widely accepted GHG accounting tool. Aligning industry efforts in accounting for and reducing GHG emissions can allow the beverage industry opportunities to influence and better navigate future emissions legislation.

Companies in the industry have begun to set energy efficiency and GHG emission reduction goals to improve operational efficiency as they recognize the potential material impacts from rising energy costs and regulation. AB InBev set a 2017 goal to reduce energy use by 10 percent per hectoliter of production from 2013 levels. Through its current energy efficiency programs, the company has saved a cumulative \$110 million since 2009, and more than \$31 million in 2013 alone. SABMiller set a goal to reduce direct emissions by 50 percent by 2020 from 2008 baseline levels. Through its current efficiency programs, including both water and energy, the company estimates it is saving more than \$90 million every year. Furthermore, companies are beginning to diversify their energy portfolios away from volatile fossil fuels and into more renewable energy sources. Producing alcohol generates by-products that can be used to generate renewable energy from biogas made in anaerobic digesters. Diageo invested £6 million in an anaerobic digester at a Scottish distillery, which allows the company to utilize draff (grain residue) and pot ale condensate to generate biogas. This program will supply the site with 40 percent of its total energy needs and reduce CO₂ emissions by 5 percent. In 2013, the company generated 9.8 percent of its direct energy usage from renewable sources, up from less than 1 percent in 2011. Similarly, Miller Coors invested \$1.5 million in a 1 MW biogas cogeneration plant to help power its Irwindale, California brewery. The net cost of the project was \$474,040 after state rebates, and it generates annual costs savings of nearly \$1 million.

Analysis

- IWG feedback and heat map scores indicate a moderate to high level of interest in this issue, while SASB's initial research suggests there may be relatively significant financial impacts associated with it. SASB conducted additional research to determine the relative size of GHG emissions and energy consumption by this industry, as well as to assess industry norms and potential regulatory risk.
- A number of different data sets (including Bloomberg, CDP, TruCost, etc.) were used to analyze the quantity and intensity of Scope 1 and 2 emissions across this sector. Data from the U.S. annual survey of manufacturers was also used to assess the cost of purchased fuels and electricity as % of total costs. This data was compared to other industries and sectors to review the relative differences in scale. Furthermore, additional considerations such as industry profit margins, regulatory exposure, and product-specific operations were also taken into consideration.
 - Scope 2 emissions from the alcoholic beverage industry are lower than Scope 1 emissions. However, the total level of emissions is also relatively low compared to other manufacturing industries covered in the past, but not insignificant. Annual survey of manufacturing data for purchased electricity and fuel costs for different segments of the industry indicate that energy is a relatively low amount of total costs (<2%), with some variance between the different segments, but not a drastic difference.
- Major companies and industry experts were also consulted to better understand whether or not this is a potentially material topic for this industry.
 - Industry experts noted that heating and cooling is an energy intensive part of the brewing and production process.
 - A number of these companies (mostly beer manufacturers) are also included in the California Cap and Trade program due to high facility level emissions. Companies currently listed in the Cap and Trade program include: AB InBev, Miller Coors, and E&J Gallo Winery. However, the industry as a whole might be exposed to this regulatory risk if the Cap and Trade program were to expand to other states or regions.
 - Companies also mentioned pilot programs underway in Europe to measure and label the carbon footprint/intensity associated with total production volume of beer.

Recommendation

- **Keep the GHG angle of this issue and consider removing the separate energy management angle** (typically SASB discusses energy management separately from GHG)

emissions when purchased electricity consumption is significant, capturing an industry’s indirect environmental impacts but also material impacts on costs and operations).

- Most participants agreed that this issue is likely to be material and SASB’s initial research suggests the potential for significant cost savings from reductions in direct energy use and GHG emissions.
- GHG emissions is particularly relevant for this industry due to the use of onsite cogeneration, Cap and Trade regulations, and upcoming carbon footprint labeling pilots for European beverages. While Scope 2 energy management is slightly lower than Scope 1, it is potentially still a relevant and comparable proxy for energy intensity (particularly at a per bottle rate), though perhaps less of a risk from a cost perspective due to higher industry margins. SASB will continue to research this issue further.

III. Strong Issues with Reservations

This section focuses on issues where a majority of participants also agreed about the likely materiality, but some had reservations (close to 75 percent of participants typically agreed that the issues were likely material or they agreed that issues were likely material but with some reservations). Feedback on issues in this section was generally more positive than those issues presented in Sections I and II. For such issues, SASB evaluated the **specific IWG comments** and the strength of the initial evidence of financial impact to determine whether any changes were required. An **analysis** of all evidence is provided, together with a final **recommendation** for inclusion or removal of the issue.

1. NON-ALCOHOLIC BEVERAGES

a. Packaging Lifecycle Management & Innovation – Keep Issue

Evidence of Interest

Heat Map Tests

The heat map score is 15 out of 100, which is in the bottom quartile among the issues for this industry and indicates a low level of interest.

IWG Feedback

Issue priority

The average priority ranking of the issue was moderate, ranked 4th out of a total of 6 issues.

Issue materiality

RESPONSES TO MATERIALITY OF PACKAGING LIFECYCLE MANAGEMENT & INNOVATION IN THE NON-ALCOHOLIC BEVERAGES INDUSTRY

Materiality	Corporations	Market Participant	Public Interest & Intermediaries	Grand Total	% of Total
Yes. It is material	4	3	4	11	61%
Yes, but with reservations	--	2	5	7	39%
No. It is not material	--	--	--	--	0%
Grand Total	4	5	9	18	

As the table shows, no IWG participants indicated that the issue is not likely to be material for companies in the industry.

Comments from IWG respondents

The table below highlights some of the key comments received from IWG participants. A number of participants (primarily public interest groups) had hesitations on the materiality of this issue, citing the following concerns: packaging is not necessarily produced or controlled by the company selling the final product and innovation is usually secretive, benefits of reporting do not outweigh the costs, not comparable amongst companies, low financial impact, and not relevant to investor time horizons.

Stakeholder Type	Material?	Stakeholder Comment
Public Interest & Intermediary	Yes	<i>wasted resources (i.e. container materials) and litter represent an unnecessary wasting of natural resources, increasing, long-term cost exposure to producers and social backlash (i.e. legislation)and environmental impact with litter an lack of recycling effort success</i>
Market Participants	Maybe	<i>While an important topic for investors, I do not see how these efforts can be measured and compared across companies in a meaningfully analytical way.</i>
Public Interest & Intermediary	Maybe	<i>Of all of the issues, this appears to have the least amount of financial impact. Light-weighting had a direct impact, however, recycling and recovery has a less direct impact on the company's ability to be successful until the raw materials needed for packaging become more scarce or expensive.</i>

Analysis

- A number of stakeholder interviews were conducted with major industry players as well as industry analysts to determine the opportunity for financial analysis and corporate differentiation via packaging innovation in this industry and the potential role that corporations may or may not play in it.
 - Investors noted interest in this topic since it could help identify industry leaders, lower costs and footprint, and better target the green consumer market opportunity.
 - Efforts noted in the evidence section in the brief point to cost savings opportunities.

Recommendation

- **Keep this issue.** No respondents indicated that this topic was likely not to be material and evidence of financial impact and analyst interest is also available.
- SASB will revisit IWG concerns about the comparability of material inputs in future iterations of the brief. The metrics section will continue to address the comparability concerns of the IWG responses via activity level metrics that allow for more direct comparability between companies and additional clarification throughout the reporting guidance.

2. ALCOHOLIC BEVERAGES

a. Packaging Lifecycle Management & Innovation – Keep Issue

Evidence of Interest

Heat Map Tests

The heat map score is 35 out of 100, which is in the upper quartile among the issues for this industry and indicates a high level of interest.

IWG Feedback

Issue priority

The average priority ranking of the issue was low, ranked 5th out of a total of 5 issues.

Issue materiality

RESPONSES TO MATERIALITY OF PACKAGING LIFECYCLE MANAGEMENT & INNOVATION IN THE ALCOHOLIC BEVERAGES INDUSTRY

Materiality	Corporations	Market Participant	Public Interest & Intermediaries	Grand Total	% of Total
Yes. It is material	3	3	5	11	69%
Yes, but with reservations	1	1	2	4	25%
No. It is not material	1	--	--	1	6%
Grand Total	5	4	7	16	

Comments from IWG respondents

The table below highlights some of the key comments received from IWG participants. Most respondents agreed that this topic is likely to be material, however, those with reservations noted the following concerns:

- **Lack of Comparability:** Difficult to quantify and benchmark metrics, partly due to wide variety of packaging formats, a lack of standardization around LCA analysis, and companies managing issues based on different factors.
- **Limited Control:** Due to the variability of market recycling infrastructure, regional packaging regulations, and varied ownership of the packaging design process, not all companies feel that they have control over changing this issue.

Stakeholder Type	Material?	Stakeholder Comment
Corporation	Maybe	<i>Beverage alcohol products are sometimes subjected to packaging regulations which limit the ability of primary packaging (i.e. the bottle) to be reused. Because of the different recycling regulations and infrastructure, it is difficult to produce a single package which can be fully recycled in all markets where it is sold. Again, end of lifecycle control is limited, as companies can only try to influence consumers to properly recycle beverage alcohol packaging.</i>
Corporation	No	<i>...Most companies are also working to lower material inputs and use materials with fewer impacts. Compared to water and energy, packaging life cycle is less material and harder to measure, and make comparisons...End of life reuse and recycling depend on a variety of factors and are complicated. For example, in some instances it could take more energy to recycle glass if transportation distances are long. The brief doesn't mention secondary packaging and only briefly mentions reducing material inputs. ... not material because each company will manage issues based on different factors - size, culture, geographic footprint, etc.</i>
Public Interest & Intermediary	Maybe	<i>Packaging formats and material use vary significantly across the alcoholic sector category of products; generally not comparable from one to the next. Metrics are real challenge.</i>

Analysis

- A number of stakeholder interviews were conducted with major players in the industry as well as industry analysts to determine the role of corporate opportunity for innovation of packaging in this industry.
 - Interviews confirmed that a number of companies do have packaging that is vertically integrated into their operations, and that they often do play a role in driving packaging innovation (this is particularly relevant for premium alcohol brands that wish to distinguish themselves in the marketplace). Beyond the direct bottle/container, there are also opportunities to light-weight shipping containers and additional packaging.
 - Experts also noted that the industry as a whole tends to perform fairly similarly and take advantage of new innovations and reductions industry-wide when they become available. The market also dictates the options and opportunities very differently across multiple regions.
- The research brief provides evidence of low recycling rates, high costs of packaging materials, capital investments in new bottling technologies, and materials reduction and cost-savings from companies that have participated in package improvement efforts. Excerpts from the brief:
 - Currently, it is estimated that only 37 percent of the nearly 243 billion beverage containers sold in the U.S. are recycled and diverted away from landfills.
 - Constellation Brands, a large producer of distilled spirits and wine, states that packaging materials are the largest cost component in beverage production, representing large opportunities for cost savings.
 - In 2013, AB InBev invested more than \$100 million in a new aluminum bottling plant that would allow the company to reduce the weight of its 16 ounce cans by 40 percent, reducing materials by more than 9,200 tons per year and avoiding 80,500 tons of CO₂ emissions.
 - Industries with similar containers have seen large cost savings from their light-weighting efforts. For example, Coca-Cola's light weighting efforts have helped the company save more than \$180 million over a two-year period.

Recommendation

- **Keep this issue.** Only one respondent indicated that this topic was likely not to be material and evidence of financial impact and analyst interest is also available.
- SASB will revisit IWG concerns about the reduction of material inputs in future iterations of the brief. The metrics section will continue to address the comparability concerns of the IWG responses via activity level metrics that allow for more direct comparability between companies and additional clarification throughout the reporting guidance.

3. TOBACCO

a. Responsible Marketing – Keep Issue

Evidence of Interest

Heat Map Tests

The heat map score is 55 out of 100, which is in the upper quartile among the issues for this industry and indicates a high level of interest.

IWG Feedback

Issue priority

The average priority ranking of the issue was high, ranked 2nd out of a total of 4 issues.

Issue materiality

RESPONSES TO MATERIALITY OF RESPONSIBLE MARKETING IN THE TOBACCO INDUSTRY*

Materiality	Corporations	Market Participant	Public Interest & Intermediaries	Grand Total	% of Total
Yes. It is material	--	3	2	5	71%
Yes, but with reservations	--	1	--	1	14%
No. It is not material	1	--	--	1	14%
Grand Total	1	4	2	7	

*Note: This industry has a small sample size of participants

Comments from IWG respondents

The table below highlights some of the key comments received from IWG participants. Most respondents agreed that this issue is likely to be material, citing in particular, public perception for the social license to operate and preserving relationships with governments and regulators as key opportunities in responsible marketing. The market participant that had hesitations noted that the definition of “responsible marketing” is not always clear, and that much of the irresponsible marketing comes from retailers or others beyond the traditional major companies. The company that did not think this issue is material noted that it will depend on the nature and size of any enforcement actions and that the absence of fines do not necessarily indicate more responsible behavior (particularly if smaller manufacturers are less of a target).

Stakeholder Type	Material?	Stakeholder Comment
Corporations	No	<i>This seems to be more of an issue of legal compliance than anything else, and materiality will depend upon the nature and size of any particular enforcement action. Existing rules requiring disclosure of material contingent liabilities already provide investors with actionable information on legal and regulatory enforcement risk. Also, depending upon the size of the company, the absence of fines / litigation arising out of marketing is not necessarily an indicator of responsible marketing, as enforcement agencies typically focus on larger manufacturers.</i>
Market Participants	Maybe	<i>Responsible marketing is a difficult topic because (1) Definition of responsible is very hard. All the major companies will follow the guidelines but is direct marketing by good looking salespeople in bars to adults irresponsible. Some may say yes but others that adults can make own choice. The health lobby argue any marketing of a product that is dangerous is irresponsible; (2) Many of the 'irresponsible' marketing comes from people other than the major players eg retailers often sell to underage users but do the authorities really make an effort to stop this, illicit cigarettes are a major problem - far less so in the USA...</i>

Analysis

- As noted in IWG feedback, “Responsible marketing” should be clearly defined in the technical protocol.

- Responsible marketing metrics should be directed at actions that companies within this industry have control of and the use of fines as an assessment tool should be thoroughly reviewed.
- An expert interview with a tobacco industry analyst was conducted to learn more about this issue.
 - There have not been significant changes/problems in tobacco marketing since the Master Settlement Agreement noted in the evidence section. However, a similar set of regulations are underway for new and emerging tobacco products (e-cigarettes, etc.) so this could remain an issue of concern until additional regulations are in place.

Recommendation

- **Keep this issue**, since it may be relevant to emerging tobacco products that are not fully regulated yet. However, per IWG feedback, “responsible marketing” will be clearly defined in the technical protocol and the associated briefs to address concerns about the ambiguity of this title.

b. Supply Chain Management – Keep Issue

Evidence of Interest

Heat Map Tests

The heat map score is 23 out of 100, which is in the lower part of the interquartile range among the issues for this industry and indicates a moderately low level of interest.

IWG Feedback

Issue priority

The average priority ranking of the issue was moderately low, ranked 3rd out of a total of 4 issues.

Issue materiality

RESPONSES TO MATERIALITY OF SUPPLY CHAIN MANAGEMENT IN THE TOBACCO INDUSTRY*

Materiality	Corporations	Market Participant	Public Interest & Intermediaries	Grand Total	% of Total
Yes. It is material	--	3	2	5	71%
Yes, but with reservations	--	--	--	--	0%
No. It is not material	1	1	--	2	29%
Grand Total	1	4	2	7	

**Note: This industry has a small sample size of participants*

Comments from IWG respondents

The table below highlights some of the key comments received from IWG participants that did not agree on the materiality of this issue. These two participants did not find this topic material, citing the high gross margins and diversity of supply, and that the risks primarily fall on the growers and intermediaries as opposed to the manufacturers. However, most of the participants felt like this issue was likely to be material and that supply chain materials are critical for a number of reasons.

Stakeholder Type	Material?	Stakeholder Comment
Corporation	No	<i>Supply chain management may be material to a “socially responsible” investor, but it is not clear that the risks being managed are material to an investor who does not use such a filter in making investment decisions. All</i>

		<i>of the legal, regulatory, and direct financial risks associated with things like child labor, worker health, and agronomic practices fall directly on the growers, not the manufacturer contracted to purchase from the grower. A manufacturer who purchases from a leaf dealer who purchases from a grower has an even more tenuous connection to the itemized risks. Therefore, at most, this is a reputational risk, and companies that want to have a reputation for responsibility ought to be managing against this risk, but it does not follow that it is material for purposes of this exercise. It also appears that the brief is duplicative here with respect to points otherwise covered in the climate change adaption section.</i>
Market Participants	No	<i>The Tobacco industry has high gross margins and good diversity of supply. In most cases one would not expect any material issues from the supply chain in either a financial or operational sense.</i>

Analysis

- SASB analyzed the supply chain of the Tobacco industry within the Climate Change Adaptation section noted above. Companies primarily procure tobacco leaf through sourcing contracts (as opposed to their own operations), therefore sourcing concerns within the supply chain are still relevant to consider. Furthermore, other social and environmental concerns related to labor and safety issues, certifications, and other regulatory impacts are still relevant to consider here.
- SASB’s industry brief discusses the potential value impact for tobacco companies. Excerpt from the brief:
 - Tobacco products companies rely on stable supplies of inputs including tobacco leaf. Sustainability factors affecting supply availability, including [environmental factors], social issues, and certain farming practices, can increase the probability of crop failure or reduced yields. This could raise tobacco leaf purchase costs for manufacturers, and in turn lower cash flows and profits. Social issues such as labor abuses or community pushback can similarly raise purchase costs if supplies are constrained or cut, either voluntarily by purchasers or against purchasers’ will. Recurring supply chain disruptions and resulting financial consequences may harm a company’s credit profile over time.

Recommendation

- **Keep this issue** and address any current supply chain or sourcing concerns in this section.

IV. Suggested Additional Issues

The following additional topics were suggested by industry working group members, and reviewed by SASB. Often these topics include those already considered by SASB as part of the initial research process. This is followed by SASB’s decision on the issues, based on additional evidence research. SASB conducted further research, including analysis of Form 10-K disclosures, and discussions with industry experts to determine materiality of the topics suggested. In some cases, it may result in addition of an angle and relevant metrics to an existing issue or inclusion of a new issue.

TABLE II: NEW ISSUES PROPOSED BY IWG MEMBERS

Industry	Topics Proposed by IWG Members
1. Agricultural Products	a. Waste Management
	b. Energy Management
	c. Food Security
	d. Employee Health & Safety
	e. Employee Diversity
	f. Product Lifecycle Management*
	g. Political Spending*
2. Meat, Poultry, and Dairy	a. Waste Management*
	b. Air Quality
	c. Energy Management
	d. Working Conditions
	e. Community Relations*
	f. Food Waste
3. Processed Foods	a. Waste Management
	b. Labor Relations*
	c. Employee Diversity
	d. Food Waste
	e. Climate Change Adaptation*
	f. Political Spending
4. Non-Alcoholic Beverages	a. Ecological Impacts*
	b. Food Safety
5. Alcoholic Beverages	a. Ecological Impacts*
	b. Waste Management
	c. Employee Health & Safety
	d. Employee Diversity
6. Tobacco	a. Counterfeit Products
7. Household & Personal Products	a. GHG Emissions & Energy Management
	b. Waste Management*

**Note: These topics are already incorporated into other issues/angles within the industry*

1. AGRICULTURAL PRODUCTS

a. **Waste Management** – Do not add

- **IWG Comment:** *“Is material part of the resource efficiency”*
- **Analysis:** Further background research and expert calls identified that this is a difficult issue for companies to universally tackle based on the type of industry and degree of vertical integration. Furthermore, recovery techniques are currently in place to a certain degree and additional measure may or may not be cost effective.
- **Recommendation:** Do not add

b. **Energy Management** – Do not add

- **IWG Comment:** *“(Quantitative) a ranking by product and method of energy in / kcal out EUI of base operation. EUI of chosen suppliers. Captured vs. Potential Efficiency. In some ways, efficiency metrics are embedded in the other categories.”*
- **Analysis:**
 - Data suggests that most of the GHG emissions from the industry come from Scope 1 emissions. The use of natural gas and diesel to run farm equipment and distribution of crops is accounted for in Scope 1 emissions as part of the GHG emissions issue.
- **Recommendation:**
 - Do not add as a separate issue. SASB did not come across evidence of materiality for Scope 2 emissions in this industry, and Scope 1 emissions are already captured under the GHG emissions issue.

c. **Food Security** – Likely do not add

- **IWG Comments:**
 - *“According to FAO, **Food Security is a more inclusive term, which also involves other critical issues on the industry, beyond Food Safety and Inocuity**”* [Public Interest]
 - *“I’m not sure if this fits the context of a separate topic, but I **don’t see it sufficiently captured** at the moment, **particularly in the interplay between biofuels and food ag.** I’m not sure of the best way to note this profile, but it’s an important issue that should get some attention here I think.”* [Public Interest]
- **Analysis:**
 - It’s unclear what the role of corporate responsibility is here, and how agricultural products companies would be evaluated, however, it may be more relevant for the biofuels industry to consider.
- **Recommendation:**
 - This topic is being considered in the Renewable Resources sector within the Biofuels industry since there is a stronger link to companies in this industry. Additional research is currently underway on this issue and it may be added at a later date if deemed relevant and likely to be material.

d. **Employee Health & Safety** – Do not add. Already addressed – Labor Conditions.

- **IWG Comment:** *“Fraught with danger.”* [Corporation]
- **Analysis:**
 - Total Recordable Injury Rate (TRIR) and pesticide exposure incidents are included in the metrics for the Labor Conditions issue:
 - (1) Total Recordable Injury Rate (TRIR), (2) Fatality Rate, and (3) Near Miss Frequency Rate for (a) full-time employees, (b) seasonal and migrant employees
 - Number of reportable incidents resulting from worker exposure to pesticides
- **Recommendation:**

- Do not add this as a separate issue since this angle is already captured under Labor Conditions.
- e. **Employee Diversity** – Do not add
- **IWG Comment:** “Agriculture is a heavily skewed male industry.” [Corporation]
 - **Recommendation:** Do not add, no additional evidence of financial impact was found and this is not considered likely to be material for this industry.
- f. **Product Lifecycle Management** – Do not add. Already addressed.
- **IWG Comment:** “Shipping containers and production materials should be addressed, heavily intensive in industry” [Corporation]
 - **Analysis:**
 - This issue is currently captured (in large part) under Scope 1 emissions from transport in the GHG Emissions Issue.
 - **Recommendation:**
 - Do not add as a separate issue since SASB does not typically focus on Scope 3 emissions from transport outside of direct operations. Companies often lack direct control of Scope 3 emissions and therefore there is a lack of financial impact.
- g. **Political Spending** – Do not add. Already addressed in Mgt of Legal & Reg Environment.
- **IWG Comment:** “In addition to all the usual metrics around this topic, the movement of money to mask or enhance any of the above categories. Follow the money and much of the rest of the stories will be told.”
 - **Analysis:**
 - See the Management of the Legal and Regulatory Environment Issue where this topic was already analyzed and included as a material issue for this industry.
 - **Recommendation:**
 - This issue was already in the brief, under the title “Management of the Legal and Regulatory Environment. Suggest changing the “Management of the Legal and Regulatory Environment title to “Political Spending” to make sure the metric asked clearly represents the issue title and aligns with issue names used in the Resource Transformation sector.

2. MEAT, POULTRY, AND DAIRY

- a. **Waste Management** – Do not add. Already addressed.
- **IWG Comments:**
 - “If poorly managed, waste can create **regulatory actions and burdens.**” [Public Interest]
 - “Waste in production of meat, poultry and animal products which could include animal waste, packaging waste, production waste (such as acid whey when producing dairy) that has **cost and risk associated in its disposal.**” [Corporation]
 - “Amounts of solid and/or hazardous wastes **generated and disposed of in landfills.**” [Corporation]
 - “Managing solid waste is a **significant cost to this industry.** Sustainable practices such as **composting and package reduction should be encouraged** by adding this metric to disclosures.” [Public Interest]
 - **Analysis:**
 - This issue in terms of hazardous materials / proper disposal of waste is covered under the “Land Use & Ecological Impacts” issue in Meat & Poultry. See evidence from brief below:
 - “In 1997, the EPA fined Smithfield Foods, Inc., and two of its subsidiaries \$12.6 million for violations of the Clean Water Act, the largest CWA fine in history at the time. The company allegedly discharged wastewater from its hog slaughtering and

processing into the Pagan River, in Virginia, resulting in more than 5,000 water discharge permit violations over the course of five years. The water contained high levels of substances including phosphorous, ammonia, cyanide, oil, grease, and fecal coliform, a result of the company's failure to install adequate treatment equipment.

Companies discuss potential financial liabilities from wastewater disposal in financial disclosure. For example, National Beef reported risks in its FY2013 10-K in regards to wastewater treatment costs. The company utilizes both municipal wastewater treatment facilities as well as its own treatment plants. The company stated that, as water quality discharge requirements become increasingly strict, it "could be asked to contribute toward the costs of such upgrades or to pay significantly increased water or sewer charges...National Beef may also be required to undertake upgrades and make capital improvements to its own wastewater pretreatment facilities, the cost of which could be significant."

- **Recommendation:**

- Do not add (not a new issue) – This topic is already covered under Ecological Impacts within the Brief in terms of regulatory (fines) risks, as well as its influence on the environment in which waste is disposed. SASB will consider renaming the issue and/or adjusting the issue description to ensure this angle is clearly represented.

b. **Air Quality** – Likely do not add

- **IWG Comment:** "How much NO_x, SO_x, VOC, PM, Lead, CO etc are emitted?" [Corporation]

- **Analysis:**

- A number of industry reports were analyzed and included searches for significant fines or regulations on this topic.
 - There is insufficient evidence to indicate that these specific emissions are of material concern.
 - The air emissions data that was found for this industry was relatively small in comparison with other industries
 - Research did not yield any major fines, though there is some evidence of past fines that have since been remediated. SASB will continue to look for additional fines that are more recent.

- **Recommendation:**

- Likely do not include this issue since insufficient evidence was found to determine if it's likely to be material. However, SASB will continue to research this issue.

c. **Energy Management** – Do not add

- **IWG Comment:**

- "Energy is a major costs to operations in this sector." [Public Interest]
- "There is reference to generation of GHGs ... but would be good to associate the use of energy as a separate matter." [Public Interest]

- **Analysis:**

- A number of different data sets were used to analyze the quantity and intensity of Scope 1 and 2 emissions across this sector. Data from the annual survey of manufacturers was also used to assess the cost of purchased fuels and electricity as % of total costs. This data was compared to other industries and sectors to review the relative differences in scale.
 - This issue seems not likely to be material for the industry as a standalone topic; however the topic might be material for some sub-industries in livestock production. Data suggests that most of the GHG emissions from the industry are Scope 1 emissions. However, as evidenced by an FAO report, the Scope 1/ Scope 2 ratio is very different for several sub-industries within livestock production. Emissions from electricity use for Poultry, for example, seems to be higher than those coming

from the animals and manure management. Also data from the Annual Survey of Manufacturers shows that electricity use is relatively high for some segments (but not all).

- **Recommendation:**

- Do not add as a separate issue. Scope 2 emissions seems NOT to be universally material for all segments in this industry, and Scope 1 emissions are already captured under the GHG emissions issue.

d. **Working Conditions** – Do not add

- **IWG Comment:** *“There is a growing interest in controlling better the use of migrant workers in the farms.”* [Public Interest]

- **Analysis:**

- Working conditions of the migrant workforce is already included in the “Workforce Health and Safety” issue. Metrics include:
 - (1) Total Recordable Injury Rate (TRIR), (2) Fatality Rate, and (3) Near Miss Frequency Rate
 - Description of practices to monitor for and mitigate chronic and acute respiratory conditions

- **Recommendation:**

- Do not add as an additional issue, already included.

e. **Community Relations** – Do not add. Already in Land Use and Eco. Impacts.

- **IWG Comment:** *“Many livestock facilities hurt local economies by lowering property values, causing odors and pollution. It would be great to see a “good neighbor” score that is crowd sourced from local communities where company facilities are located.”* [Public Interest]

- **Analysis:**

- This is covered under the Land Use and Ecological Impacts issue which also looks at runoff, odor, pollution, etc., which can impact community relations.
- SASB did not find major evidence of regulations or fines as a result of community pushback beyond those noted already and the case mentioned below:
 - North Carolina passed a law in 2007 which banned new lagoons from swine operations and mandated that any new or expanded CAFO’s must use environmentally superior technologies – however, a number of loopholes exist that have prevented full implementation of this law.
- While community relations issues could arise due to protests, sit-ins, etc., there is little evidence of direct value impact to shareholders; particularly since many of these operations are outsourced to small farmers and not directly linked to a corporate brand.

- **Recommendation:**

- Do not add

f. **Food Waste** – Do not add

- **IWG Comments:**

- “So much food gets wasted globally and producers have a responsibility to ensure packaging optimizes shelf life and that proper consumer education programs are in place.” [Corporation]
- *“Managing solid waste is a significant cost to this industry. Sustainable practices such as composting and package reduction should be encouraged by adding this metric to disclosures.”* [Public Interest]

- **Analysis:**

- SASB analyzed the current state of food waste in the meat industry and the potential opportunity for improvements.

- Efficient utilization of by-products has direct impact on the economy and environmental pollution. Non-utilization or underutilization of by-products not only leads to loss of potential revenues but can also lead to the added and increasing cost of disposal of these products. Traditions, culture and religion are often important when a meat by-product is being utilized for food (there must be market opportunity). Regulatory requirements are also important because many countries restrict the use of meat by-products for reasons of food safety and quality.
 - Hillshire Farms and other meat production facilities have processes to convert input materials to other products (such as bologna).
- **Recommendation:**
 - Do not include this issue. While improvements could likely still be made, not much food waste or by-products are sent to landfill since it can be used in other applications. It appears that the industry has already included the best alternative value-added avenues for waste and by-products within relevant markets. There is insufficient evidence to show the market opportunity industry-wide.

3. PROCESSED FOODS

a. **Waste Management** – Do not add

- **IWG Comments:**
 - *“Waste in food production in both supply chain and manufacturing can be significant and contribute to sustainability impacts at plant and on a supply level.”* [Corporation]
 - *“While packaging is noted in the current list, a substantial amount of waste is also created during food manufacturing process (before, during, after). Food manufacturers should be able to track, report and hopefully set goals to reduce that waste.”* [Corporation]
- **Analysis:**
 - Wastewater is covered under SASB’s “Water Management” issues which makes up the majority of regulation and disposal concerns (separate from food waste).
 - “Food Waste” has been suggested as its own issue (see proposed Food Waste section for further details).
- **Recommendation:**
 - Do add this as an issue. Based on previous issue research, SASB determined that solid waste management (separate from food waste) was not likely to be of material concern to the industry since most processed foods companies do not directly utilize many hazardous chemicals, pollute the environment, or violate regulations on a regular basis due to solid waste. Furthermore, wastewater was covered under the “Water Management” issue in the brief.

b. **Labor Relations** – Do not add. Partially addressed in Supply Chain Management.

- **IWG Comment:** *“Labor Issues (Child/Forced Labor, Discrimination, Discipline, Harassment/Abuse, Freedom of Association, Labor Contracts) are **material to many industries**, particularly those with **manufacturing aspects**.”* [Corporation]
- **Analysis:**
 - SASB reviewed a number of documents looking for examples of this in companies’ direct operations, as well as fines, strikes, etc. There is insufficient evidence to support this angle from a direct operations perspective.
 - While there are some labor relations concerns associated with food production, they primarily occur in the “Supply Chain Management” issue, which addresses this topic via third party certifications through the following metrics:
 - Percentage of food ingredients sourced that are certified to a third-party environmental and social standard

- Suppliers' social and environmental responsibility audit compliance: (1) priority non-conformance rate and associated corrective action rate, and (2) other non-conformances rate and associated corrective action rate
 - **Recommendation:**
 - Do not add due to lack of evidence that this is likely material in direct operations, and potential overlap with the supply chain management issue.
- c. **Employee Diversity** – Do not add
 - **IWG Comment:** *“This may go beyond the realm of this initiative, but given that many companies today are requiring appropriate levels of diversity within their supplier base, I think some level of disclosure of gender and possibly ethnic diversity at the level of senior leadership may be appropriate as a metric for strength of leadership. However, this is a softer topic that may not be warranted here. Other options might be an industry standard for the level of employee engagement based on externally-audited surveys. Again, just a thought while we're thinking about overall societal impact and values that may be of interest to investors.”* [Market Participant]
 - **Recommendation:**
 - Do not include, not considered material for this industry.
- d. **Food Waste** – Do not add
 - **IWG Comments:**
 - *“Food waste in the United States is estimated at roughly between **30 to 40 percent of the food supply**. In 2010, an estimated 133 billion pounds of food from U.S. retail food stores, restaurants, and homes never made it into people's stomachs. The amount of uneaten food in homes and restaurants was valued at almost \$390 per U.S. consumer in 2008, more than an average months' worth of food expenditures. Food waste the single largest type of waste entering our landfills -- Americans throw away up to 40 percent of their food. Addressing this issue not only helps with combating hunger and saving money, but also with combating climate change: food in landfills decomposes to create potent greenhouse gases. Same EPR argument above on packaging could result on liabilities for the food industry on its contribution to domestic food waste.”* [Market Participant]
 - *“Waste –specifically food waste – represents a significant opportunity for the environment and society. Approximately **40 percent of food is wasted globally** (see FWRA report). Though most of this occurs in residential settings, the food and ingredients wasted by food companies represent loss through (1) the expense of purchasing the raw material/ingredient and (2) the expense of managing the waste stream. Further analysis should be done to determine the economic value of the waste and opportunity to determine whether the issue is material from an investor perspective.”* [Corporation]
 - **Analysis:**
 - Further background research and expert calls identified that this is a difficult issue for companies to universally tackle since the degree of vertical integration is often indicative of the amount of control they have over for this issue. For example, since many companies in this industry source agricultural products from other farmers in their supply chain, they are often unable to dictate how those farmers process excess food waste. Furthermore, food waste recovery techniques are currently in place within the processing states (to a certain degree) and additional measures may or may not be cost effective.
 - Some companies report philanthropic and collaborative efforts to reduce additional food waste, however, no clear evidence of financial impact was found.
 - Literature reviews often cited disparate assumptions about where in the value chain this was occurring, what the extent of the problem is, and how companies can be involved in improving this situation. However, several sources agree that the majority of this waste occurs at the consumer and/or production phases; in comparison, processing and

packaging losses represent a relatively smaller amount of waste (depending on the sub-segment of food types).

- **Recommendation:** Do not add

e. **Climate Change Adaptation** – Do not add. Already addressed in Supply Chain Management.

- **IWG Comment:** “As with the meat, dairy and poultry industry, climate change affects access to raw materials for producing processed foods and the associated economics.” [Public Interest]
- **Analysis:**
 - This angle is covered in the supply chain management issue since most of the climate impacts occur in the supply chain.
- **Recommendation:**
 - Do not add as a separate issue, already addressed in supply chain management.

f. **Political Spending** – Do not add

- **IWG Comment:** “Given the level of spend by many companies on topics ranging from anti-GMO labeling to limiting restrictions on marketing and the Farm Bill, I think disclosure of such spend by topic would be extremely helpful. Of course, the advent of Citizens United may make such disclosures hard to enforce, but consideration may be warranted.” [Market Participant]
- **Analysis:**
 - There is limited evidence correlated with financial impact on this topic, with the exception of GM.
 - The industry doesn’t, in raw numbers, contribute that much toward political campaigns. Their main issue revolves around GMOs and anti-obesity initiatives, and SASB has already developed metrics to capture a companies’ risk exposure to these issues.
- **Recommendation:**
 - Do not add

4. NON-ALCOHOLIC BEVERAGES

a. **Ecological Impacts** – Do not add. Already addressed.

- **IWG Comment:** “tied to agriculture, sustainable agricultural practices have direct impact on soils quality, run-off and impact to eco-system” [Public Interest]
- **Analysis:** This angle is captured in the Supply Chain Management issue for this industry, and more directly in the Agricultural Products industry.
- **Recommendation:**
 - Do not add this as a new issue, since it is already addressed in other issues.

b. **Food Safety** – Do not add

- **IWG Comment:** “Food and Beverages companies are affected by food safety issues (recalls, closures)” [Public Interest]
- **Analysis:**
 - This issue was partially discussed in the Health and Nutrition issue, however, it has since been removed since there is limited evidence on any recent recalls (beyond bottled water). Some of the major safety problems from Odwalla and others occurred in the late 90’s with limited recent evidence to draw from.
- **Recommendation:**
 - Do not add as a new issue due to lack of recent evidence.

5. ALCOHOLIC BEVERAGES

- a. **Ecological Impacts** – Do not add. Already addressed in Supply Chain Management.
- **IWG Comment:** *“eg hops (for beer): conserve biodiversity and restore ecosystems”* [Market Participant]
 - **Analysis:** This angle is captured in the Supply Chain Management issue for this industry, and more directly in the Agricultural Products industry.
 - **Recommendation:**
 - Do not add this as a new issue, since it is already addressed in other issues.
- b. **Waste Management** – Do not add
- **IWG Comment:** *“Looking at packaging life-cycle alone is short-sighted (and hopefully this definition includes recycling infrastructure efforts as well). In addition, investors will want the total footprint of companies to be sustainable, and that would include all waste in manufacturing facilities.”* [Corporation]
 - **Analysis:**
 - This angle is further addressed in the “Packaging and Lifecycle Management” issue as well as the Water Management issue (for waste water).
 - While several companies have made major waste reductions, there is insufficient evidence to quantify significant financial impact in this industry. Overall waste volumes are relatively low in this industry.
 - **Recommendation:**
 - Do not add.
- c. **Employee Health & Safety** – Do not add
- **IWG Comments:**
 - *“There are several necessary added chemicals and processes which pose risk for employees in the production process.”* [Corporation]
 - *“Keeping employees healthy and safe is a vital part of [...] values and behaviours. It has a direct effect on every employee’s sense of engagement with their work and the Company, on our business performance and on the broader community.”* [Corporation]
 - **Analysis:**
 - This sector did have some Bureau of Labor Statistics (BLS) data that was considered higher than average for lost time, however, fatal and non-fatal injuries were not high.
 - Exposure to chemicals in certain processes is a potential area of concern, however, SASB did not find sufficient evidence to prove the industry is poorly managing this risk.
 - No other evidence of financial impact was found.
 - **Recommendation:**
 - Do not add.
- d. **Employee Diversity** – Do not add
- **IWG Comment:**
 - *“Not exclusive to just the alcoholic beverages industry, but I expect most companies to disclose this information.”* [Corporation]
 - *“The alcohol sector is a heavily male dominated industry”* [Corporation]
 - **Recommendation:**
 - Do not add, no evidence was found to show this issue is likely to be material for this industry.

6. TOBACCO

a. Counterfeit Products – Do not add

- **IWG Comment:** *“Illicit trade is a directly competitive product with duty-paid tobacco products and the industry has a high propensity to illicit trade because duty makes up the majority of the retail price and therefore non duty-paid can easily undercut the legitimate market on price. It can be clearly demonstrated that where tobacco products or certain tobacco products are priced at levels which limit affordability that illicit trade is likely to grow. This in turn can impact the elasticity of demand for consumer which in turn directly impact the business model of tobacco (i.e. volumes down but prices up) Again in terms of the scale of the issue I refer you to KPMG studies (Sun and Star) but also any study of the Canadian market place between 2007-11”*
- **Analysis:** This issue was originally explored in SASB’s initial analysis and was not found likely to be material.
- **Recommendation:**
 - Do not add

7. HOUSEHOLD AND PERSONAL PRODUCTS

a. Energy Management & GHG Emissions – Likely do not add

- **IWG Comments:**
 - *“GHG emissions are an important marker of a company’s environmental performance, and are relevant to sustainability reporting in this industry. Beyond supply chain management, SASB should consider whether consumer products companies should be tracking GHG emissions of their suppliers to monitor performance and provide a larger picture of the company’s environmental footprint.”* [Public Interest]
 - *“These companies usually have large manufacturing operations that are energy intensive. Should carbon be priced, these companies would be exposed to increased costs.”* [Market Participant]
 - *“Companies need to disclose that they are measuring and making at least some effort to reduce their own carbon footprint. Not doing so will increasingly be a material reputational risk. This is **less of an issue in this industry than many others, but its material nonetheless.**”* [Public Interest]
 - *“Energy tends to be one of the top input costs for the sector. As climate legislation increases through time, there is likely to be a cost impact, short of additional innovation in alternative sources.”* [Corporation]
 - *“Energy in the form of electricity is vital to the manufacturing process of the industry. Electricity tends to be reliant on coal power generation or natural gas. Firms including P&G and SC Johnson have made commitments to increase their usage and investment in renewable energy. Continued pressures are expected in this area as GHG emissions are further regulated.”* [Public Interest]
- **Analysis:**
 - GHG emissions seems not likely to be material for the industry as a standalone topic, but considerations apply. Several data sources were used to analyze the overall quantities and intensity of emissions for this industry.
 - The TRUCOST and Bloomberg data reviewed, indicate that the majority of the GHG emissions from the industry are Scope 3 emissions and happen in other steps in the value chain. However, not all data sets reviewed were in alignment (particularly for different industry sub-segments). SASB will continue to review industry-wide data.
 - Nonetheless, the issue seems relatively weak as a standalone issue, especially when compared with industries in other sectors. Companies in this industry are not

currently under regulatory scrutiny for carbon emissions, however, this could change in the future.

- Energy costs for this industry were low, significantly under 2% of costs according to the annual survey of manufacturers' data.

- **Recommendation:**

- Likely do not add as a new issue. Even though GHG emissions and energy management are of growing concern for a variety of stakeholders, there is little evidence to prove that this particular industry is at risk. However, SASB will continue to research and monitor this industry for potential inclusion in the future as the regulatory landscape and data sets continue to evolve.

b. **Waste Management** – Do not add

- **IWG Comment:** *“Many companies in this space are perusing targets around reducing manufacturing waste through the creation of zero waste to landfill facilities. This may provide a competitive advantage to a company choosing to go down this path as it can reduce cost, reduce risk, decrease hazardous materials, and provide resilience against potential waste policies in the US and abroad.”* [Public Interest]

- **Analysis:**

- Waste Efficiency at a manufacturing level is a movement towards a zero waste opportunity, and selling waste products for additional profit streams. A number of companies have set targets for this:
 - Environmental Leader – “Diverting its waste streams away from landfill has created more than \$1 billion in value for the company, P&G says.” (<http://www.environmentalleader.com/2013/04/03/pg-achieves-zero-waste-at-45-sites-2/#ixzz3IEcBrrcB>)
 - SC Johnson – SC Johnson is currently on track to have a 70 percent decrease of global manufacturing waste by 2016. (<http://www.scjohnson.com/en/press-room/press-releases/04-01-2014/SC-Johnson-is-on-Track-to-Decrease-Global-Manufacturing-Waste-by-70-Percent-by-2016.aspx>)
 - Environmental Leader – “Unilever has already reached the milestone of 100 percent of sites sending zero waste to landfill in 18 countries. More than 130 Unilever factories across the world, from Costa Rica to Japan, send no non-hazardous waste to landfill, up from 74 at the start of 2012. This equates to a cost saving of about €70 million, according to Unilever.”
- Key elements of waste management are also captured in other places (i.e. packaging lifecycle management. “Description of strategies to reduce the environmental impact of packaging throughout its lifecycle.”

- **Recommendation:**

- Do not add as a standalone issue, but consider including as part of the Packaging and Lifecycle Management issue. Reduction of waste in the manufacturing process can result in material savings for firms, however, SASB will try to capture this in other metrics.

Appendix I: Summary of IWG Feedback on Issues

	Agricultural Products	Meat, Poultry & Dairy	Processed Foods	Non-Alcoholic Beverages	Alcoholic Beverages	Tobacco	Household & Personal Products
Environment	<ul style="list-style-type: none"> • Energy Management • GHG Emission • Water Management • Land Use & Eco. Impacts 	<ul style="list-style-type: none"> • Energy Management • GHG Emission • Water Management • Land Use & Eco. Impacts • Waste Management • Air Quality 	<ul style="list-style-type: none"> • Energy Management & GHG Emission • Water Management • Waste Management 	<ul style="list-style-type: none"> • Energy Management & GHG Emission • Water Management • Land Use & Eco. Impacts 	<ul style="list-style-type: none"> • Energy Management & GHG Emission • Water Management • Ecological Impacts • Waste Management 		<ul style="list-style-type: none"> • Energy Management & GHG Emission • Water Management • Waste Management
Social Capital	<ul style="list-style-type: none"> • Food Safety • Food Security 	<ul style="list-style-type: none"> • Food Safety 	<ul style="list-style-type: none"> • Food Safety • Health & Nutrition • Labeling & Marketing Integrity 	<ul style="list-style-type: none"> • Food Safety • Health & Nutrition • Labeling & Marketing Integrity 	<ul style="list-style-type: none"> • Responsible Drinking & Marketing 	<ul style="list-style-type: none"> • Public Health • Responsible Marketing 	
Human Capital	<ul style="list-style-type: none"> • Labor Conditions • Employee Health & Safety • Employee Diversity 	<ul style="list-style-type: none"> • Working Conditions • Workforce Health & Safety • Community Relations 	<ul style="list-style-type: none"> • Labor Conditions • Employee Diversity 		<ul style="list-style-type: none"> • Employee Health & Safety • Employee Diversity 		
Business Model & Innovation	<ul style="list-style-type: none"> • Climate Change Adaptation • Product Lifecycle Management • Food Waste 	<ul style="list-style-type: none"> • Animal Care & Welfare • Climate Change Adaptation • Food Waste 	<ul style="list-style-type: none"> • Packging. Lifecycle Mgt. & Innovation • Climate Change Adaptation • Food Waste 	<ul style="list-style-type: none"> • Packaging Lifecycle Management & Innovation 	<ul style="list-style-type: none"> • Packaging Lifecycle Management & Innovation 	<ul style="list-style-type: none"> • Climate Change Adaptation • Counterfeit Products 	<ul style="list-style-type: none"> • Packaging Lifecycle Management & Innovation • Product Stewardship
Leadership & Governance	<ul style="list-style-type: none"> • Supply Chain Management • Management of Legal & Reg. Environment • Competitive Behavior • Political Spending 	<ul style="list-style-type: none"> • Supply Chain Management 	<ul style="list-style-type: none"> • Supply Chain Management • Political Spending 	<ul style="list-style-type: none"> • Supply Chain Management 	<ul style="list-style-type: none"> • Supply Chain Management 	<ul style="list-style-type: none"> • Supply Chain Management 	<ul style="list-style-type: none"> • Supply Chain Management

Issue with weak evidence of interest – Section I

Strong issues with reservations – Section III

Significant concerns, seeking additional evidence & inputs – Section II

New issue proposed by IWG members – Section IV

Appendix II: Draft List of Disclosure Topics for Public Comment

The following table comprises issues that are likely to be presented for Public Comment on January 14, 2015, based on SASB's review of IWG comments and additional research. Note these issues are not final and are subject to change.

	Agricultural Products	Meat, Poultry & Dairy	Processed Foods	Non-Alcoholic Beverages	Alcoholic Beverages	Tobacco	Household & Personal Products
Environment	<ul style="list-style-type: none"> • GHG Emission • Water Management • Land Use & Eco. Impacts 	<ul style="list-style-type: none"> • GHG Emission • Water Management • Land Use & Eco. Impacts 	<ul style="list-style-type: none"> • Energy Management & GHG Emission • Water Management 	<ul style="list-style-type: none"> • Energy Management • Water Management 	<ul style="list-style-type: none"> • GHG Emission • Water Management 		<ul style="list-style-type: none"> • Water Management
Social Capital	<ul style="list-style-type: none"> • Food Safety 	<ul style="list-style-type: none"> • Food Safety 	<ul style="list-style-type: none"> • Food Safety • Health & Nutrition • Transparent Labeling & Marketing 	<ul style="list-style-type: none"> • Health & Nutrition • Transparent Labeling & Marketing 	<ul style="list-style-type: none"> • Responsible Drinking & Marketing 	<ul style="list-style-type: none"> • Public Health • Responsible Marketing 	
Human Capital	<ul style="list-style-type: none"> • Labor Conditions 	<ul style="list-style-type: none"> • Workforce Health & Safety 					
Business Model & Innovation	<ul style="list-style-type: none"> • Climate Change Adaptation 	<ul style="list-style-type: none"> • Animal Care & Welfare • Climate Change Adaptation 	<ul style="list-style-type: none"> • Packaging Lifecycle Management & Innovation 	<ul style="list-style-type: none"> • Packaging Lifecycle Management & Innovation 	<ul style="list-style-type: none"> • Packaging Lifecycle Management & Innovation 		<ul style="list-style-type: none"> • Packaging Lifecycle Management & Innovation • Safety of Product Formulation
Leadership & Governance	<ul style="list-style-type: none"> • Supply Chain Management • Political Spending 	<ul style="list-style-type: none"> • Supply Chain Management 	<ul style="list-style-type: none"> • Supply Chain Management 	<ul style="list-style-type: none"> • Supply Chain Management 	<ul style="list-style-type: none"> • Supply Chain Management 	<ul style="list-style-type: none"> • Supply Chain Management 	<ul style="list-style-type: none"> • Supply Chain Management

Appendix III: Sample Accounting Metrics

The following table lists the disclosure items (metrics), as they stand currently, for the sustainability topics determined by SASB to likely be material for the Household & Personal Products Industry following IWG feedback. This table provides sample metrics for reference only. The accounting metrics are currently being revised, and final metrics put forward for public comment may be different from the ones outlined below.

TOPIC	ACCOUNTING METRIC	CATEGORY	UNIT OF MEASURE	CODE
Water Management	Total fresh water withdrawn, percentage recycled, percentage in regions with High or Extremely High Baseline Water Stress	Quantitative	Cubic meters (m ³), Percentage (%)	CN0602-01
Packaging Lifecycle Management & Innovation	Total weight of packaging and percentage from (1) primary material (2) recycled or renewable materials	Quantitative	Metric tons (t), Percentage (%)	CN0602-02
	Total weight of packaging, percentage that is: (1) recyclable, (2) compostable, (3) degradable	Quantitative	Metric tons (t), Percentage (%)	CN0602-03
	Description of strategies to reduce the environmental impact of packaging throughout its lifecycle	Discussion & Analysis	n/a	CN0602-04
Safety of Product Formulation	Percentage of products that contain REACH substance of very high concern (SVHC)	Quantitative	Percentage by revenue (%)	CN0602-05
	Revenue from products containing California DTSC Chemicals of Concern	Quantitative	U.S. Dollars (\$)	CN0602-06
	Discussion of process to identify and manage emerging materials and chemicals of concern	Discussion & Analysis	n/a	CN0602-07
	Revenue from products designed with green chemistry principles	Quantitative	U.S. Dollars (\$)	CN0602-08
Supply Chain Management	Percentage of palm oil consumption certified to the Roundtable on Sustainable Palm Oil (RSPO) standard	Quantitative	Percentage (%)	CN0602-09
	Total wood fiber purchased, percentage from certified sources	Quantitative	Metric tons (t), Percentage (%)	CN0602-10



Sustainability Accounting Standards Board

75 Broadway
Suite 202
San Francisco, CA 94111
415 830-9220
sasb.org